Vermont All-Payer ACO Model
Annual Health Outcomes and Quality of Care Report
Performance Year 2 (2019)

Submitted February 26, 2021

Green Mountain Care Board

1. Executive Summary

1.1. Performance Year 2 (2019)

With the conclusion of the second performance year of five, this report demonstrates that Vermont is currently on track to meet *five of the six* population-level health outcomes targets, *seven of the eight* healthcare delivery system quality targets (one data point of nine currently unavailable) and is making progress toward *five of six* available process milestones (one of the seven data points currently unavailable). Due to the ongoing Public Health Emergency and COVID-19 Pandemic, this report does not provide an update on all measures. Those measures that require the Vermont Department of Health (VDH) to engage in data collection will be submitted at a later date.

While there is still much work to do, there are some encouraging signs of delivery system reform: hospitals are increasing their investments in primary prevention and the social determinants of health; traditionally siloed providers are finding new ways to coordinate care and reduce duplication of services across the care continuum, and advances in data analytics are helping to identify high risk patients who would benefit most from early intervention and complex care coordination. Delivery system reform is by no means complete. Major transformation requires patience and time, and these preliminary changes and reallocation of resources towards population health are signs of progress towards reform. We expect that as the adoption of prospective population-based payments increases relative to fee for service reimbursement, we will only see greater momentum in delivery system reform as a result of more flexible funding streams and the ability for providers to plan and invest resources more wisely.

This report outlines baselines, targets, and progress made for each of the twenty-two[1] quality metrics as required in Appendix 1 of the Vermont All-Payer Accountable Care Organization Model Agreement (the "Agreement"). Appendix 1 also sets goals for population-level health outcomes, healthcare delivery system targets, and process milestone targets. It is important to note that these are five-year targets, intended to be achieved by the end of Performance Year 5 (2022). For Performance Years 1 and 2 (2018 and 2019), the Agreement sets an expectation that the results will improve over baseline.[2]

1.2. Considerations

This report has been submitted with the most complete data available at the time of production. Given the evolution of the COVID-19 pandemic, and the ongoing public health emergency, several measures are unable to be reported at this time. The GMCB will work to update this report as soon as it is feasible.

In addition, as this is the second annual Quality and Health Outcomes Report, many are eager to draw year over year comparisons based on the two points in time. However, it is imperative that such comparison is done with caution and that, first and foremost, consideration is given to growth and risk status of attributed lives. This population growth is an important step in moving toward achieving our Scale Targets and makes interpretation of the results complex, as in some cases growth nearly doubled amongst payer populations.

1.3. Public Health Emergency

This report focuses on results produced based on the mutual understanding of the technical changes amendment in progress at the beginning of 2020. As such, it codifies memorandums and other changes negotiated between the State of Vermont and the Center for Medicare and Medicaid Innovation throughout

[1] Due to disaggregation of a composite measure by Medicare nationally, the total number or measures increased to reflect this change.
[2] For Performance Years 3-5 (2020-2022), the Agreements establishes quantitative milestones toward reaching the targets.

Performance Years 1 and 2 (2018 and 2019). In light of the COVID-19 pandemic requiring both a state and national response, the amendment has been paused as priorities have shifted to address more pressing needs. Given mutual understanding, and considering full transparency, the GMCB respectfully submits this report based on the aforementioned mutual agreement between Agreement signatories.

Due to the ongoing Public Health Emergency and COVID-19 Pandemic, this report does not provide an update on all measures. Those measures that require the Vermont Department of Health (VDH) for data collection and reporting purposes will be submitted at a later date.

1.4. Scale Growth

While model performance on quality metrics is imperative, it is also important to note the underlying denominator changes in many measures that are specific to the ACO-aligned population. The below table shows the scale growth between 2018 and 2019.

	2018	2019	% Change
All-Payer	109,728	160,048	46%
Medicare	36,860	53,973	46%

Source: 2019 Scale Targets and Alignment Report.

When more Vermonters enter scale-target qualifying programs, it introduces volatility in the ability to compare data from year to year; once attribution plateaus, it will be easier to draw conclusions on aligned-beneficiary health and quality over time. These increases, coupled with the fact that trending is not possible with only two years of data, should caution the reader in their interpretation of results at this early juncture.

1.5. Risk Score

Risk scores are a way to compare populations based on healthcare utilization (claims data analysis) and predict future utilization patterns. As discussed in the GMCB's Payer Differential Reporting Package, compared with the VHCURES average, the ACO-aligned member average risk scores are higher. Overall ACO-aligned members have a 2% higher risk. Broken down into payer categories, Medicare FFS risk is 48% higher; Medicaid is 16% lower; and the commercial average score is 28% lower. It is important to note that the risk scores used in this analysis do not account for all variation in risk. Specifically, risk adjustment can only capture factors observed in claims data, which can exclude patient characteristics like disease severity and socio-economic status that could affect risk.[3]

2. Background

The Vermont All-Payer Accountable Care Organization Model ("All-Payer ACO Model" or "APM") Agreement was signed on October 26, 2016, by Vermont's Governor, Secretary of Human Services, Chair of the Green Mountain Care Board, and the Centers for Medicare & Medicaid Services (CMS). The All-Payer ACO Model aims to reduce health care cost growth by moving away from fee-for-service reimbursement to risk-based arrangements for Accountable Care Organizations (ACOs); these arrangements are tied to quality and health outcomes.
Section 7.e of the Agreement, Annual Health Outcomes and Quality of Care Report, requires GMCB to report on performance relative to the statewide health outcome and quality targets described in Appendix 1 of the Agreement: *"The GMCB, in collaboration with AHS, shall submit to CMS for its approval, on or before September 30th following each Performance Year 1 through 5, an annual report on the State's efforts to achieve the*

[3] All-Payer ACO Model Payer Differential Reporting Package: https://gmcboard.vermont.gov/sites/gmcb/files/documents/PayerDifferential_ReportPackage_Redacted.pdf.

Statewide Health Outcomes and Quality of Care Targets ("Annual Health Outcomes and Quality of Care Report")[4,5]. At a minimum, the State shall describe the following in this annual report:

i. *Vermont's progress on achieving Statewide Health Outcomes and Quality of Care Targets set forth in Appendix 1;*

ii. *How Scale Target ACO Initiatives hold Vermont ACOs accountable for quality of care, the health of their aligned beneficiaries (section 6.b.iv), or both; and*

iii. *How the State holds Vermont ACOs accountable to allocate funding for and invest in community health services to achieve the Statewide Health Outcomes and Quality of Care Targets.*

The quality framework discussed in this report represents 22 carefully selected measures that aim to support improvement on identified population health goals, building on measurement and long-term health care initiatives underway in Vermont at the time the Agreement was signed. While selecting measures and developing targets, Vermont consistently advocated for measures that addressed key priority areas in the State, alignment with existing measure sets, consideration of collection burden, and targets that are ambitious but realistically achievable over the five-year period. The framework encourages health, public health, and community service providers to work together to improve quality and integration of care. This collaboration includes the ACO and its community partners – while the ACO is not responsible for these outcomes alone, the GMCB will continue to assess their approach to quality improvement through our regulatory levers.

The state and CMMI have agreed that the base years should be updated to reflect data that are relevant to the model's performance. At the time the agreement was signed, the base year reflected the most recent data available. For ACO measures, to reflect the impact of the ACO program on quality, the base year must reflect the first year the multi-payer ACO program was in operation, which was PY1, or 2018. For those measures that are Statewide, baselines have been updated to the most recent available year as noted in Table 2.2 – for these measures, we can assess growth towards 2022 targets.

3. Progress on Achieving Statewide Health Outcomes and Quality of Care Targets

3.1. Domains and Measures Included in Statewide Health Outcomes and Quality of Care Targets Monitoring Report

Measures that are tracked in Vermont's Annual Statewide Health Outcomes and Quality of Care Targets Monitoring Report correspond to three overarching goals: (1) reducing deaths related to suicide and drug overdose, (2) reducing the prevalence and morbidity of chronic disease, and (3) increasing access to primary care. **Tables 3.2 -3.4** outline measures included in each domain, including associated goals, baseline performance, performance targets, and the performance for 2018 (PY1) and 2019 (PY2) when applicable and available. This report does not comprehensively comment on performance across all 22 quality measures (data are currently available for 16 of the 22 measures given VDH's shift to priorities related to the COVID-19 Public

[4] Per a memo to CMMI dated August 21, 2019, the deadline for the Statewide Health Outcomes and Quality of Care Report was changed from September 30 to December 31 of the year following each measured performance year.
[5] Per an email to CMMI on December 21, 2020, this 2019 Statewide Health Outcomes and Quality of Care Report experienced delays due to data availability, changing the submission deadline to February 28, 2021.

Health Emergency) but provides greater insight into those measures where Vermont has achieved success as well as those measures where the State has the greatest opportunity to improve.

3.2. Summary Results

Table 3.2: Summary Results for Population-Level Health Outcomes Targets

Goal	Measure	Baseline	2022 Target	2018 (PY1)	Current	2019 (PY2)	2020 (PY3)	2021 (PY4)	2022 (PY5)
Population-Level Health Outcomes Targets				*Rate*	*2019 Rate*	*Num/Denom*	*Num/Denom*	*Num/Denom*	*Num/Denom*
Reduce Deaths Related to Suicide and Drug Overdose	Deaths Related to drug Overdose (Statewide)[6]	123 (2017)	Reduce by 10% (111)	159	137[7] ▼				
Reduce Deaths Related to Suicide and Drug Overdose	Deaths Related to Suicide (Statewide)	17.2/100,000 (2016)	16 per 100k VT residents or 20th highest rate in US	18.8/100k[8] (2018)[9]	15.3/100k (2019)[8] ▼				
Reduce Chronic Disease	COPD Prevalence (Statewide)	6% (2017)	Increase ≤1%	6%	7% ▲				
Reduce Chronic Disease	Diabetes Prevalence (Statewide)	8% (2017)	Increase ≤1%	9%	9% ▶				
Reduce Chronic Disease	Hypertension Prevalence (Statewide)	26% (2017)	Increase ≤1%	25%	26% ▲				
Increase Access to Primary Care	Percentage of Adults with Personal Doctor or Care Provider (Statewide)	87% (2017)	89%	86%	86% ▶				

[6] Vermonters who die in Vermont (i.e. excludes out-of-state residents' deaths and Vermonters who die in other states).
[7] 2019 data are preliminary.
[8] Death rate is age-adjusted per 100,000 population.
[9] https://www.healthvermont.gov/sites/default/files/documents/pdf/HSVR_Injury_Suicide_Databrief_2021.pdf.

Table 3.3: Summary Results for Health Care Delivery System Quality Targets

Goal	Measure	Baseline	2022 Target	2018 (PY1)	Current	2019 (PY2)	2020 (PY3)	2021 (PY4)	2022 (PY5)
Health Care Delivery System Quality Targets				*Rate*	*2019 Rate*	*Num/Denom*	*Num/Denom*	*Num/Denom*	*Num/Denom*
Reduce Deaths Related to Suicide and Drug Overdose	Initiation of Alcohol and Other Drug Dependence Treatment (Multi-Payer ACO)	38.9% (2018)	40.8%	*38.9%*	40.1% ▲	*1,321* / *3,293*			
Reduce Deaths Related to Suicide and Drug Overdose	Engagement of Alcohol and Other Drug Dependence Treatment (Multi-Payer ACO)	13.3% (2018)	14.6%	*13.3%*	17.1% ▲	*564* / *3,293*			
Reduce Deaths Related to Suicide and Drug Overdose	30-Day Follow-Up After Discharge from ED for Mental Health (Multi-Payer ACO)	84.4% (2018)	60%	*84.4%*	89.8% ▲	*1,828* / *2,035*			
Reduce Deaths Related to Suicide and Drug Overdose	30-Day Follow-Up After Discharge for Alcohol or Other Drug Dependence (Multi-Payer ACO)	28.2% (2018)	40%	*28.2%*	27.6% ▼	*345* / *1,250*			
Reduce Deaths Related to Suicide and Drug Overdose	Growth Rate of Mental Health and Substance Abuse-Related ED Visits (Statewide)[10,11]	5.3% (2016 - 2017)	5%[12]	*6.9% (2017-2018)*	XX				
Reduce Chronic Disease	Diabetes HbA1c Poor Control (Medicare ACO)	58.02% [13] (2018)	70th-80th percentile (national Medicare benchmark)	*58.02% (Medicare 80th percentile)*	13.49% ▶ *(Medicare 80th percentile)*	*34* / *252*			
	Controlling High Blood Pressure (Medicare ACO)	68.12% (2018)	70th-80th percentile (national Medicare benchmark)	*68.12% (Medicare 60th percentile)*	71.46% ▲ *(Medicare 70th Percentile)*	*338* / *473*			
	All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions (Medicare ACO) [14]	63.84% (2018)	70th-80th percentile (national Medicare benchmark)	*63.84% (Medicare 30th percentile)*	60.04% ▼ *(Medicare 40th percentile)*	*Medicare 40th percentile*			
Increase Access to Primary Care	ACO CAHPS Composite: Getting Timely Care, Appointments and Information (Medicare ACO)	84.62% (2018)	70th-80th percentile (national Medicare benchmark)	*84.62% (Medicare 80th percentile)*	82.48% ▶ *(Medicare 80th Percentile)*	- / *257*			

*Staff priorities have shifted due to the Public Health Emergency and contact tracing efforts. As such, current rates are not available for the grey shaded cells above. An updated version of this report will be produced once data are available.

[10] Shown as a percent change from previous year.
[11] Vermont residents only.
[12] This measure uses a phased approach. The goal is to reduce the growth rate of mental health and substance abuse-related ED visits to 5% in PY 1-2, 4% in PY 3-4 and 3% by PY5.
[13] The baseline and 2018 result shown is a Medicare composite of ACO #27 (A1c poor control) and ACO #41 (diabetes eye exam) per Medicare Shared Savings Program reporting standards. In 2019, the result is for ACO #27 only.
[14] A lower rate is indicative of better performance on this measure.

Table 3.4: Summary Results for Process Milestones

Goal	Measure	Baseline	2022 Target	2018 (PY1)	Current	2019 (PY2)	2020 (PY3)	2021 (PY4)	2022 (PY5)
Process Milestones				*Rate*	*2019 Rate*	*Num/Denom*	*Num/Denom*	*Num/Denom*	*Num/Denom*
Reduce Deaths Related to Suicide and Drug Overdose	Percentage of Vermont Providers Checking Prescription Drug Monitoring Program Before Prescribing Opioids (Statewide)	2.19 (2017)	1.80	*3.10*					
Reduce Deaths Related to Suicide and Drug Overdose	Adults Receiving Medication Assisted Treatment (MAT) (Statewide, Ages 18-64) Rate per 10,000 Vermonters	257 per 10,000 Vermonters (2018)	150 per 10,000 Vermonters (or up to rate of demand)	*257 per 10,000*	*218*[15] *per 10,000* ▶	- / -			
Reduce Deaths Related to Suicide and Drug Overdose	Screening for Clinical Depression and Follow-Up Plan (Multi-Payer ACO)	50.23% (2018)	70th-80th percentile (national Medicare benchmark)	*50.23% (Medicare 50th percentile)*	54.47%[16] (Medicare 50th Percentile) ▶	*500* / *949*			
Reduce Chronic Disease	Tobacco Use Assessment and Cessation Intervention (Multi-Payer ACO)	70.56% (2018)	70th-80th percentile (national Medicare benchmark)	*70.56%*[17]	84.94%[18] (Medicare 70-80th percentile) ▲	*331* / *394*			
Reduce Chronic Disease	Percentage of Vermont Residents Receiving Appropriate Asthma Medication Management – 50% compliance (Statewide)	72.5% (2018)	65%	*72.5%*	73.4%	*1,104* / *1,591*			
Increase Access to Primary Care	Percentage of Medicaid Adolescents with Well-Care Visits (Statewide Medicaid)	47.8% (2017)	53%	*49.9%*	52.5%[19] ▲	*13,398* / *25,516*			
Increase Access to Primary Care	Percentage of Medicaid Enrollees Aligned with ACO (Statewide Medicaid)	31% (Jan 2018)	≤15 percentage points below alignment rate for Vermont Medicare beneficiaries	*31%*	58.2% ▲	*79,004*[20] / *135,639*[21]			

*Staff priorities have shifted due to the Public Health Emergency and contact tracing efforts. As such, current rates are not available for the grey shaded cells above. An updated version of this report will be produced once data are available.

[15] Q1 2019 results; https://www.healthvermont.gov/scorecard-opioids.
[16] Weighted result based on ACO Medicare, Medicaid and Commercial QHP performance in CY 2018.
[17] No national Medicare benchmark is available for CY 2018.
[18] Weighted result based on ACO Medicare and Medicaid performance in CY 2018.
[19] As reported by DVHA for the CMS Child Core Quality Measure Set.
[20] VMNG ACO Program; https://dvha.vermont.gov/sites/dvha/files/VMNG%202019%20Report%20FINAL%2010-12-2020.pdf.
[21] PY2 Scale Targets and Alignment Report; https://gmcboard.vermont.gov/sites/gmcb/files/documents/PY2%20Annual%20ACO%20Scale%20Targets%20and%20Alignment%20Report_FINAL2_01082021.pdf.

3.3. Discussion: Population-Level Health Outcomes Targets

The State and CMMI have a preliminary agreement that the base years should be updated to reflect data that is relevant to the model's performance years. At the time the agreement was signed, the base year reflected the most recent data available. In an effort to more accurately measure performance across the population, the data has been updated to utilize 2017 as a base where applicable. For Performance Years 1 and 2 (2018 and 2019), the Agreement sets an expectation that the results will improve over baselines, final performance results for the second year of the model show Vermont currently moving towards meeting *five of six* population-level health outcomes targets. Selected measures and contributing factors are discussed in detail below.

Deaths Related to Drug Overdose (Statewide)

The Vermont Department of Health's Alcohol and Drug Abuse Programs has moved away from reporting deaths due to drug overdoses to deaths related to opioids specifically, given the growing epidemic. The 2019 rate shown in the table above was given to the GMCB for the purposes of this annual report but is not available in any publications. Moving forward, the GMCB suggests following the direction of VDH and reporting on opioid-related deaths. Historical data on the number and rate of accidental and undetermined opioid-related fatalities among Vermonters living in Vermont, up to 2019, are shown in the table below.

	2014	2015	2016	2017	2018	2019
Total	63	73	96	110	130	111
Rate/100k	10.1	11.7	15.4	17.6	20.8	17.7

It should be noted that the Vermont methodology identifies approximately 5% more deaths than the CDC[22] – detailed information can be found in the Detailed Measure Information in Appendix A.

Deaths Related to Suicide (Statewide)

The APM sets a statewide goal of 16 deaths due to suicide per 100,000 Vermont residents by the end of the Model. The rate of suicide deaths decreased from the 2018 result (18.8) to the current reported year of 2019 (15.3)[23]. The Vermont Department of Health produces an *Intentional Self Harm and Death by Suicide* Data Brief annually, providing further insight into the populations impacted by this unfortunate statistic. Notably, suicide-related hospital visits are higher among females, while suicide rates are higher amongst males; additionally, one fifth of suicide deaths are among Vermonters who have served in the military. [24] Further insights can be derived from the Vermont National Violent Death Reporting System (NVRDS[25]) and will continue to be monitored by the Board. The State has focused several initiatives on suicide prevention in an effort to increase awareness and outreach, and hopefully reduce deaths related to this preventable public health problem. The Board will continue to monitor initiatives in place through the Vermont Department of Health and the Vermont Department of Mental Health, as well as through regulatory roles in Hospital and ACO budget review and approval as we continue on through the Agreement period and beyond.

3.4. Discussion: Healthcare Delivery System Quality Targets

As in the previous section, data were also updated to utilize 2017 as a base where applicable. For those measures that are ACO-specific, 2018 (PY1) will serve as the base year. As noted above, this updated baseline allows for a more accurate comparison through the remaining years of the APM Agreement, especially within

[22] Opioid-Related Fatalities Among Vermonters; https://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP_Data_Brief_Opioid_Related_Fatalities.pdf.
[23] https://www.healthvermont.gov/sites/default/files/documents/pdf/HSVR_Injury_Suicide_Databrief_2021.pdf.
[24] Vermont Department of Health, *Intentional Self-Harm and Death by Suicide*.
[25] https://vtspc.org/national-violent-death-reporting-system/?doing_wp_cron=1612984892.8739669322967529296875.

the ACO population as 2018 was the first year of the Next Generation multi-payer ACO initiative. Final 2019 data show Vermont moving toward achievement on *seven of the eight available* healthcare delivery system quality targets, with one data point not yet reported for 2019. This change in the total measures differs from the agreement due to the disaggregation of a Medicare ACO composite into three individual measures (diabetes HbA1c poor control; controlling high blood pressure; all-cause unplanned admissions for patients with multiple chronic conditions). To align with federal reporting, the State also reports each measure individually in this report.

Engagement of Alcohol and Other Drug Dependence Treatment

The Agreement goal is to increase alcohol and drug treatment engagement rates by 10% over the five-year term, making the goal 14.6% when calculated based on the 2018 baseline rate. Often shown together with its counterpart, initiation of treatment, it is important to discuss the vast improvement in the Engagement component from 2018 – 2019. Coupled with growing scale (more than 1,000 additional cases in the denominator), the ACO-aligned population still showed marked improvement on this measure, from 13.3% in 2018 to 17.1% in 2019, surpassing the 2022 target. All participating payer contracts also included this measure set in their quality reporting, contributing to the added success.[26]

30-Day Follow-Up After Discharge from the Emergency Department for Alcohol or Other Drug Dependence

The Agreement sets forth a goal of 40% follow-up after discharge from the emergency department for alcohol or other drug dependence amongst ACO-aligned beneficiaries. While the State performed better on the 30-day follow-up for mental health (89.8% in 2019), we fell short on increasing the rate of follow-up for alcohol and other drug dependence (27.6% in 2019). However, the denominator, or eligible population for this measure increased by nearly 58% over 2018. While this can seem like there is a large increase in emergency department visits for alcohol or drug dependence, it is important to remember that the ACO-aligned growth is now capturing more of these visits for their aligned population. As scale increases, the ACO and payers will be better able to identify those needing specialized treatment and/or resources. The State is hopeful that learnings and efforts that lead to increases in the 30-day mental health follow-up can be applied to this measure as well.

Diabetes HbA1c Poor Control

This measure of Medicare-aligned ACO beneficiaries has been consistently included in the ACO's Medicare contract and aims to better understand chronic diabetes in the elderly population. The goal is to remain within the 70-80th percentile for Medicare, which the State has met for both 2018 and 2019. It is important to note a methodology change between the 2018 rate and 2019 rate; due to a disaggregation at the Federal level, the 2018 rate shows a composite result for HbA1c poor control and a diabetic eye exam. These have been uncoupled starting in 2019 and will continue to be reported alone for the duration of the Agreement. The State proposes to work with CMMI to identify a new benchmark for this measure.

3.5. Discussion: Process Milestones

As noted above, data were updated to utilize 2017 as a base where applicable. For those measures that are ACO-specific, 2018 (PY1) will serve as the base year. This updated baseline allows for a more accurate comparison through the remaining years of the APM Agreement, especially within the ACO population as 2018 was the first year of the Next Generation multi-payer ACO initiative. 2019 results show Vermont making progress toward *five of the six* available process milestones, with one measure currently unavailable. Selected measures and contributing factors are discussed in detail below.

[26] See Appendix B for Measure Crosswalk.

Vermont Prescription Monitoring System

The data for the percent of Vermont providers checking the VPMS before prescribing opioids is not yet available for 2019. However, an alternate measure of performance shows great progress towards lowering opioid overdose and dependence. The Vermont Department of Health's Alcohol and Drug Abuse Programs regularly report on the number of opioid analgesic morphine milligram equivalents (MMEs) dispensed per 100 residents, and a steady decline is noted from 2014 to 2019 as seen in the table below.[27] The GMCB will submit a formal proposal that recommends utilizing this measure in place of the existing VPMS measure for more timely data reporting.

	2014	2015	2016	2017	2018	2019
MMEs/100 VTers	73,476	77,090	68,915	61,300	52,535	49,497

Percentage of Vermont Residents Receiving Appropriate Asthma Medication Management

This HEDIS measurement can be viewed by both the 50% and 75% compliance rate; the mutual agreement between the State and CMMI states that reporting will be ACO-aligned beneficiary specific at the 50% level for the purposes of this report.

This measure realized a nearly 1% decrease from our 2018 rate (base); however, the denominator (measure-eligible population) grew by over 370 Vermonters. When more Vermonters enter into scale-target qualifying programs, it introduces volatility in the ability to compare data from year to year; once attribution plateaus, it will be easier to draw conclusions on aligned-beneficiary health and quality over time.

Percentage of Medicaid Adolescents with Well-Care Visits

The APM sets a goal that 53% of all eligible Medicaid adolescents receive their well-care visit. Steady progress has been realized in this measure since the base year of 2017. In 2019, the rate was 50.2%, inching Vermont closer to the five-year performance goal. The current trajectory sets Vermont up for success in years to come. Given the Public Health Emergency due to the COVID-19 pandemic, the GMCB will closely monitor payer decisions and rulemaking at the State and Federal levels to ensure that all telehealth visits or encounters meeting this requirement be included in future reporting.

4. Vermont ACOs' Role in the All-Payer ACO Model Agreement

The All Payer ACO Model Agreement uses the accountable care organization model as the innovation for furthering the statewide cost and quality targets. It allows the GMCB to adapt the Medicare Next Generation ACO program to promote alignment across payer programs and to set the Medicare ACO benchmark.

The GMCB also has state regulatory levers over the ACO. In 2016, the legislature enacted Act 113, which granted authority to the Board to regulate accountable care organizations (ACOs). The GMCB ACO regulatory process includes certification, annual budget and program review and monitoring of the budget order throughout the year. In order to receive payments from Medicaid or commercial insurers, Vermont ACOs must obtain and maintain, on a yearly basis, certification from the GMCB.[28] OneCare Vermont, the only ACO operating in Vermont, received their initial certification in 2018, with an extensive compliance review of the GMCB Rule 5.000 certification elements. Each calendar year an ACO with attributed lives in Vermont must submit a budget

[27] https://www.healthvermont.gov/scorecard-opioids.

[28] See 18 V.S.A. § 9382 (Oversight of accountable care organizations); see generally GMCB's ACO Oversight website, available at https://gmcboard.vermont.gov/aco-oversight.

for the coming year that includes a description of their projected network, anticipated payer contracts, operational budget as well as estimates of health service expenditures for which the ACO will be accountable, and population health programs. An ACO is required to present their budget and programs in a public hearing before the GMCB. Vermont's Office of the Health Care Advocate is also a party to the budget process.

The quality framework in the Agreement encourages health, public health, and community service providers to work together to improve quality and integration of care. This collaboration includes the ACO and its community partners – while the ACO is not responsible for these outcomes alone, a major component of the ACO budget review process is GMCB's review of the ACO's quality improvement efforts.

In response to the state's performance to date, in November of 2020 the Agency of Human Services issued an assessment of progress and recommendations for improving performance in Vermont's model for health care reform. This report outlined a number of implementation risks and opportunities that could be leveraged by each stakeholder to ensure Vermont's continued progress toward the goals of the Vermont All-Payer Accountable Care Organization Model Agreement. Among successes, the plan highlights OneCare's success in quality framework alignment:

> *"High performing ACOs maximize alignment of measures across payer contracts to amplify focus on improvement and to reduce administrative burden. OneCare Vermont's ACO-level quality measures are highly aligned with the Agreement's quality framework and across payer contracts, reflecting years of ACO standards building, partnership with the GMCB to customize the measure set for the Vermont Medicare ACO Initiative, and collaboration with Medicaid and participating commercial payers to reflect Vermont's priorities for quality improvement."*[29]

This alignment is paramount to meeting the two ACO-specific requirements under the Model; (1) *How Scale Target ACO Initiatives hold Vermont ACOs accountable for quality of care, the health of their aligned beneficiaries, or both; and (2) How the State holds Vermont ACOs accountable to allocate funding for and invest in community health services to achieve the Statewide Health Outcomes and Quality of Care Targets.* Discussion on progress and overall alignment with those two requirements are described sections 5 and 6, below. Most areas of opportunity for improvement are related to payment models, which, if addressed, would allow for further quality improvement as providers gain flexibility in how they can apply standard payments. We expect that the adoption of prospective population-based payments increases relative to fee for service reimbursement will yield momentum in delivery system reform as a result of more flexible funding streams and the ability for providers to plan and invest resources more wisely.

5. ACO Accountability for Aligned Beneficiary Health Outcomes and Quality of Care

In 2019, 160,000 of approximately 618,200 Vermonters (26%) were attributed to OneCare's network. The first year of the model (2018) was foundational as the ACO, providers, and payers worked to determine ways to achieve and affect delivery system transformation and implement a system of accountability. In year two, of the 22 APM measures, there were 11 that were reported by the ACO in one or more payer contracts.[30] The remaining APM measures were largely statewide prevalence measures which one would not expect an ACO to

[29] All-Payer Model Implementation Improvement Plan; https://gmcboard.vermont.gov/sites/gmcb/files/documents/APM%20Implementation%20Improvement%20Plan%20Final%2011.19.20.pdf.
[30] See Appendix B.

impact, at least initially. The goal of prevalence measures would be to encourage the ACO to collaborate on prevention and upstream solutions to preventing chronic disease. As the scale of the model grows and more patients are impacted, Vermont will be tracking how the ACO and State are affecting health outcomes both separately and together.[31,32]

In 2019, there were several ways that the ACO was accountable for aligned beneficiary's health outcomes and quality of care:

- Through the payer contracts, the ACO's financial incentives are tied to their quality and financial performance.
- In their contracts with health and social service providers, the ACO includes measures holding providers accountable for the provision of services which are intended to improve quality, reduce provider burden, and bring down the total cost of care by providing care at the right time and place. In return, there is a financial distribution to providers based on quality performance. Each of these are described below.

ACO payer and provider contracts are decided on an annual basis, allowing for opportunity to modify reporting requirements – this could lead to inconsistencies in year over year alignment – but allow for payer and provider specific augments to the contracts to reflect performance most accurately. An example of these changes can be seen in the 2020 contract amendments to allow for financial flexibilities related to the Public Health Emergency.[33]

5.1. Payer Contracts

Under GMCB Rule 5.000, and in accordance with 18 V.S.A. § 9382, the ACO is required to maintain a quality evaluation and improvement program that is actively supervised by a clinical director and evaluated against defined measures. Additionally, OneCare also has continuous quality improvement requirements in their payer agreements. OneCare examines their ACO quality measure performance in the first quarter of each year following the close of that year, prioritizes data, and sets clinical priorities to achieve going forward that will meet quality and cost outcomes. This is built into their quality improvement program.

Under the ACO certification process and for continued eligibility, ACOs must submit both a completed and planned quality improvement plan annually. Under the ACO budget oversight process, the ACO is required to also demonstrate progress being made in their quality improvement program. ACO clinical priority areas are reviewed and selected annually and are in addition to the ACO quality measures included in their payer contracts. The priorities are set by the Quality Improvement Committee for the network.

OneCare's 2019 clinical priorities were to:

1) decrease acute inpatient admission rate for high and very high-risk cohorts,
2) decrease emergency department visit rate for high and very high-risk cohorts,
3) increase percent of high and very high patients engaged in care coordination,
4) decrease inpatient admission rate for COPD for patients with COPD,
5) decrease inpatient admission rate for CHF for patients with CHF,
6) decrease emergency department visit rate for asthma for patients with asthma (pediatric and adult),
7) increase percent of patients with A1c performed within 12 months,

[31] The GMCB 2018 ACO Oversight Process https://gmcboard.vermont.gov/content/2018-aco-oversight.
[32] Vermont Department of Health. State Health Improvement Plan. https://www.healthvermont.gov/about-us/how-are-we-doing/state-health-improvement-plan.
[33] https://gmcboard.vermont.gov/sites/gmcb/files/documents/payment-reform/Vermont%20letter%20to%20CMS%20CMMI%20re%20COVID-19.pdf.

8) increase percent of Medicare patients with an annual wellness visit within 12 months,
9) increase percent of Medicaid and Commercial patients aged 12-21 with well-care visit within 12 months, and
10) increase percent of Medicaid and Commercial patients with developmental screening.[34]

Progress on the 2019 clinical priorities was discussed in the 2020 OneCare budget submission.[35] OneCare stated the 2019 priorities were identified as clinically important, represented opportunity for improvement, and could be monitored monthly with available data for timely action. OneCare stated that measures from 2018 that did not meet these criteria and relied on annual reports, such as mental health and substance use-related measures, were retired. OneCare selected two new clinical priorities in 2019: increasing the percent of patients with diabetes with an A1c performed within 12 months and decreasing emergency department visit rates for patients with asthma (pediatric and adults).

One of the premises of the APM is to test whether aligned, risk-based contracts that are tied to the ACO's performance on quality and cost will improve the health of Vermonters and will slow the rate of health care spending. To help support this effort, there is a requirement in the Agreement for the ACO, in its Medicare Next Generation Contract, to withhold a portion of the cost of care to be used to reward providers who meet the payer's quality targets. The mechanism for this withhold is the Value Based Incentive Fund. In 2019, as in 2018, the Medicaid and BCBS QHP ACO contracts each also had a similar withhold from the total spend which is to be distributed to providers based on their quality performance, reinvested in payer program quality improvement initiatives, or a combination of the two. Once the performance settlements are complete, funds are calculated for each participating payer program individually and the ACO then makes payments separately to each eligible provider participant based on both attribution and performance on quality measures.[36]

5.2. Provider Contracts

OneCare's 2019 provider network included 12 of 14 Vermont hospitals and Dartmouth-Hitchcock (DHMC) in New Hampshire, the largest out of state provider of care to Vermonters. Non-hospital providers in the OneCare network included FQHCs, skilled nursing facilities, home health agencies, designated agencies, and independent primary care and specialist practices. In 2019, OneCare added three hospitals that will participate in the Vermont Medicaid Next Generation Program – Rutland Regional Medical Center, Northeastern Vermont Regional Hospital, and Gifford Medical Center. Two hospitals – Southwestern Vermont Medical Center and Mt. Ascutney Hospital – moved to full participation in all three programs (Medicaid, Medicare, and Commercial). This move noticed eight of Vermont's 14 hospitals fully participating in all three programs. Four additional hospitals participated in the Medicaid program, and DHH participated in the Medicaid and Commercial programs. OneCare also added FQHCs, primary care practices, and specialty practices to its 2019 network.[37]

it is important to highlight that the ACO structure puts OneCare in charge of provider quality accountability through contractual agreements; the GMCBs oversight of the ACO provides transparency and accountability to

[34] OneCare Vermont ACO 2020 Fiscal Year Budget Submission, Attachment A, Part 5. Available at: https://gmcboard.vermont.gov/sites/gmcb/files/files/payment-reform/2020%20Section%205%20Appendix%20ACO%20Pop%20Health%20and%20Quality%20Templates%20-%20For%20GMCB%20-%20FINAL.xlsx
[35] OneCare Vermont ACO 2020 Fiscal Year Budget Submission. Section 5, pp. 48-51. Available at: https://gmcboard.vermont.gov/aco-oversight/2020.
[36] OneCare Vermont's Value-Based Quality Incentive Fund Policy. Policies are available upon request.
[37] 2019 Budget Order; https://gmcboard.vermont.gov/sites/gmcb/files/FINAL%20%202019%20ACO%20Budget%20Order%202_5_2019.pdf.

ACO-level quality systems at the payer level. The GMCB is actively looking for ways to augment other regulatory processes to make quality a more central component of our provider-level regulation.

6. Vermont ACOs Allocation of Funding and Investments in Community Health Services

The GMCB's ACO Oversight authority outlined in Act 113 and Rule 5.000 requires the ACO to invest and strengthen key areas to support population health and access to comprehensive primary care, including strengthening and reducing burden in primary care, integrating community-based providers in its care model to promote seamless coordination of care across the care continuum, investing in the social determinants of health to improve population health outcomes, and working to prevent and address the impacts of adverse childhood experiences and other traumas. In addition to this authority, per the All-Payer ACO Model Agreement Section 8b, the GMCB may direct a Vermont Next Generation ACO to make specific infrastructure and care delivery investments. The ACO is held accountable to these investments through the GMCB's budget review, budget order and quarterly monitoring.

The ACO's population health investments were derived from two sources: public and private payer agreements and individual participation fees from hospitals. The GMCB had a list of conditions, with several related to investments in population health. The 2019 ACO Budget Order required the ACO to maintain the investment for population health at a certain percentage of their revenue (3.6% of its overall budget)[35]. In addition, the 2019 ACO Budget Order required the ACO to distribute the Medicare funding to the Blueprint for Health and SASH at 2018 Medicare levels, plus an inflationary rate of 3.8% in risk and non-risk communities.

6.1. Detailed Descriptions of OneCare's 2019 Population Health Programs

Payments to Primary Care and Social Service Providers

Primary care attributed life per member per month (PMPM)

This is a payment per attributed life, by payer, that each payer includes in their contracts with OneCare when the practice attests to having achieved a set of criteria to facilitate primary care transformation. The payment is distributed to participating primary care providers on a per member per month (PMPM) basis. OneCare's criteria include population health monitoring activities, utilization of data to identify strengths and opportunities, and the implementation of quality improvement initiatives to strengthen person-centered care and outcomes. Of note, these payments started under the Centers for Medicare and Medicaid Studies Multi-Payer Advanced Primary Care Demo (MAPCP) and the Blueprint for Health. Although this demo has ended with Medicare, OneCare, through their 2018 Vermont Medicare Modified Next Generation ACO Agreement, has been able to continue receipt and distribution of this funding for the state's primary care providers.

Capitated payment reform program for independent primary care providers

2019 was the second year of the Comprehensive Payment Reform program for independent primary care practices. In 2019, a "partial capitation" model was offered to smaller practices with fewer attributed lives to increase participation and provide an on-ramp to full capitation. This program provides additional resources and investments to practices to support the transition to a value-based payment model. Participating practices are required to work on a clinical or quality project throughout the year and report their progress and outcomes. In 2019, nine practices participated in either the full or partial capitation models.[38]

[38] OneCare Vermont, Comprehensive Payment Reform (CPR) Program Interim Report to Green Mountain Care Board (July 31, 2020), available at: https://gmcboard.vermont.gov/sites/gmcb/files/documents/payment-reform/Q2%20Deliverables%20-%20post%20to%20web.zip.

Withhold for quality improvement initiatives (Value-based Incentive Fund)

As described in Section 5, in the Medicaid, BCBS QHP, and Medicare payer contracts, a percentage for quality was withheld and a portion, based on performance was redistributed to providers in their network after payer settlement. The total VBIF funds are divided into two pools: primary care (70%), and general distribution (30%). If quality targets are unmet, OneCare and the payers agreed to use unpaid funds to focus on ACO measures where OneCare was at 50th or below the national percentile in 2019.

Complex care coordination program payments for primary and social service providers

OneCare's complex care coordination program is designed to engage providers through incentives and tools to increase communication and integration and decrease duplication of services. In the program, rising risk and high-risk patients choose a lead care coordinator from local primary care, social, and home health providers, who are incentivized through an enhanced PMPM to take extra time to coordinate care through regular contact with patients, care conferences with the patient and the care team, and shared documentation in OneCare's online care coordination program.

Community-based Initiatives

Primary prevention program (RiseVT)

RiseVT is a community-based model aimed at reducing morbidity of chronic disease (the third population health goal of the APM). OneCare adopted RiseVT as a primary prevention program in 2018 based on initial implementation in one geographic region, Franklin and Grand Isle Counties. Today, RiseVT has expanded its reach to nine of Vermont's 14 counties.[39]

Supports and Services at Home (SASH) and Community Health Teams

The Vermont Modified Next Generation ACO Medicare Agreement allows OneCare to receive funding from CMMI to continue paying for the Supports and Services at Home (SASH) program that was started under the Blueprint for Health. This funding provides health and social services for Medicare patients in congregate housing. CMMI, through the APM, also provided continued funding for an initiative started by the Blueprint for Health called 'Community Health Teams', which goes to each health service area in the state to bring providers together to work on quality improvement initiatives, with OneCare and the Blueprint co-facilitate using data from OneCare's information technology platform.

7. Conclusion

This second annual report demonstrates that Vermont is currently on track to meet five of six population-level health outcomes targets, seven of the eight healthcare delivery system quality targets (one data point of nine currently unavailable) and is making progress toward five of six available process milestones (one of the seven data points currently unavailable). In this second year, while there is still ample opportunity for the state to improve the quality of care and health outcomes for Vermonters, there are promising signs that delivery system reform is gaining momentum.

The GMCB has the regulatory authority, to review OneCare's quality improvement initiatives to support continuous quality improvement and success in the APM. However, it should be noted that the State does not have the authority to require self-insured employers to accept quality measures in alignment with the APM. In 2020, ACO program added one additional commercial payer program and worked to expand its Medicaid

[39] RiseVT: https://risevt.org.

population by introducing a geographic attribution pilot. The GMCB continues to monitor the ACO's quality programs to ensure alignment and continues to review quality measures of new payer programs as they are developed. The GMCB is engaging in further work and research to assess the impact of the ACO on various quality measurements, including access to and utilization of primary care, and inpatient and outpatient care, among others.

The GMCB will update this report when the outstanding data points become available. The GMCB looks forward to working with the state reporting and providing more comparative analysis on the 2020 results in the Performance Year 3 Annual Health Outcomes and Quality of Care Report.

Appendix A: Detailed Measure Information

Table A.1: Population-Level Health Outcome Targets – Measure Summaries and Methodologies

<table>
<tr><th>Measure</th><th>Methodology</th></tr>
<tr><td>Deaths Related to Drug Overdose (Statewide)</td><td>Calculation: State's performance, measured as a count of Vermont residents who die in Vermont – includes accidents, suicide, and undetermined drug-related fatalities. Vermont performance differs from that reported by the CDC in two ways, 1) VDH considers all causes of death, contributing conditions, and injury descriptions as opposed to underlying cause of death only. 2) VDH examines a broader list of ICD-10 Codes than those used by CDC:

<table><tr><th colspan="4">ICD Codes Used in Drug-Related Fatalities Analysis
(beyond those used by CDC)</th></tr><tr><td>X45</td><td>F10.0</td><td>F14.0</td><td>F17.0</td></tr><tr><td>X65</td><td>F10.1</td><td>F14.1</td><td>F17.1</td></tr><tr><td>Y15</td><td>F11.0</td><td>F15.0</td><td>F18.0</td></tr><tr><td>T36-T50</td><td>F11.1</td><td>F15.1</td><td>F18.1</td></tr><tr><td>T51.0</td><td>F13.0</td><td>F16.0</td><td>F19.0</td></tr><tr><td></td><td>F13.1</td><td>F16.1</td><td>F19.1</td></tr></table>
Source: Vermont Department of Health, Alcohol and Drug Abuse Programs.</td></tr>
<tr><td>Deaths Related to Suicide (Statewide)</td><td>Calculation: Cause of death is coded by ICD-10 Intentional Self-Harm (Suicide).
Source: Vermont Department of Health, Vital Statistics; Vital Statistics Bulletin (2017).</td></tr>
<tr><td>COPD Prevalence (Statewide)</td><td>Calculation: Percent of Vermont resident respondents who answer "yes" to the following question: "Has a doctor, nurse, or other health professional ever told you that you have chronic obstructive pulmonary disease, COPD, emphysema or chronic bronchitis?"

Notes: This information is collected annually by the state of Vermont and nationally by the CDC.

Source: Vermont Behavioral Risk Factor Surveillance System.</td></tr>
<tr><td>Diabetes Prevalence (Statewide)</td><td>Calculation: Percent of Vermont resident respondents who answer "yes" to the following question: "Has a doctor, nurse, or other health professional ever told you that you have diabetes?"

Notes: This information is collected annually by the state of Vermont and nationally by the CDC.</td></tr>
</table>

Measure	Methodology
	Source: Vermont Behavioral Risk Factor Surveillance System.
Hypertension Prevalence (Statewide)	This information is collected annually by the state of Vermont and nationally by the CDC. **Calculation:** Percent of Vermont resident respondents who answer "yes" to the following question: "Has a doctor, nurse, or other health professional ever told you that you have high blood pressure?" **Notes:** This information is collected bi-annually by the CDC nationally. To meet the terms of the Agreement, the GMCB works with the Vermont Department of Health to ensure that the hypertension prevalence question is collected through the survey annually. This includes proposal preparation, staff presentation to the Vermont BRFSS committee and payment to add the measure to the data collection tool. **Source:** Vermont Behavioral Risk Factor Surveillance System.
Percentage of Adults with Personal Doctor or Care Provider (Statewide)	**Calculation:** Percent of Vermont resident respondents who answer "yes" to the following question: "Do you have one person you think of as your personal doctor or health care provider?" **Notes:** This information is collected annually by the state of Vermont and nationally by the CDC. **Source:** Vermont Behavioral Risk Factor Surveillance System.

Table A.2: Health Care Delivery System Targets – Measure Summaries and Methodologies

Measure	Methodology
Initiation of Alcohol and Other Drug Dependence Treatment (Multi-Payer ACO)	**Calculation:** Follows HEDIS specifications for Initiation and Engagement of Treatment (IET); the percentage of adolescent and adult members with a new episode of alcohol or other drug (AOD) abuse or dependence who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth or medication treatment within 14 days of the diagnosis. **Notes**: Denominator results presented exclude Part A only and Part B only Medicare beneficiaries. **Source:** VHCURES.
Engagement of Alcohol and Other Drug Dependence Treatment (Multi-Payer ACO)	**Calculation:** Follows HEDIS specifications for Initiation and Engagement of Treatment (IET); the percentage of adolescent and adult members with a new episode of alcohol or other drug (AOD) abuse

Measure	Methodology
	or dependence who initiated treatment and who were engaged in ongoing AOD treatment within 34 days of the initiation visit. **Notes**: Denominator results presented exclude Part A only and Part B only Medicare beneficiaries. **Source:** VHCURES.
30-Day Follow-Up After Discharge from ED for Mental Health (Multi-Payer ACO)	**Calculation:** Follows HEDIS specifications for Follow-up After Emergency Department Visit for Mental Illness (FUM). Shown as the percentage of ACO-aligned beneficiaries' emergency department (ED) visits for members 6 years of age and older with a principal diagnosis of mental illness or intentional self-harm, who had a follow-up visit for mental illness. Specifically, the percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days). **Notes**: Denominator results presented exclude Part A only and Part B only Medicare beneficiaries. **Source:** VHCURES.
30-Day Follow-Up After Discharge for Alcohol or Other Drug Dependence (Multi-Payer ACO)	**Calculation:** Follows HEDIS specifications for Follow-up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA). Shown as the percentage of ACO-aligned beneficiaries' emergency department (ED) visits for members 13 years of age and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence, who had a follow up visit for AOD. Specifically, the percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days). **Notes**: Denominator results presented exclude Part A only and Part B only Medicare beneficiaries. **Source:** VHCURES.
Number of Mental Health and Substance Abuse-Related ED Visits (Statewide)	Shown as the percent change from previous calendar year. Results utilize CCS 5 groupings for ED visits. Diagnosis categories include: - Adjustment disorders - Anxiety disorders - Attention-deficit conduct and disruptive behavior disorders - Developmental disorders - Disorders usually diagnosed in infancy, childhood, or adolescence - Impulse control disorders - Mood disorders

Measure	Methodology
	- Personality disorders - Schizophrenia and other psychotic disorders - Alcohol-related disorders - Substance-related disorders - Suicide and intentional self-inflicted injury - Screening and history of mental health and substance abuse codes - Miscellaneous disorders **Source:** VUHDDS.
Diabetes HbA1c Poor Control (Medicare ACO)	**Calculation:** Percentage of patients 18 to 75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period. Only patients with a diagnosis of Type 1 or Type 2 diabetes should be included in the denominator of this measure; patients with a diagnosis of secondary diabetes due to another condition should not be included. **Notes:** ACOs stopped reporting ACO-41 (Diabetic Eye Exam) after 2018. Since it was one of a two measure composite for diabetes, along with ACO-27, the 2018 result reflects the composite. Beginning in 2019, ACO-27 is assessed as an individual measure. **Source:** Centers for Medicare and Medicaid Services (2019 specification).
Controlling High Blood Pressure (Medicare ACO)	**Calculation:** The percentage of Medicare ACO beneficiaries aged 18-85 with a documented diagnosis of hypertension and a blood pressure reading of < 140/90 mm Hg at their most recent ambulatory office visit. **Notes:** Denominator excludes patients with evidence of end stage renal disease (ESRD), dialysis or renal transplant before or during the measurement period. Also excludes patients with a diagnosis of pregnancy during the measurement period OR Patients age 65 and older in Institutional Special Needs Plans (SNP) or Residing in Long-Term Care with a POS code 32, 33, 34, 54 or 56 any time during the measurement period. **Source:** Centers for Medicare and Medicaid Services (2019 specification).
All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions (Medicare ACO)	**Calculation:** Risk-adjusted outcome measure. Includes Medicare-fee-for-service beneficiaries 65 years or older who have two or more of the following nine chronic conditions: - AMI - Alzheimer's disease and related disorders or senile dementia - A Fib

Measure	Methodology
	- Chronic kidney disease - COPD or asthma - Depression - Diabetes - Heart failure - Stroke or TIA **Source:** Centers for Medicare and Medicaid Services (2019 specification).
ACO CAHPS Composite: Getting Timely Care, Appointments and Information (Medicare ACO)	**Calculation**: Survey asks patients how often they got appointments for care as soon as needed and timely answers to questions when they called the office. The survey also asks patients how often they saw the doctor within 15 minutes of their appointment time. **Source:** Centers for Medicare and Medicaid Services (2018 specification).

Table A.3: Process Milestones – Measure Summaries and Methodologies

Measure	Methodology
Percentage of Vermont Providers Checking Prescription Drug Monitoring Program Before Prescribing Opioids (Statewide)	**Calculation:** The number of Vermont Prescription Monitoring System queries by prescribers who have written at least one opioid analgesic prescription divided by the number of unique recipients who have received at least one opioid analgesic prescription. **Source:** Vermont Department of Health, Alcohol and Drug Abuse Programs.
Adults Receiving Medication Assisted Treatment (MAT) (Statewide, Ages 18-64)	**Calculation**: Count of Vermont Adults (18-64) receiving Medication Assisted Treatment in Vermont Hub and Spoke programs. **Source**: Vermont Department of Health, Alcohol and Drug Abuse Programs.
Screening and Follow-Up for Clinical Depression and Follow-Up Plan (Multi-Payer ACO)	**Calculation:** Percentage of patients aged 12 years and older screened for depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen. 2018 baseline and results are derived from Medicare, Medicaid and Commercial QHP performance and weighted based on attribution within each of those payer programs. Results are combined and given a total percentage score which is then compared to the Medicare performance benchmarks. **Source:** ACO-payer contract results.

Measure	Methodology
Tobacco Use Assessment and Cessation Intervention (Multi-Payer ACO)	**Calculation:** Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received tobacco cessation intervention if identified as a tobacco user. 2018 baseline and results are derived from Medicare and Medicaid performance and weighted based on attribution within each of those payer programs. Results are combined and given a total percentage score which is then compared to national Medicare performance benchmarks. **Source:** ACO-payer contract results.
Percentage of Vermont Residents Receiving Appropriate Asthma Medication Management (Multi-Payer ACO)	**Calculation:** Follows HEDIS specifications for Medication Management for People with Asthma (MMA). The percentage of ACO-aligned Vermonters in VHCURES 5-64 years of age during the measurement year who were identified as having persistent asthma and were dispensed appropriate medications that they remained on for at least 50% of their treatment period. **Notes:** Denominator results presented exclude Part A only and Part B only Medicare beneficiaries. **Source:** VHCURES.
Percentage of Medicaid Adolescents with Well-Care Visits (Statewide Medicaid)	**Calculation:** Percentage with at least one well care visit with a PCP or OB/GYN ages 12-21. **Source:** As reported by DVHA for the CMS Child Core Quality Measure Set: https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-child-chart-pack.pdf.
Percentage of Medicaid Enrollees Aligned with ACO (Statewide Medicaid)	**Calculation:** Shown as percent of all Medicaid-enrolled Vermonters who are aligned to the ACO in Performance Year 1. Performance is compared to the Medicare-enrolled proportion of Vermonters as reported in the 2018 Annual Scale Targets and Alignment Report. **Source:** Department of Vermont Health Access (Medicaid).

Appendix B: Measure Crosswalk

Table B.1: Payer-Specific Measure Calculation Notes and Changes from Appendix 1

Measure	Vermont All-Payer ACO Model	2019 Vermont Medicaid Next Gen	2019 Medicare Next Gen	2019 BCBSVT Next Gen	Notes
% of adults with a usual primary care provider	X				BRFSS Survey Results. Data are not publicly available on the VDH website at this time due to the COVID-19 Public Health Emergency.
Statewide prevalence of Chronic Obstructive Pulmonary Disease	X				BRFSS Survey Results. Data are not publicly available on the VDH website at this time due to the COVID-19 Public Health Emergency.
Statewide prevalence of Hypertension	X				BRFSS Survey Results. Data are not publicly available on the VDH website at this time due to the COVID-19 Public Health Emergency.
Statewide prevalence of Diabetes	X				BRFSS Survey Results. Data are not publicly available on the VDH website at this time due to the COVID-19 Public Health Emergency.
% of Medicaid adolescents with well-care visits	X	X		X	All Medicaid adolescents in VHCURES, excluding dual-eligible.
Initiation of alcohol and other drug dependence treatment	X	X	X	X*	BCBSVT Next Gen treats these measures as a single composite measure; All-Payer ACO Model and Vermont Medicaid Next Gen treat them as separate measures.
Engagement of alcohol and other drug dependence treatment	X	X	X		
30-day follow-up after discharge from emergency department for mental health	X	X	X	X	ACO-attributed beneficiaries in VHCURES, utilizing HEDIS specification for FUM.
30-day follow-up after discharge from emergency department for alcohol or other drug dependence	X	X	X	X	ACO-attributed beneficiaries in VHCURES, utilizing HEDIS specification for FUH.
% of Vermont residents receiving appropriate asthma medication management	X				All Vermonters in VHCURES, utilizing HEDIS specifications for MMA.

Measure	Vermont All-Payer ACO Model	2019 Vermont Medicaid Next Gen	2019 Medicare Next Gen	2019 BCBSVT Next Gen	Notes
Screening for clinical depression and follow-up plan (ACO-18)	X	X	X	X	Reported in Statewide Health Outcomes and Quality of Care Report. Measure is a combination of claims and clinical data (chart review). Annual reported scores are weighted based on participating program data received from the ACO and/or payer.
Tobacco use assessment and cessation intervention (ACO-17)	X	X	X		
Deaths related to suicide	X				VDH results.
Deaths related to drug overdose	X				VDH ADAP results.
% of Medicaid enrollees aligned with ACO	X				DVHA results.
# per 10,000 population ages 18-64 receiving medication assisted treatment for opioid dependence	X				VDH ADAP results.
Rate of growth in mental health or substance abuse-related emergency department visits	X				VUHDDS results. Not yet available.
# of queries of Vermont Prescription Monitoring System by Vermont providers (or their delegates) divided by # of patients for whom a prescriber writes prescription for opioids	X				VDH ADAP results. Not yet available.
Hypertension: Controlling high blood pressure	X	X	X	X	As of CY 2018, Medicare no longer reports this as a composite measure; the All-Payer ACO Model Agreement Appendix 1 has been updated to reflect this change. Each measure will be reported separately in the Statewide Health Oucomes and Quality of Care Report.
Diabetes Mellitus: HbA1c poor control		X		X	
All-Cause unplanned admissions for patients with multiple chronic conditions		X			

Measure	Vermont All-Payer ACO Model	2019 Vermont Medicaid Next Gen	2019 Medicare Next Gen	2019 BCBSVT Next Gen	Notes
Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient experience surveys	X	X	X	X	Surveys vary by program. All-Payer ACO Model includes ACO CAHPS Survey composite of Timely Care, Appointments, and information for ACO-attributed Medicare beneficiaries. Vermont Medicaid Next Gen includes multiple CAHPS PCMH composites for ACO-attributed Medicaid beneficiaries. Medicare Next Gen includes multiple ACO CAHPS composites for ACO-attributed Medicare beneficiaries. BCBSVT Next Gen includes care coordination composite and tobacco cessation question from CAHPS PCMH for ACO-attributed BCBSVT members.
ACO all-cause readmissions (HEDIS measure for commercial plans)				X	
Risk-standardized, all-condition readmission (ACO-8)			X		
Influenza immunization (ACO-14)			X		
Colorectal cancer screening (ACO-19)			X		
Developmental screening in the first 3 years of life		X		X	
Follow-up after hospitalization for mental Illness (7-Day Rate)		X		X	