MILLIMAN REPORT

Evaluation of State Medicaid Scorecard data

2021 Scorecard update

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Introduction and highlights

This report provides an analysis of the 2021 Centers for Medicare and Medicaid Services (CMS) State Medicaid and Children's Health Insurance Program (CHIP) Scorecard (Scorecard). This is the fourth annual release of the Scorecard. CMS released the initial version of the Scorecard in June 2018 with a stated goal of improving transparency and tracking progress of performance and outcomes within the Medicaid program. CMS released the third annual update on December 13, 2021.[1] This fourth iteration of the Scorecard represents not only a data refresh but also a continued evolution in terms of the information CMS included in the Scorecard. As we describe the various elements of the Scorecard below, we will highlight significant changes in reported values from last year's Scorecard in the callout boxes below the description of each section.

The Scorecard includes data about state and federal metrics arranged in four sections: state administrative accountability, federal administrative accountability, national context, and state health system performance (SHSP).[2]

- **State administrative accountability.** This portion of the Scorecard measures the timeliness of states' managed care rate certifications to CMS in relation to the start of the contract period, as well as the number of days it takes for a state to respond to questions from CMS regarding the managed care rates. Other measures focus on the approval periods for state plan amendments (SPAs) and waiver requests, renewals, and amendments. Additionally, CMS provides state-level information regarding timeliness of annual 372(S) reporting, Medicaid modified adjusted gross income (MAGI) and CHIP application processing times, the number of unresolved high-priority Transformed Medicaid Statistical Information System (T-MSIS) data quality issues, state participation with CMS's Unified Program Integrity Contractors and the Healthcare Fraud Prevention Partnership, and the total number of days a managed care contract action is under CMS review. Those measures are all carried over from last year's Scorecard. There were no new measures for the 2021 Scorecard release.[3]

Significant changes relative to the CY 2020 Scorecard – State Administrative Accountability

- **Medicaid and CHIP application processing times**: The percentage of Medicaid/CHIP applications taking longer than 45 days to process decreased from 15.5% during the February 2020 through April 2020 time period to 4.6% during the February 2021 through April 2021 time period (percentages reflect straight average of values reported for the three months).* This may be partially attributable to the pause in eligibility redetermination under the COVID-19 PHE that has reduced the normal churn of the Medicaid/CHIP population. The number of new Medicaid/CHIP applications submitted from December 2019 through February 2020 was approximately 5.3 million but decreased to 4.2 million from December 2020 through February 2021.†
- **Managed care capitation rate review and submission**: The Scorecard tracks the timeliness of state actuarial rate certification submissions. There was a noted increase in the number of rate certifications submitted more than 360 days after the start of the rating period, increasing from only three in FFY 2019 (out of 126 in total) to 14 (out of 118 in total) in FFY 2020. ‡ This increase may be attributable to complications resulting from the onset of the COVID-19 PHE.

[1] Medicaid and CHIP Scorecard: 2021 Fact Sheet. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/downloads/2021-scorecard-fact-sheet.pdf.

[2] Medicaid. Medicaid & CHIP Scorecard. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/index.html.

[3] Medicaid. State Administrative Accountability. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/state-administrative-accountability/index.html.

- **Status of T-MSIS priority items**: The Scorecard tracks the number of open priority items related to state submissions of T-MSIS data. The priority items tracked by the Scorecard are data quality issues related to fundamental system reporting requirements and data elements intended to improve reporting of beneficiary demographics and service provider information.§ The Scorecard indicated the number of states with six or more priority items open has decreased from 20 in July 2020 to three in July 2021. CMS has been increasingly using the T-MSIS data to provide publicly available research tools and data for the Medicaid population.**Additionally, the Scorecard indicates 17 states are collaborating with CMS's Unified Program Integrity Contractors (UPIC) to initiate joint investigations related to program integrity using T-MSIS to initiate investigations.††

*Medicaid. Medicaid MAGI and CHIP Application Processing Times. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/medicaid-magi-and-chip-application-processing-times/index.html.

†Analysis of monthly eligibility data provided on https://data.medicaid.gov/.

‡Medicaid. Managed Care Capitation Rate Review: Timing of States' Submissions. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/managed-care-capitation-rate-states-submission-timing/index.html.

§Medicaid. T-MSIS Data Quality: Number of Open Priority Items. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/t-msis-data-quality-open-top-priority-issues/index.html.

**For example, see https://www.medicaid.gov/medicaid/data-systems/macbis/medicaid-chip-research-files/transformed-medicaid-statistical-information-system-t-msis-analytic-files-taf/index.html.

††Medicaid. Initiation of Collaborative Investigations Between States and CMS's Unified Program Integrity Contractors. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/investigations-between-states-and-unified-program-integrity-contractors/index.html.

- **Federal administrative accountability.** Complementing the state administrative accountability measures, the federal administrative accountability measures focus on the length of time required by CMS to review and approve managed care rates, managed care contract actions, and advance planning documents (APDs) for enhanced federal funding.[4] Other measures regarding SPAs and waiver requests overlap with the state administrative accountability section. There were no new measures for the 2021 Scorecard release.

Significant Changes Relative to the CY 2020 Scorecard – Federal Administrative Accountability

Managed care capitation rate review and approval: The median time for CMS to approve rates (reflecting both the time CMS takes to conduct the review and the time it takes states to respond to questions and provide additional information) was reduced from 125 days in FFY 2019 to 91 days in FFY 2020. Additionally, the number of rate reviews extending beyond 300 days was reduced from 32 rate submissions in FFY 2019 to only six rate submissions in FFY 2020.* These statistics suggest that collaboration between CMS and its state Medicaid agency partners during the rate review process has increased. The annual CMS Medicaid Managed Care Rate Development Guide may also be facilitating a more efficient rate review process by requesting detailed information on methodologies and assumptions as part of the rate certification itself.†

*Medicaid. Managed Care Capitation Rate Review: Total Days to Approve Rates. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/managed-care-capitation-rate-days-to-approve-rates/index.html.

†CMS (June 2021). 2021-2022 Medicaid Managed Care Rate Development Guide. Retrieved May 18, 2022, from https://www.medicaid.gov/medicaid/managed-care/downloads/2021-2022-medicaid-rate-guide-11102021.pdf.

[4] Medicaid. Federal Administrative Accountability. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/federal-administrative-accountability/index.html.

- **National context.** This section provides information related to enrollment of different populations, approaches to delivering care, and program expenditures. These high-level statistics are intended to help the user understand and consider differences among states as they evaluate the detailed metrics in the other sections of the Scorecard. There were no new measures added for the 2021 Scorecard release.[5]

Significant Changes Relative to the CY 2020 Scorecard – National Context

- **Medicaid enrollment changes**: As indicated by monthly enrollment reports released by CMS, Medicaid and CHIP enrollment has increased significantly since the start of the COVID-19 PHE, with total enrollment increasing from 72.7 million in the 2020 Scorecard to 82.3 million in the 2021 Scorecard.
- **Medicaid Payment Error Rate Measurement (PERM)***: The PERM program reflects a statistical sampling of claim payments from state Medicaid and CHIP programs used to develop an estimate for the national improper payment rate. † As stated by CMS, the PERM rate is "not a fraud rate but simply a measurement of payments made that did not meet statutory, regulatory, or administrative requirements." ‡ Statistical sampling occurs across a three-year cycle among the 50 states and the District of Columbia. Beginning in FFY 2019, CMS reviews Medicaid/CHIP beneficiary eligibility information related to the sampled claim payments (with FFY 2020 marking the second year of the three-year cycle that incorporates the review of beneficiary eligibility information). Keeping these methodology changes in mind, the Medicaid PERM rate increased from 14.9% in FFY 2019 to 21.4% FFY 2020. The CHIP PERM rate increased from 15.8% to 27.0%. Note that, for the FFY 2020 PERM rate measurement, only claims completed prior to the COVID-19 PHE were reviewed. CMS indicated that eligibility errors are related to "insufficient documentation to verify eligibility determinations or non-compliance with eligibility redetermination requirements." Eligibility process issues causing these errors included income verification not being performed and lack of documentation that eligibility verification was completed.§

*Medicaid. What Is the Rate of Improper Payments in Medicaid and CHIP? Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/what-rate-of-improper-payments-medicaid-chip/index.html.

†Medicaid and CHIP Payment and Access Commission. Payment Error Rate Measurement (PERM). Retrieved May 18, 2022, from https://www.macpac.gov/subtopic/payment-error-rate-measurement-perm/.

‡Medicaid. What Is the Rate of Improper Payments in Medicaid and CHIP?, op cit.

§https://cmsnationaltrainingprogram.cms.gov/sites/default/files/shared/2022_FraudWasteAbuse_Final_508.pptx

For the first three sections of the Scorecard, state-specific information is generally not provided. Rather, national median statistics or histograms are used to illustrate results, with a few exceptions generally displayed as nationwide heat maps.

- **State health system performance (SHSP).** The final section of the Scorecard provides state-specific statistics on SHSP based on quality measures contained in the Child and Adult Core Sets.[6] For federal fiscal year (FFY) 2020, 34 measures were contained in the Child Core Set, compared to 48 measures in the Adult Core Set. As noted in this report, several adjustments were made to both Child and Adult Core Set measures from FFY 2019 to FFY 2020.

[5] Medicaid. National Context. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/national-context/index.html.

[6] Core Set data is available from https://data.medicaid.gov/.

Significant Changes Relative to the CY 2020 Scorecard – State Health System Performance

- **Improved reporting of quality measures.** As noted in Figure 1 of this report, state reporting completeness for common measures in FFY 2019 and FFY 2020 increased by 3.4% and 7.5% for the Child and Adult Core Sets, respectively.
- **Impact of COVID-19 on Core Set reporting.** For most measures, Core Set values for FFY 2020 reflect services provided to Medicaid members in calendar year 2019.* Therefore, FFY 2020 performance values should not be impacted by utilization changes resulting from the COVID-19 PHE. For some measures, states had the option of reporting FFY 2019 values again for FFY 2020 because of the COVID-19 PHE.† However, as described later in this report, states exercised this option to a limited degree. For FFY 2021, Core Set values are likely to be impacted by changes in Medicaid enrollment and the service delivery disruption that occurred during calendar year 2020 because of the COVID-19 pandemic.

*Please see https://www.medicaid.gov/medicaid/quality-of-care/downloads/ffy-2020-adult-core-set-measurement-periods.pdf?t=1643891853 (Adult Core Set) and https://www.medicaid.gov/medicaid/quality-of-care/downloads/ffy-2020-child-core-set-measurement-periods.pdf (Child Core Set) for measurement period specifications.

†Medicaid. Medicaid & CHIP Scorecard. Retrieved May 18, 2022, from https://www.medicaid.gov/state-overviews/scorecard/index.html.

Overview of the Scorecard

This report provides an analysis of the 2021 CMS Medicaid and Children's Health Insurance Program (CHIP) Scorecard (Scorecard), the fourth annual release of the Scorecard. As in our analysis of previous years' Scorecards, we primarily focus on the quality measures included in the Scorecard, based on the Child and Adult Core Set data, with material changes in other sections noted above.

- **Child Core Set.** The Child Core Set was developed from the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), which required the U.S. Department of Health and Human Services (HHS) to develop a set of quality measures for Medicaid and CHIP programs based on voluntary reporting by states.[7]
- **Adult Core Set.** Section 1139B of the Patient Protection and Affordable Care Act (ACA) established the impetus for the Adult Core Set. The measures were first published by CMS in January 2012.[8]

To support states' efforts to report these measures, CMS established the Technical Assistance and Analytic Support (TA/AS) program.[9] Annual updates are made to the Core Sets based on changes in clinical guidelines and discussion between state and federal officials, providers, health plans, and patient advocates.[10] These annual updates sometimes are not immediately reflected in the Core Set data, as at least 25 states must report on a measure and internal data quality standards must be met for it to meet the minimum reporting standard, so there is frequently a lag for new measures.

Due to material differences in how states report these measures to CMS, our analysis controls for key differences in state-level reporting methodologies to enable meaningful comparisons. For a more complete review of these topics, the reader is referred to Appendix 1, an excerpt from our analysis of the 2018 Scorecard.[11] For states with available data, we summarized performance rates into state profile reports (provided in separate documents), which illustrate

[7] CMS. Children's Healthcare Quality Measures. Retrieved May 18, 2022, from https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html.

[8] CMS. Adult Healthcare Quality Measures. Retrieved May 18, 2022, from https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-core-set/index.html.

[9] Medicaid and CHIP (March 2022). Fact Sheet: About the Medicaid and CHIP Core Set Technical Assistance and Analytic Support Program. Retrieved May 18, 2022, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/tafactsheet.pdf.

[10] CMS (November 19, 2020). 2021 Updates to the Child and Adult Core Healthcare Quality Measurement Sets. CMCS Informational Bulletin. Retrieved May 18, 2022, from https://www.medicaid.gov/federal-policy-guidance/downloads/cib111920.pdf.

[11] For more information, please see https://www.milliman.com/en/insight/Evaluation-of-State-Medicaid-Scorecard-Data.

how each state's performance rates measure relative to other states, controlling for variances in reporting methodologies and underlying populations for each quality measure. For those readers who may be unfamiliar with the state profile reports, Appendix 2 provides an overview of the layout and information included.

Consistent with previous years, we continue our review of state-specific comments for each rate reported in the Core Sets. We manually reviewed these notes for indications of data quality issues and we excluded all rates with potentially material issues from the report. Due to the COVID-19 public health emergency (PHE), some states reported measures using FFY 2019 data (solely or mixed with FFY 2020 data). We also identified these rates and similarly excluded them from the report. Additionally, for this year's analysis, we applied a methodology to identify outlier values in the reported data to facilitate better metric comparison among states.

Measure reporting completeness

Consistent with previous analysis, we reviewed measure reporting completeness and the associated changes from FFY 2019 to FFY 2020. This review only included measures that were common between the two years—"Additions" and "Retirements" for FFY 2020, as described below, were not included. For this analysis, a state was considered to have reported a measure if the state reported it for at least one population and the rate was not indicated as having potential data issues (please see the Data Quality Review section for further detail).

In FFY 2019, across all states, a total of 1,134 Child Core Set measures were reported. This increased to 1,184 reported measures in FFY 2020. For both years, the number of total possible measures in the Child Core Set was 1,479, indicating 76.7% of possible measures were reported in FFY 2019 and 80.1% in FFY 2020—an increase of 3.4%. Similarly, in FFY 2019, a total of 1,312 Adult Core Set measures were reported across all states, which increased to 1,458 reported measures in FFY 2020. For the Adult Core Set, the number of total possible measures is 1,938, indicating 67.7% of possible measures were reported in FFY 2019, and 75.2% in FFY 2020, an increase of 7.5%. Please note that only measures reported in both FFY 2019 and FFY 2020 were included in this analysis.

Figure 1 summarizes the reporting completeness and improvements by measure domain. For example, the 77.3% reported in FFY 2019 for the Child Core Set behavioral health domain was calculated by dividing the number of reported measures in the domain, 197, by the number of total possible measures, 255 (five possible measures for each of the 51 reporting jurisdictions, including the District of Columbia). Reporting for Puerto Rico started in FFY 2020 but was not included in the comparison.

FIGURE 1: REPORTING IMPROVEMENTS FOR COMMON MEASURES

	Child Core Set				Adult Core Set			
Domain	Common Measures	Percent Reported in FFY 2019	Percent Reported in FFY 2020	Change	Common Measures	Percent Reported in FFY 2019	Percent Reported in FFY 2020	Change
Behavioral	5	77.3%	82.4%	5.1%	19	70.7%	78.6%	7.9%
Maternal	8	67.2%	72.5%	5.4%	5	60.0%	65.9%	5.9%
Primary Care	10	81.6%	82.9%	1.4%	4	80.4%	86.3%	5.9%
Acute and Chronic	4	80.4%	84.3%	3.9%	10	60.8%	69.0%	8.2%
Dental	2	81.4%	81.4%	0.0%	NA	NA	NA	NA
Total	**29**	**76.7%**	**80.1%**	**3.4%**	**38**	**67.7%**	**75.2%**	**7.5%**

Note: For the number of states completing each measure in FFY 2020, please see https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2021-adult-chart-pack.pdf and https://www.medicaid.gov/medicaid/quality-of-care/downloads/2021-child-chart-pack.pdf.

Two potential factors that may be influencing the completeness of state reporting include:

- **Future reporting requirements**. As indicated in last year's report, starting in FFY 2024, reporting of the Child Core Set and the Behavioral Health measures on the Adult Core Set will be required.[12] Efforts appear to be underway by states to increase the completeness of reporting prior to FFY 2024.
- **Directed payments**. As it relates to directed payments, CMS also released a revised version of the Section 438.6(c) preprint form, to be used for all state-directed payment requests for contract rating periods beginning on or after July 1, 2021.[13] The preprint has been expanded with the goal of facilitating review and reducing turnaround time, but of particular note here is that the quality questions on the template now specifically *recommend* the use of the Child and Adult Core Set measures and include links directly to the Core Set websites.

FFY 2020 CORE SET UPDATES

In our review of the FFY 2020 Child and Adult Core Sets—which is the information reported in the 2021 Scorecard update—we note the following changes from last year. The additions may represent either brand-new measures added to the Core Sets or measures that meet the inclusion criteria for the first time. As noted, some of the measure categories may refer to several similar measures where ages or timeframes vary (for example, "women delivering a live birth who had a postpartum care visit after delivery" below refers to the change in the time of the visit). A complete listing of all Child and Adult Core Set measures is provided in Appendices 3 and 4, respectively.

ADDITIONS

- Adults with concurrent use of prescription opioids and benzodiazepines
- Women at risk for unintended pregnancy receiving contraception (2 measures)
- Adults who received an influenza vaccination
- Long-term services and supports (LTSS) measures from the National Core Indicators Survey (3 measures)[14]—included in the new LTSS measure domain
- Children on antipsychotics who received blood glucose and cholesterol testing (3 measures)
- Weight assessment and counseling for nutrition and physical activity for children (2 measures)—additions to the former rate, which reflected body mass index (BMI) percentile documentation
- Adult smokers and tobacco users advised to quit, or discussing cessation medications or strategies (3 measures)

RETIREMENTS

- Adults with diabetes (type 1 or type 2) who had a hemoglobin A1c (HbA1c) test
- Adults who received at least 180 treatment days of ambulatory medication therapy and annual monitoring
- Children on two or more concurrent antipsychotic medications
- Children with a primary care visit in the past year (4 measures)
- Children with pediatric central line–associated bloodstream infections

MODIFICATIONS

- The category "women delivering a live birth who had a postpartum care visit after delivery" has had the time of the visit criteria change from "between 21 and 56 days" to "between 7 and 84 days"
- BMI percentile documentation is no longer on a percentage basis

All newly reported measures, as well as those identified in the Behavioral Health and Maternity Core Sets, are indicated accordingly in Appendices 3 and 4 of this report.

[12] Please see https://www.medicaid.gov/federal-policy-guidance/downloads/cib111920.pdf for additional information.

[13] CMS. Section 42 CFR 438.6(c) Preprint – January 2021. Retrieved May 18, 2022, from https://www.medicaid.gov/medicaid/managed-care/downloads/sdp-4386c-preprint-template.pdf.

[14] See the National Core Indicators website at https://www.nationalcoreindicators.org/.

Assessing variances in reporting between states

Upon announcement of the first iteration of the Scorecard, the National Association of Medicaid Directors (NAMD) issued a press release expressing caution when using and interpreting the Scorecard's SHSP measures.[15] The Medicaid directors' concerns are primarily related to the following factors:

- Reporting completeness (number of rates reported by a state)
- Methodology employed by a state to report a particular rate (claim-based or claim and medical record review)
- Variances in the populations underlying the reported rates (e.g., nondisabled vs. dual-eligible populations)

To better understand the available data contained in the SHSP section of the Scorecard, for the 2018 Scorecard we explored the issues identified by NAMD and the extent to which they may limit the ability for users to compare state Medicaid program performance. Complete results of this prior analysis are provided in Appendix 1, an excerpt from the relevant sections of our 2018 Scorecard report.[16]

Taking into consideration the state-level differences NAMD has highlighted, we control for the reporting methodology and underlying population for each rate when drawing comparisons in the state profile reports, discussed in more detail in Appendix 2.

Data quality review

We conclude this report with documenting adjustments made for the effect of certain data outliers on state performance comparisons. In reviewing the notes supplied for each rate reported in the Core Sets, we looked for indications the rate reported by the state may be materially affected by data quality issues.

We deemed rates to have data quality issues if they fell into any of the following categories:

- **Distinct age thresholds:** CHIP rates included were restricted to a smaller age band than 0-19. The majority of such observations in both 2019 and 2020 were associated with a single state. The increase in 2020 (as shown in Figure 2 below) is attributed to a state that did not report any issues in 2019 and the largest contributor in 2019 reporting more issues in 2020.
  - **Example:** CHIP rate includes fee-for-service (FFS) and primary care case management (PCCM) populations ages 6 to 17.
- **Differing methodology:** The state methodology differed from Core Set specifications, the state was unable to calculate accurate weighted averages for its MCOs, or the state did not include pertinent data (e.g., not including vaccinations administered at pharmacies). The decrease in 2020 for this data issue (as shown in Figure 2 below) is largely attributed to one state not reporting any issues in 2020 that had reported the most issues in 2019.
  - **Example:** The state is unable to calculate weighted rates for its managed care organizations (MCOs), resulting in an overweight for some plans that serve beneficiaries with multiple chronic conditions.
- **Provider coding issue:** Inconsistent coding or lack of complete coding on the part of providers.
  - **Example:** Rates include FFS and PCCM populations. State attributes lower performance to services being underreported due to providers not using immunization codes during well-care visits.
- **Unreliable data identified by state:** Missing or potentially inaccurate data; may be missing significant provider or claim detail information. Twelve of the 22 with this data issue can be attributed to data collection interruptions caused by COVID-19.
  - **Example:** For the managed care population, a state limited the numerator to claims identified as dental claims because managed care claims do not contain specific provider information. The state is unable to distinguish "dental hygienists who provide services under the supervision of a dentist" from all dental hygienists in claims.

[15] https://www.fiercehealthcare.com/payer/cms-unveils-medicaid-chip-scorecard-data-but-doesn-t-say-what-it-ll-do-it

[16] For more information, please see https://www.milliman.com/en/insight/Evaluation-of-State-Medicaid-Scorecard-Data, pages 5 through 9.

- **Outliers:** Outliers identified during manual review of the reported rates. Current FFY 2020 rates were compared to the FFY 2019 rate and the distribution of rates reported by other states using the same reporting methodology for the same population. Rates were only compared to the distribution if 10 or more states were reporting the measure with the same reporting methodology for the same population.

Figure 2 illustrates the number of data exclusions made for the 2019 and 2020 Core Sets, by type of issue.

FIGURE 2: SUMMARY OF DATA ISSUES

Issue	2019 Count	2020 Count
Distinct age thresholds	8	14
Differing methodology	37	13
Provider coding issue	7	4
Unreliable data identified by state	17	22
Outliers	NA	24
Total	**69**	**77**

For the 2020 Core Sets, there were a total of 3,450 observations, of which we excluded 77 (2.2%) for having potentially material data quality issues, including deviations from Core Set measurement specifications. Of those 77 observations we excluded, 19 (24.7%) were associated with two states. For the 2019 Core Sets, there were a total of 3,096 observations, of which we excluded 69 (2.2%). Of those 69 observations excluded, 40 (58.0%) were associated with two states.

In addition to the data quality review above, we also reviewed the notes for each rate to determine whether FFY 2019 data was used in reporting the FFY 2020 measures. In response to the COVID-19 PHE, states were allowed to report rates using FFY 2019 data, either fully or partially. The table in Figure 3 summarizes the number of measures that used FFY 2019 data fully or partially, by state.

FIGURE 3: SUMMARY OF MEASURES USING FFY 2019 DATA

	Number of Measures			
State	Fully 2019	Mix of 2019 and 2020	Fully 2020	Percentage of Measures Using 2019 Data
Connecticut	5	-	74	6.3%
Delaware	-	9	64	12.3%
Florida	-	12	58	17.1%
Kentucky	1	-	61	1.6%
Louisiana	1	-	74	1.3%
Massachusetts	-	13	69	15.9%
Minnesota	4	-	67	5.6%
New Hampshire	-	1	76	1.3%
New Jersey	2	11	52	20.0%
Ohio	-	11	47	19.0%
Tennessee	5	15	92	17.9%
Washington	-	9	68	11.7%
West Virginia	-	3	96	3.0%
All Other States	-	-	2,346	0.0%
Total	**18**	**84**	**3,244**	**3.0%**

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Appendix 1: 2018 Scorecard analysis

For reference, we have included the following excerpt related to comparing Medicaid program performance across states from our report on the 2018 Scorecard.[17]

AVAILABLE MEASURES AND COMPLETENESS OF REPORTING

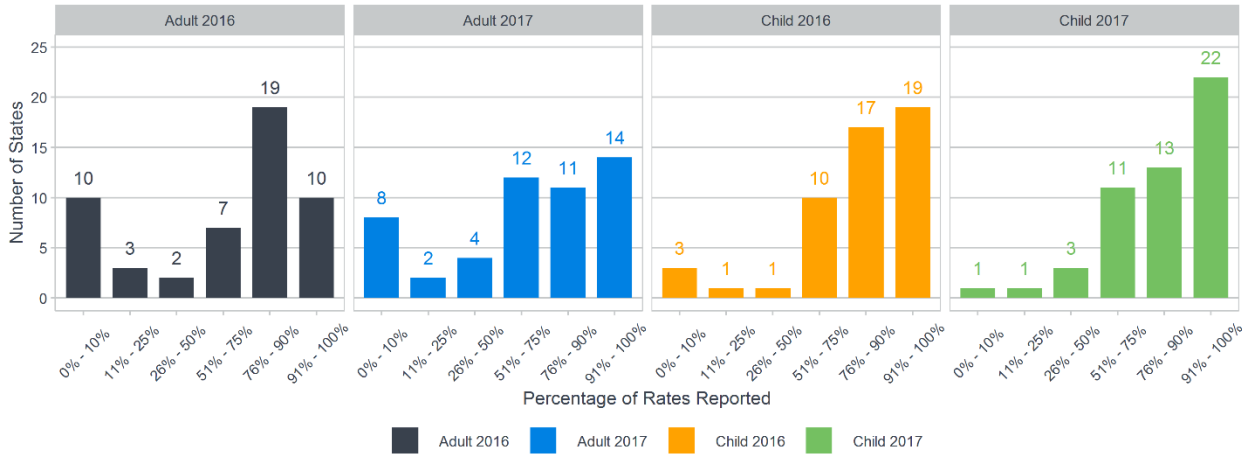
There are 48 unique metrics (rates) measured within the SHSP portion of the 2017 Scorecard based on the Child and Adult Core Sets. These metrics can be broken down into the two "Core Sets" as well as five different domains, as illustrated in Figure 4. Metrics may be added or removed to the Core Sets each year. A full list of the metrics included in the 2016 and 2017 Core Sets (including identification of annual changes) is provided in the appendices of this report.

FIGURE 4: NUMBER OF CHILD AND ADULT CORE SET MEASURES BY DOMAIN

	2016			2017		
Domain	**Child**	**Adult**	**Total**	**Child**	**Adult**	**Total**
Behavioral Health Care	5	8	13	5	8	13
Care of Acute and Chronic Conditions	5	5	10	4	8	12
Dental and Oral Health Services	2	0	2	2	0	2
Maternal and Perinatal Health	3	1	4	3	1	4
Primary Care Access and Preventive Care	13	4	17	13	4	17
All Domains	**28**	**18**	**46**	**27**	**21**	**48**

Figure 5 summarizes the number of states reporting various percentages of the Core Set measures in 2016 and 2017, separately for child and adult measures.

FIGURE 5: PERCENTAGE OF CHILD AND ADULT CORE SET MEASURES COMPLETED BY STATES



The following key observations can be made regarding the completeness of state reporting:

- Reporting for 2017 is slightly more complete than for 2016.
  - Twenty-two states reported more than 90% of measures in the 2017 Child Core Set relative to 19 states for the 2016 Child Core Set.
  - Fourteen states reported more than 90% of measures in the 2017 Adult Core Set relative to 10 states for the 2016 Adult Core Set.

[17] For more information, please see https://www.milliman.com/en/insight/Evaluation-of-State-Medicaid-Scorecard-Data, pages 5 through 9.

  - Two states completed 25% or fewer of 2017 Child Core Set measures, versus four states for the 2016 Child Core Set measures.
  - Ten states completed 25% or fewer of 2017 Adult Core Set measures, versus 13 states for the 2016 Adult Core Set measures.
- Child reporting is more complete than adult
  - Thirty-five states reported more than 75% of measures in the 2017 Child Core Set relative to only 25 states for the 2017 Adult Core Set.
  - Only two states completed 25% or fewer of 2017 Child Core Set measures, versus 10 states for the 2017 Adult Core Set measures.
  - While the reporting of the 2017 Adult Core Set measures is less complete than the Child Core Set measures, 37 states still reported more than 50% of the measures.
  - Similar observations also apply for federal fiscal year (FFY) 2016.
- Factors driving low reporting of measures
  - In general, states with low Medicaid membership reported on fewer of the quality measures. For example, North Dakota and South Dakota are states with the lowest number of measures reported. Both of these states also have relatively low Medicaid membership.
  - The Child Core Set may be more complete due to CHIPRA preceding the ACA.

VARIANCE IN REPORTING METHODOLOGY EMPLOYED BY STATES FOR INDIVIDUAL MEASURES

As indicated by NAMD, variances in reported measures may be influenced by the reporting methodology employed by the state. Core Set measures are calculated using four techniques:

- **Administrative.** The calculation of quality scores is completed using claims or encounter data. For states with risk-based managed care, incomplete encounter data may result in understated quality scores.[18] In addition to satisfying new Medicaid managed care regulations and facilitating capitation rate setting,[19] complete encounter data will also likely increase quality measurements that use only administrative data.
- **Hybrid.** The hybrid method uses a combination of administrative data and a review of medical records to calculate a quality measure. A state may use the hybrid method due to administrative data that is incomplete or missing necessary information to calculate the measure. CMS indicates the hybrid method may yield more accurate rates than administrative data alone and cites a study showing that for 15 Healthcare Effectiveness Data and Information Set (HEDIS®) measures in commercial plans, hybrid measurements were 20 percentage points higher relative to using only administrative data. However, because the hybrid method requires a review of medical records, it may be too costly for states to implement.[20]
- **Administrative and hybrid.** Some states derive rates using both administrative and hybrid method data. This is due to variance in the reporting of quality measures by managed care organizations (MCOs), when a common means of reporting is not employed (administrative vs. hybrid).
- **Electronic health records.** Certain rates may be determined by using electronic health record (EHR) specifications. For 2017 Core Set measures, we observed Oregon reporting two adult measures based on EHR data.

[18] Medicaid/CHIP (October 2014). Technical Assistance Brief: Using the Hybrid Method to Calculate Measures From the Child and Adult Core Sets. Retrieved February 21, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/hybrid-brief.pdf.

[19] Cunningham, J., Lewis, M.T., & Houchens, P.R. (May 17, 2016). Encounter Data Standards: Implications for State Medicaid Agencies and Managed Care Entities From Final Medicaid Managed Care Rule. Milliman White Paper. Retrieved February 21, 2019, from http://www.milliman.com/insight/2016/Encounter-data-standards-Implications-for-state-Medicaid-agencies-and-managed-care-entities-from-final-Medicaid-managed-care-rule/.

[20] Medicaid/CHIP (October 2014), Technical Assistance Brief, op cit.

Figures 6 and 7 illustrate the number of states reporting each measure and the reporting methodology employed across states for the Child and Adult Core Sets, respectively. Measures are grouped by domain. Note that some measures contain duplicates due to some states reporting multiple populations with distinct methodologies. As an example, the state of Texas reports Adolescent Well-Care Visit: Ages 12-21 (PC 17) for the CHIP population and Medicaid population separately. The Medicaid-only population is reported with the Administrative and Hybrid methodologies whereas the CHIP-only population is reported solely with the Hybrid methodology. Because Texas reports two rates with two methodologies for this single measure, this creates two data points in the chart. Across all states in 2017, there are only seven instances of states reporting different methodologies for a given measure between Medicaid-only and CHIP-only.

FIGURE 6: REPORTING METHODOLOGIES BY DOMAIN: 2017 CHILD CORE SET

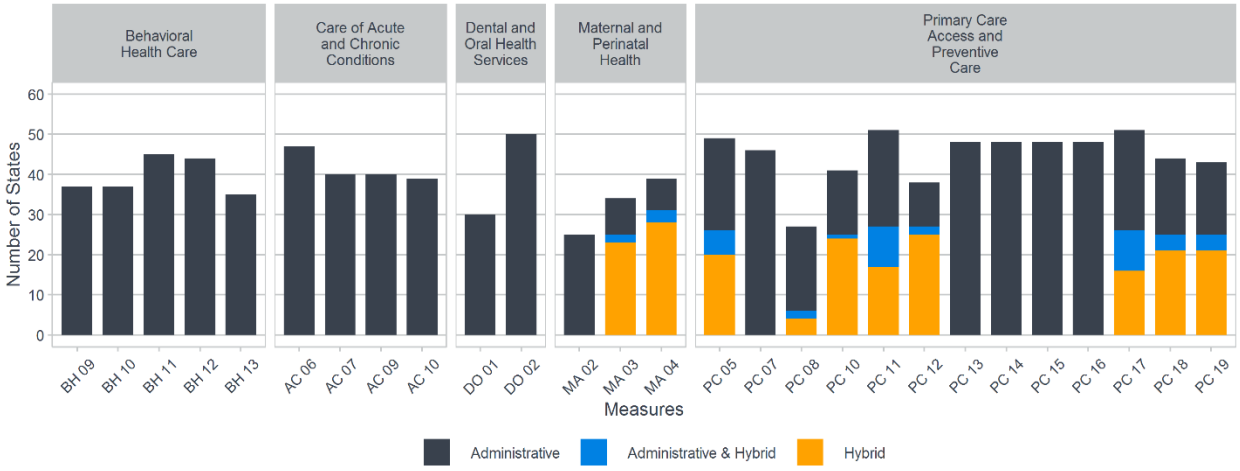
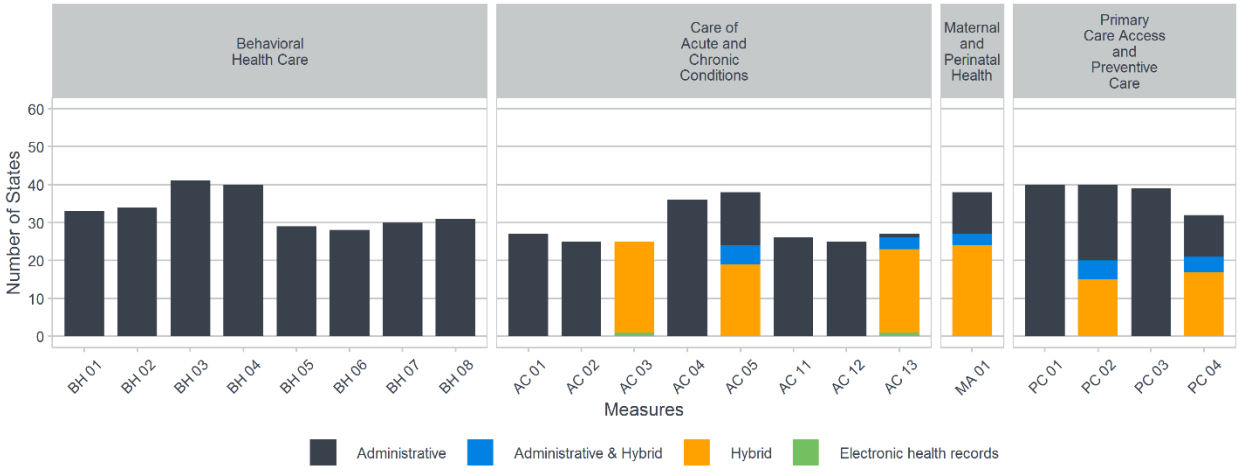


FIGURE 7: REPORTING METHODOLOGIES BY DOMAIN: 2017 ADULT CORE SET



The variance in reporting methodologies is confined to a minority of measures in both the Child and Adult Core Sets.

- **Child Core Set reporting methodologies.** For the Behavioral, Acute/Chronic, and Dental/Oral domains, reporting is entirely administrative. Within the Maternal/Perinatal and Primary/Preventive domains, a mix of reporting methodologies are employed. However, the Primary/Preventive domain has several measures that are reported entirely on an administrative basis. Within each domain except the Maternal/Perinatal, at least one measure is reported by nearly every state on an administrative basis.
- **Adult Core Set reporting methodologies.** The Behavioral Health domain is completely reported using the administrative methodology. The other domains incorporate a mixture of reporting methodologies. While overall reporting is less complete relative to the Child Core Set, there are still several measures across the domains, with approximately 35 states reporting on an administrative basis.

To illustrate how values for certain measures can be influenced by the reporting methodology, we selected two measures, one each from the Child and Adult Core Sets, with approximately an even split between states using the administrative versus hybrid methods as well as several states using a combination of methodologies. These examples clearly indicate that reporting methodology materially influences the reported measure's value.

FIGURE 8: PERCENTAGE WITH 1 OR MORE WELL-CHILD VISITS WITH A PRIMARY CARE PRACTITIONER: AGES 3-6 (CHILD CORE SET) RATES BY REPORTING METHODOLOGY

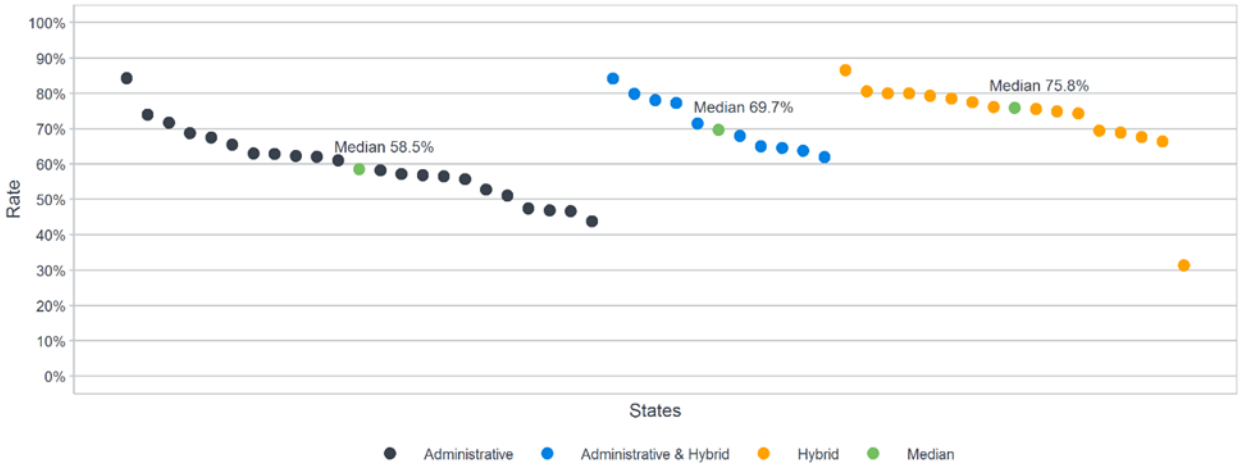
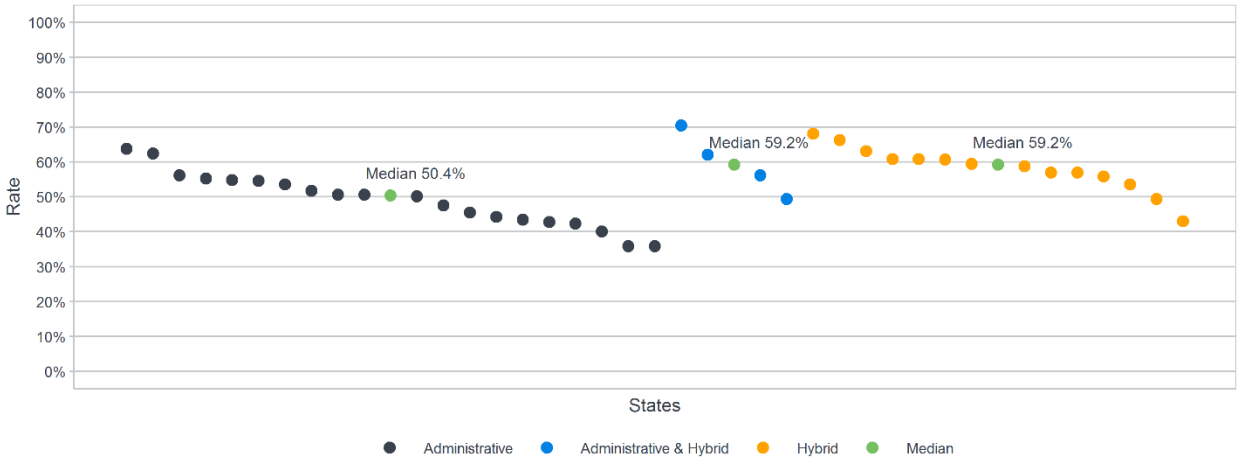


FIGURE 9: PERCENTAGE OF WOMEN SCREENED FOR CERVICAL CANCER: AGES 21-64 (ADULT CORE SET) RATES BY REPORTING METHODOLOGY



VARIANCE IN REPORTED POPULATIONS

There are variances in the underlying populations reported by each state. For the Child Core Set, states are reporting Medicaid-only, CHIP-only, or Medicaid and CHIP. For the Adult Core Set, states are reporting Medicaid and CHIP, Medicaid, Medicaid and Dual-Eligibles, or Medicaid, CHIP, and Dual-Eligibles. The differences in the reporting populations vary by state and by rate. The charts in Figures 10 and 11 show the number of populations reported for each rate within each domain and Core Set. It may be difficult to perform an accurate comparison between states reporting different populations for each rate. Note that, for the Adult Core Set, the populations for Medicaid and CHIP are included in Medicaid and the populations for Medicaid, CHIP, and Dual-Eligibles are included in Medicaid and Dual-Eligibles. Additionally, while not explicitly reported in the Core Set, states that expanded Medicaid under the ACA will likely have different mixes of adult beneficiaries relative to non-expansion states.

FIGURE 10: POPULATIONS BY DOMAIN: CHILD CORE SET

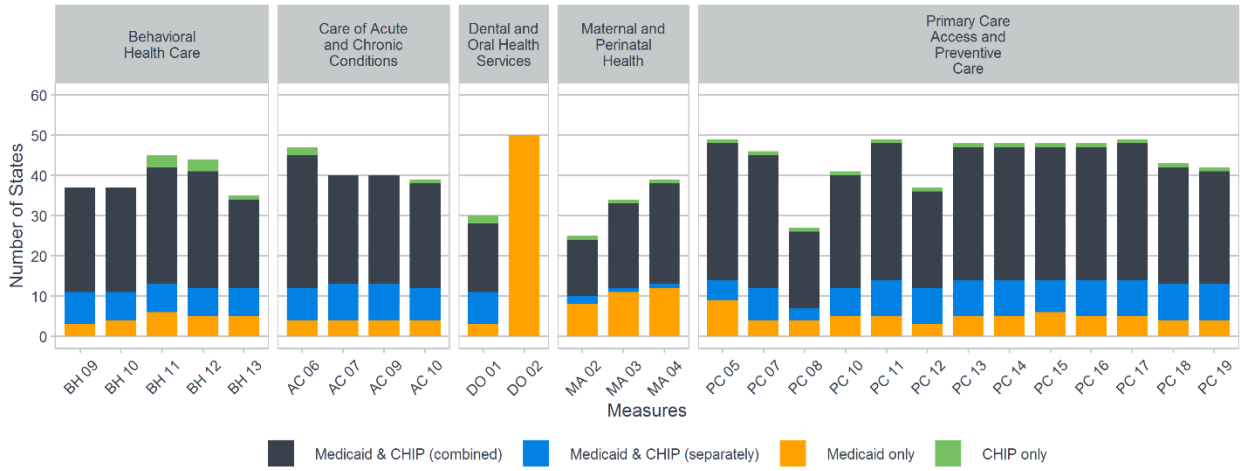
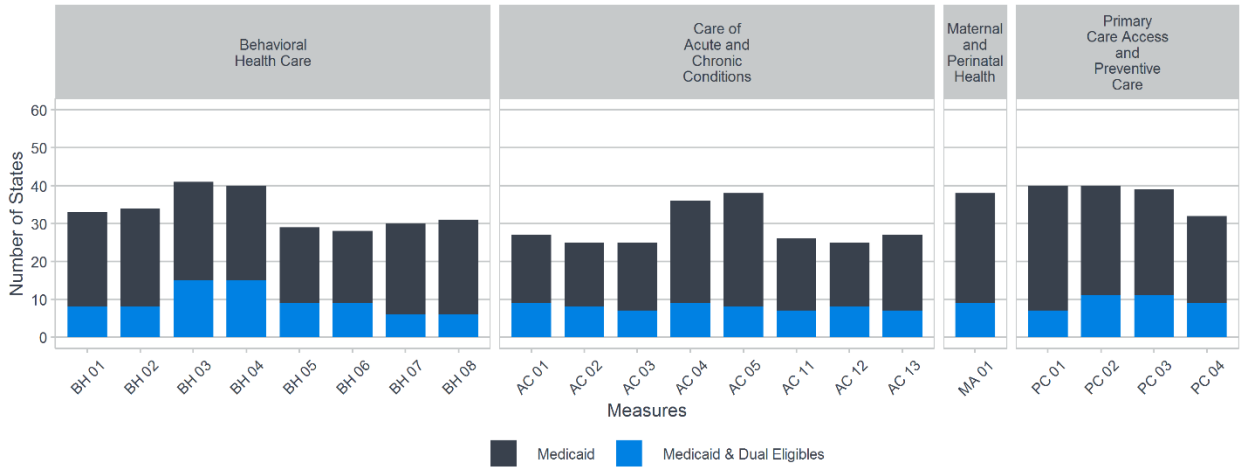


FIGURE 11: POPULATIONS BY DOMAIN: ADULT CORE SET

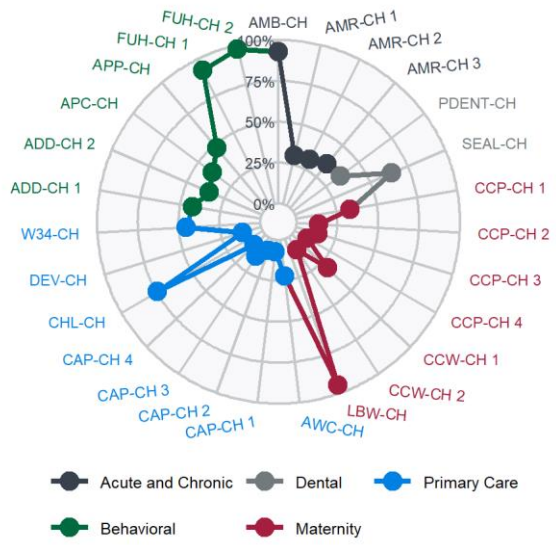


Appendix 2: State profile reports

The state profile reports provide a detailed look at each state's quality measures, in comparison to comparable states, as well as year-over-year performance changes. The state profiles are similar to previous versions, although we now exclude certain rates if our review of state-specific comments or outlier analysis indicate potentially material data quality issues. For each state, we indicate the number of rates excluded due to data quality concerns. We provide an overview of the components provided in each state profile below.

The reported rates are first displayed in "radar" charts. There are separate charts for the Child and Adult Core Set measures, along with the Behavioral Health and Maternity Core Sets. The radar charts are intended to illustrate performance *relative to other states*, limited to only those states that have reported rates on the same basis (i.e., controlling for methodology and population). An example of a state chart is shown below. The measure abbreviations below are defined in Appendix 3 and Appendix 4.

FIGURE 12: SAMPLE CHILD CORE SET RADAR CHART



HOW TO INTERPRET THE RADAR CHARTS

- The state charts display a rate on each axis (or "spoke").
- Rates are only included when there are at least 10 states using the same population and reporting methodology.
- Rates are displayed on a percentile basis (compared to those states using the same population and reporting methodology for that rate).
- Points near the outside of the circle reflect better relative performance. For example, this state reported very favorable rates for FUH-CH 1 and FUH-CH 2 (hospitalizations for mental illness with a follow-up visit within 30 or 7 days, respectively), so those points fall near the outer circle representing 100%.
- Rates are grouped and color-coded by domain to facilitate the understanding of broad, domain-level trends.

There are cases when a state separately reports on the Medicaid and CHIP populations. In these instances, we calculate a weighted average of the rates, using the children's enrollment report from CMS.[21] While this state's Child Core Set has a significant number of comparable measures, other states with less complete reporting or fewer comparable measures will have significantly fewer rates illustrated in the radar chart. To the extent there are fewer than three comparable rates, a radar chart cannot be created.

These charts are intended to provide brief snapshots of each state's reporting. In addition to the radar charts, each state profile report includes more detailed metrics for each rate in tabular format, such as the raw rate, equivalent percentile, number of comparable states, and select distribution statistics for the comparable rates. An example of a state table is shown in Figure 13.

[21] The FY 2020 version is available at: https://www.medicaid.gov/chip/downloads/fy-2020-childrens-enrollment-report.pdf.

FIGURE 13: SAMPLE FFY 2020 CHILD CORE SET MEASURES

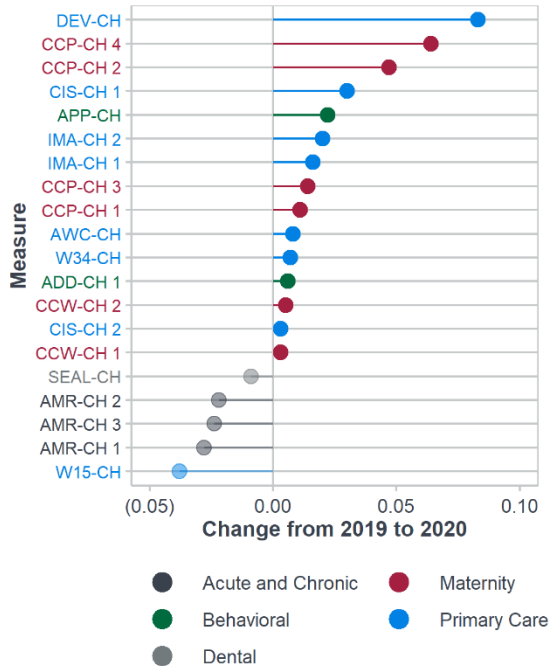
ID	Rate	# Comp.	Performance Percentile	Lowest Quartile	Median	Highest Quartile
Care of Acute and Chronic Conditions						
AMB-CH[1, 2]	40.7	44	58%	37.5	42.6	48.5
AMR-CH 1	0.8	10	89%	0.7	0.7	0.8
AMR-CH 2	0.7	10	56%	0.6	0.7	0.7
AMR-CH 3	0.7	10	67%	0.7	0.7	0.7
Dental and Oral Health Services						
PDENT-CH	0.429	49	71%	0.364	0.417	0.445
SEAL-CH	0.226	30	38%	0.220	0.231	0.270
Maternal and Perinatal Health						
CCP-CH 1[4]	-	11	0%	0.011	0.016	0.029
CCP-CH 2[4]	0.266	13	100%	0.110	0.139	0.186
CCP-CH 3[4]	-	12	0%	0.018	0.040	0.061
CCP-CH 4[4]	0.349	13	25%	0.349	0.432	0.461
CCW-CH 1[4]	0.085	12	100%	0.029	0.042	0.055
CCW-CH 2[4]	0.337	30	79%	0.213	0.295	0.331
LBW-CH[1, 4]	0.097	42	51%	0.088	0.097	0.107
PPC-CH[4]	0.822	3	NA	NA	NA	NA
Primary Care Access and Preventive Care						
AWC-CH	0.387	17	38%	0.354	0.429	0.485
CHL-CH	0.382	44	7%	0.460	0.490	0.599
CIS-CH 1	0.116	4	NA	NA	NA	NA
CIS-CH 2	0.534	4	NA	NA	NA	NA
DEV-CH	0.287	18	24%	0.289	0.356	0.505
IMA-CH 1	0.297	13	17%	0.589	0.685	0.806
IMA-CH 2	0.306	4	NA	NA	NA	NA
W15-CH[4]	0.409	4	NA	NA	NA	NA
W34-CH	0.542	17	25%	0.542	0.636	0.679
WCC-CH 1[2]	3.7	8	NA	NA	NA	NA
WCC-CH 2[2,5]	6.7	2	NA	NA	NA	NA
WCC-CH 3[2,5]	9.1	2	NA	NA	NA	NA
Behavioral Healthcare						
ADD-CH 1[3]	NA	NA	NA	NA	NA	NA
ADD-CH 2[3]	NA	NA	NA	NA	NA	NA
APM-CH 1[3,5]	0.826	8	NA	NA	NA	NA
APM-CH 2[3,5]	0.510	8	NA	NA	NA	NA
APM-CH 3[3,5]	0.505	8	NA	NA	NA	NA
APP-CH[3]	0.318	7	NA	NA	NA	NA
FUH-CH 1[3]	0.261	39	0%	0.611	0.696	0.785
FUH-CH 2[3]	0.159	38	0%	0.384	0.465	0.565

1. Lower rates are better for these measures.
2. These measures are not expressed as percentages.
3. These measures are part of the Behavioral Health Core Set.
4. These measures are part of the Maternity Core Set.
5. These measures are newly available in the 2019 Core Set. They could be either new measures entirely, or measures that did not previously meet reporting thresholds.

Note that, for select measures, a lower rate indicates a higher performance level. These measures are marked by a "1" in the appendices. For these measures, the Lowest Quartile reflects better performance relative to the Median and Highest Quartile.

In addition, we include another type of chart that displays *performance changes over time*. These charts display the change in actual performance rates from year to year, illustrating the state's performance relative to its recent past instead of benchmarking against other states. An example is shown in Figure 14.

FIGURE 14: SAMPLE CHILD CORE SET PERFORMANCE CHANGES FROM 2019 TO 2020



- Only measures that are reported on a percentage basis are included, to better allow for interpretability of the magnitude of change.
- There is a vertical line at zero, indicating no change in performance.
- Performance changes are displayed in order of largest improvement to smallest improvement (or greatest decline, if performance has deteriorated).
- Measures where a lower rate is more desirable, e.g., low birth weights, are indicated with an asterisk and have the respective changes flipped, such that a decrease is appropriately reflected on the positive (right) side of the chart.
- Similar to the radar charts, the measures are color-coded by domain to facilitate review.

Finally, key considerations when evaluating the information contained in the state profile reports include:

- **Social determinants.** Low performance percentiles do not necessarily indicate the Medicaid program is operating poorly relative to other states. As the health policy community has gained a better understanding of how social determinants of health influence healthcare outcomes, such disparities between states should be recognized when evaluating results and opportunities for improvement.
- **Non-Medicaid health policy.** Differences in state performance on certain measures may also be influenced by variation in overall statewide health policy such as state health department regulations. The distinct approaches and areas of emphasis among states should also be considered when reviewing the Scorecard results.
- **Data reliance.** The performance rates made available by CMS are dependent upon the underlying data behind the rates. To the extent a state has difficulty in reporting a measure or incomplete data, it will influence the quality measure's performance rate. Data for this report was obtained through data.medicaid.gov in September 2021. Values are displayed without modification, although some data points were excluded upon review of comments provided by the states.
- **Future reporting.** As CMS refines the Core Set measures and states are able to provide more complete reporting, the usability of the Core Set data is likely to improve. Future performance assessments are likely to be impacted by these changes and may provide more robust benchmarking opportunities.

Appendix 3: Child Core Set measures

ID	Definition
Care of Acute and Chronic Conditions	
AMB-CH[1, 2]	Emergency Department Visits per 1,000 Beneficiary Months: Ages 0 to 19
AMR-CH 1	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5 to 11
AMR-CH 2	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 12 to 18
AMR-CH 3	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5 to 18
Dental and Oral Health Services	
PDENT-CH	Percentage Enrolled in Medicaid or Medicaid Expansion CHIP Programs for at least 90 Continuous Days with at Least 1 Preventive Dental Service: Ages 1 to 20
SEAL-CH	Percentage at Elevated Risk of Dental Caries (Moderate or High Risk) who Received a Sealant on a Permanent First Molar Tooth: Ages 6 to 9
Maternal and Perinatal Health	
CCP-CH 1[4]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery: Ages 15 to 20
CCP-CH 2[4]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery: Ages 15 to 20
CCP-CH 3[4]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery: Ages 15 to 20
CCP-CH 4[4]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery: Ages 15 to 20
CCW-CH 1[4]	Percentage of Women at Risk for Unintended Pregnancy Provided a Long-Acting Reversible Method of Contraception: Ages 15 to 20
CCW-CH 2[4]	Percentage of Women at Risk for Unintended Pregnancy Provided a Most Effective or Moderately Effective Method of Contraception: Ages 15 to 20
LBW-CH[1, 4]	Percentage of Live Births that Weighed Less Than 2,500 Grams
PPC-CH[4]	Percentage of Women Delivering a Live Birth with a Prenatal Care Visit in the First Trimester, on or before the enrollment start date, or within 42 Days of Enrollment in Medicaid or CHIP

1. Lower rates are better for these measures.
2. These measures are not expressed as percentages.
3. These measures are part of the Behavioral Health Core Set.
4. These measures are part of the Maternity Core Set.
5. These measures are newly available in the 2020 Core Set. They could be either new measures entirely, or measures that did not previously meet reporting thresholds.

Appendix 3: Child Core Set measures (cont.)

ID	Definition
Primary Care Access and Preventive Care	
AWC-CH	Percentage with at Least One Well-Care Visit with a Primary Care Practitioner or Obstetrician/Gynecologist: Ages 12 to 21
CHL-CH	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16 to 20
CIS-CH 1	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday
CIS-CH 2	Percentage who had a Measles, Mumps, and Rubella (MMR) Vaccination by their Second Birthday
DEV-CH	Percentage Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool: Ages 0 to 3
IMA-CH 1	Percentage Receiving Meningococcal Conjugate and Tdap Vaccines (Combination 1) by Their 13th Birthday
IMA-CH 2	Percentage Completing the Human Papillomavirus (HPV) Vaccine Series by Their 13th Birthday
W15-CH[4]	Percentage who had 6 or More Well-Child Visits with a Primary Care Practitioner during the First 15 Months of Life
W34-CH	Percentage who had 1 or More Well-Child Visits with a Primary Care Practitioner: Ages 3 to 6
WCC-CH 1[2]	Body Mass Index Percentile Documentation: Ages 3 to 17
WCC-CH 2[2,5]	Counseling for Nutrition: Ages 3 to 17
WCC-CH 3[2,5]	Counseling for Physical Activity: Ages 3 to 17
Behavioral Healthcare	
ADD-CH 1[3]	Percentage Newly Prescribed ADHD Medication with 1 Follow-Up Visit During the 30-Day Initiation Phase: Ages 6 to 12
ADD-CH 2[3]	Percentage Newly Prescribed ADHD Medication with at Least 2 Follow-Up Visits in the 9 Months Following the Initiation Phase: Ages 6 to 12
APM-CH 1[3,5]	Percentage on Antipsychotics who Received Blood Glucose Testing: Ages 1 to 17
APM-CH 2[3,5]	Percentage on Antipsychotics who Received Cholesterol Testing: Ages 1 to 17
APM-CH 3[3,5]	Percentage on Antipsychotics who Received Blood Glucose and Cholesterol Testing: Ages 1 to 17
APP-CH[3]	Percentage who had a New Prescription for an Antipsychotic Medication and had Documentation of Psychosocial Care as First-Line Treatment: Ages 1 to 17
FUH-CH 1[3]	Percentage of Hospitalizations for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 30 Days after Discharge: Ages 6 to 17
FUH-CH 2[3]	Percentage of Hospitalizations for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 7 Days after Discharge: Ages 6 to 17

1. Lower rates are better for these measures.
2. These measures are not expressed as percentages.
3. These measures are part of the Behavioral Health Core Set.
4. These measures are part of the Maternity Core Set.
5. These measures are newly available in the 2020 Core Set. They could be either new measures entirely, or measures that did not previously meet reporting thresholds.

Appendix 4: Adult Core Set measures

ID	Definition
Care of Acute and Chronic Conditions	
AMR-AD 1	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 19 to 50
AMR-AD 2	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 19 to 64
AMR-AD 3	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 51 to 64
CBP-AD	Percentage who had a Diagnosis of Hypertension and Whose Blood Pressure was Adequately Controlled: Ages 18 to 64
HPC-AD[1]	Percentage with Diabetes (Type 1 or Type 2) who had Hemoglobin A1c in Poor Control (>9.0%): Ages 18 to 64
PCR-AD[1, 2]	Ratio of Observed All-Cause Readmissions to Expected Readmissions: Ages 18 to 64
PQI01-AD[1, 2]	Inpatient Hospital Admissions for Diabetes Short-Term Complications per 100,000 Beneficiary Months: Ages 18 to 64
PQI05-AD[1, 2]	Inpatient Hospital Admissions for Chronic Obstructive Pulmonary Disease (COPD) or Asthma per 100,000 Beneficiary Months: Ages 40 to 64
PQI08-AD[1, 2]	Inpatient Hospital Admissions for Heart Failure per 100,000 Beneficiary Months: Ages 18 to 64
PQI15-AD[1, 2]	Inpatient Hospital Admissions for Asthma per 100,000 Beneficiary Months: Ages 18 to 39
Maternal and Perinatal Health	
CCP-AD 1[4]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery: Ages 21 to 44
CCP-AD 2[4]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery: Ages 21 to 44
CCP-AD 3[4]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery: Ages 21 to 44
CCP-AD 4[4]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery: Ages 21 to 44
CCW-AD 1[4,5]	Percentage of Women at Risk for Unintended Pregnancy Provided a Long-Acting Reversible Method of Contraception: Ages 21 to 44
CCW-AD 2[4,5]	Percentage of Women at Risk for Unintended Pregnancy Provided a Most Effective or Moderately Effective Method of Contraception: Ages 21 to 44
PPC-AD[4]	Percentage of Women Delivering a Live Birth who had a Postpartum Care Visit on or Between 7 and 84 Days after Delivery
Primary Care Access and Preventive Care	
ABA-AD	Percentage who had an Outpatient Visit with a BMI Documented in the Medical Record: Ages 18 to 64
BCS-AD	Percentage of Women who had a Mammogram to Screen for Breast Cancer: Ages 50 to 64
CCS-AD	Percentage of Women Screened for Cervical Cancer: Ages 21 to 64
CHL-AD	Percentage of Sexually Active Women Screened for Chlamydia: Ages 21 to 24
FVA-AD[5]	Percentage who Received an Influenza Vaccination: Ages 18 to 64
Long-term Services and Supports	
NCIDDS-AD 1[5]	Percentage of people who make choices about their life decisions, including their residence, work, day activity, staff, and roommates
NCIDDS-AD 2[5]	Percentage of people who make choices about their everyday lives, including their daily schedule, how to spend money, and free time activities
NCIDDS-AD 3[5]	Percentage of people who reported they always have a way to get places when they need to go somewhere

1. Lower rates are better for these measures.
2. These measures are not expressed as percentages.
3. These measures are part of the Behavioral Health Core Set.
4. These measures are part of the Maternity Core Set.
5. These measures are newly available in the 2020 Core Set. They could be either new measures entirely, or measures that did not previously meet reporting thresholds.

Appendix 4: Adult Core Set measures (cont.)

ID	Definition
Behavioral Healthcare	
AMM-AD 1[3]	Percentage Diagnosed with Major Depression who were Treated with and Remained on Antidepressant Medication for 12 Weeks: Ages 18 to 64
AMM-AD 2[3]	Percentage Diagnosed with Major Depression who were Treated with and Remained on Antidepressant Medication for 6 Months: Ages 18 to 64
COB-AD[1,3,5]	Percentage with Concurrent Use of Prescription Opioids and Benzodiazepines: Ages 18 to 64
FUA-AD 1[3]	Percentage of Emergency Department (ED) Visits for Alcohol and Other Drug Abuse or Dependence with a Follow-Up Visit Within 30 Days of the ED Visit: Ages 18 to 64
FUA-AD 2[3]	Percentage of Emergency Department (ED) Visits for Alcohol and Other Drug Abuse or Dependence with a Follow-Up Visit Within 7 Days of the ED Visit: Ages 18 to 64
FUH-AD 1[3]	Percentage of Hospitalizations for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 30 Days after Discharge: Ages 18 to 64
FUH-AD 2[3]	Percentage of Hospitalizations for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 7 Days after Discharge: Ages 18 to 64
FUM-AD 1[3]	Percentage of Emergency Department (ED) Visits for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 30 Days of the ED Visit: Ages 18 to 64
FUM-AD 2[3]	Percentage of Emergency Department (ED) Visits for Mental Illness or Intentional Self-Harm with a Follow-Up Visit Within 7 Days of the ED Visit: Ages 18 to 64
IET-AD 1[3]	Percentage with a New Episode of Alcohol or Other Drug Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18 to 64
IET-AD 2[3]	Percentage with a New Episode of Alcohol or Other Drug Abuse or Dependence who Initiated and Engaged in Alcohol or Other Drug Treatment within 34 Days of the Initiation Visit: Ages 18 to 64
IET-AD 3[3]	Percentage with a New Episode of Alcohol Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18 to 64
IET-AD 4[3]	Percentage with a New Episode of Alcohol Abuse or Dependence who Initiated and Engaged in Alcohol or Other Drug Treatment within 34 Days of the Initiation Visit: Ages 18 to 64
IET-AD 5[3]	Percentage with a New Episode of Opioid Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18 to 64
IET-AD 6[3]	Percentage with a New Episode of Opioid Abuse or Dependence who Initiated and Engaged in Alcohol or Other Drug Treatment within 34 Days of the Initiation Visit: Ages 18 to 64
IET-AD 7[3]	Percentage with a New Episode of Other Drug Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18 to 64
IET-AD 8[3]	Percentage with a New Episode of Other Drug Abuse or Dependence who Initiated and Engaged in Alcohol or Other Drug Treatment within 34 Days of the Initiation Visit: Ages 18 to 64
MSC-AD 1[3]	Percentage of Current Smokers and Tobacco Users Advised to Quit: Ages 18 to 64 Years
MSC-AD 2[3]	Percentage of Current Smokers and Tobacco Users Discussing Cessation Medications: Ages 18 to 64 Years
MSC-AD 3[3]	Percentage of Current Smokers and Tobacco Users Discussing Cessation Strategies: Ages 18 to 64 Years
OHD-AD[1,3]	Percentage Without Cancer who Received Prescriptions for Opioids with an Average Daily Dosage Greater than or Equal to 90 Morphine Milligram Equivalents Over 90 Consecutive Days or More: Ages 18 to 64
SAA-AD[3]	Percentage with Schizophrenia or Schizoaffective Disorder who were Dispensed and Remained on Antipsychotic Medication for at Least 80 Percent of their Treatment Period: Age 18 and older
SSD-AD[3]	Percentage with Schizophrenia, Schizoaffective Disorder, or Bipolar Disorder who were Dispensed an Antipsychotic Medication and had a Diabetes Screening Test: Ages 18 to 64

1. Lower rates are better for these measures.
2. These measures are not expressed as percentages.
3. These measures are part of the Behavioral Health Core Set.
4. These measures are part of the Maternity Core Set.
5. These measures are newly available in the 2020 Core Set. They could be either new measures entirely, or measures that did not previously meet reporting thresholds.