MILLIMAN REPORT

Evaluation of State Medicaid Scorecard Data

2019 Scorecard Update

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Executive summary

This report provides an analysis of the recently released 2019 Centers for Medicare and Medicaid Services (CMS) Medicaid and Children's Health Insurance Program (CHIP) Scorecard. This is the second annual release of the Scorecard. As in our analysis of last year's Scorecard, we primarily focus on the quality metrics included in the Scorecard, based on the Child and Adult Core Set data. Due to material differences in how states report these measures to CMS, our analysis controls for key differences in state-level reporting methodologies to provide meaningful comparisons. For states with available data, quality metrics have been summarized into a state profile report (provided in a separate document), illustrating how a state's quality metrics measure relative to other states, controlling for variances in reporting methodologies and underlying populations for each quality measure.

We provide a brief overview of the Scorecard and our state profile reports below. For a more complete treatment of these topics, the reader is referred to our analysis of last year's Scorecard.[1] Additionally, this year we provide a closer look at certain behavioral health metrics, to gain a better understanding of the current context and state-by-state variation for these performance measures. *Throughout this report, we indicate key differences for this year – for both the CMS data and our analysis – in blue font to help the reader identify these changes.*

Overview of the Scorecard

The initial version of the Scorecard was first released in June 2018 in an effort to more transparently track and display progress within the Medicaid program. The first annual update to the Scorecard was released November 7, 2019.[2] This second iteration of the Scorecard represents not only a data refresh, but also a continued evolution in terms of the information included and its presentation on the website. As we describe the various elements of the Scorecard below, we will highlight some of these new changes.

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).[3]

- **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 the portion of long-term services and supports (LTSS) expenditures attributable to home and community-based services (HCBS). Those measures are all carried over from last year's Scorecard. In addition, new measures for this year include, but are not limited to: timeliness of 372(S) reporting related to 1915(c) waivers, Medicaid MAGI and CHIP application processing times, and the number of unresolved high priority T-MSIS data quality issues.[4]
- **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. Other measures regarding SPAs and waiver requests overlap with the state administrative accountability section. There were no new measures added to this section in this year's update.
- **National context.** This section provides valuable 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. This section has been substantially augmented this year to include new information related to dual-eligible members, managed care delivery systems, managed long-term services and supports (MLTSS), 1915(c) waivers, and 1115 SUD demonstrations.[5]

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

[2] CMS (November 7, 2019). CMS issues first annual update to the Medicaid and CHIP program Scorecard. Press release. Retrieved December 12, 2019. https://www.cms.gov/newsroom/press-releases/cms-issues-first-annual-update-medicaid-and-chip-program-scorecard.

[3] Medicaid. Medicaid & CHIP Scorecard. Retrieved December 12, 2019, from https://www.medicaid.gov/state-overviews/scorecard/index.html.

[4] Medicaid. Medicaid & CHIP Scorecard. Retrieved December 12, 2019, from https://www.medicaid.gov/state-overviews/scorecard/state-administrative-accountability/index.html.

[5] Medicaid. Medicaid & CHIP Scorecard. Retrieved December 12, 2019, from https://www.medicaid.gov/state-overviews/scorecard/national-context/index.html.

For these 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. In future analyses of the Scorecard, we may incorporate these state-specific data points into the state profile reports.

- **State health system performance.** 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]
  - **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 the measure and internal data quality standards must be met.

2019 CORE SET UPDATES

In our review of the 2019 Child and Adult Core Sets, we note the following changes from last year. The additions may represent either brand-new measures added to the Core Sets or metrics that meet the inclusion criteria for the first time. High-level metric categories are displayed for brevity, but some of these may refer to several similar measures where ages or timeframes vary (for example, "Asthma Medication Ratio" below refers to six separate measures). A complete listing of all Child and Adult Core Set measures is provided in Appendix 1 and 2, respectively.

ADDITIONS

- Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence
- Follow-Up After Emergency Department Visit for Mental Illness
- Contraceptive Care – Postpartum Women
- Contraceptive Care – All Women
- Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (separate drug-specific breakouts)
- Asthma Medication Ratio

RETIREMENTS

- Frequency of Ongoing Prenatal Care
- Medication Management for People with Asthma

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

[7] CMS. Children's Healthcare Quality Measures. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html.

[8] CMS. Adult Healthcare Quality Measures. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-core-set/index.html.

[9] Medicaid/CHIP (February 2018). Fact Sheet: About the Technical Assistance and Analytic Support Program. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/tafactsheet.pdf.

[10] CMS (November 19, 2019). 2020 Updates to the Child and Adult Core Healthcare Quality Measurement Sets. CMCS Informational Bulletin. Retrieved December 12, 2019, from https://www.medicaid.gov/federal-policy-guidance/downloads/cib111919.pdf.

Furthermore, we would also like to bring attention to the Behavioral Health and Maternity Core Sets first created in 2018.[11] [12] These do not contain new information, as they are targeted subsets of measures taken from both the Child and Adult Core Sets. However, these selective groupings allow for easy identification of the measures most relevant to CMS's efforts in these high priority areas of care.

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

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[13]. The Medicaid Directors' concerns primarily related to the following factors:

- Reporting completeness (number of measures reported by a state)
- Methodology employed by a state to report a particular measure (claims-based or claims and medical record review)
- Variances in the populations underlying the reported measures (e.g., non-disabled vs. dual-eligible populations)

To better understand the available data contained in the SHSP section of the Scorecard, last year 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 analysis are provided in last year's report.

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

State profile reports

The state profile reports provide a detailed look at each state's quality metrics, in comparison to comparable states, as well as year-over-year performance changes. The state profiles are similar to last year's versions, with a few enhancements based on user feedback. We provide an overview of the components provided in each state profile below.

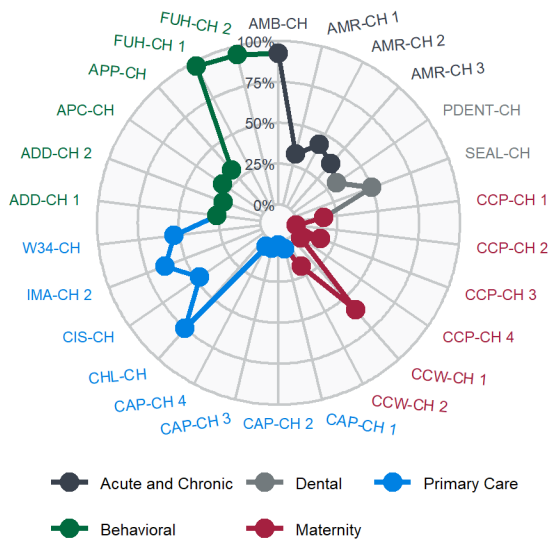
The quality metrics are first displayed in "radar" charts. There are separate charts for the Child and Adult Core Set measures, along with the Behavioral Health and Maternity Core Sets which are new for this year. The radar charts are intended to illustrate performance relative to other states, limited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

[11] CMS. 2018 Core Set of Behavioral Health Measures for Medicaid and CHIP. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2018-bh-core-set.pdf.

[12] CMS. 2018 Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2018-maternity-core-set.pdf.

[13] NAMD (June 4, 2018). NAMD Statement on the CMS Scorecard. Retrieved December 12, 2019, from http://medicaiddirectors.org/wp-content/uploads/2018/06/Scorecard-1.0-NAMD-Statement_FINAL.pdf.

FIGURE 1: CALIFORNIA CHILD CORE SET RADAR CHART



HOW TO INTERPRET THE RADAR CHARTS

- The state charts measure 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, California 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.

ENHANCEMENTS MADE THIS YEAR

- We display the measure abbreviations included in the Core Sets instead of domain-level identifiers.
- To facilitate review by domain, the measures are color-coded.
- The charts feature all comparable measures reported in one year only. Previously the radar charts had two separate lines for different years, but this imposed a constraint on the amount of information displayed, as only metrics reported in both years would be considered. Performance changes over time are now displayed in new visualizations later in the state profile appendices.

There are cases when a state reports Medicaid and CHIP populations separately. In these instances, we calculate a weighted average of the rates, using the children's enrollment report from CMS.[14] While California'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 measures illustrated in the radar chart. To the extent there are fewer than three comparable measures, 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 quality measure 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 2.

[14] The FY 2018 version is available at: https://www.medicaid.gov/chip/downloads/fy-2018-childrens-enrollment-report.pdf.

FIGURE 2: CALIFORNIA FFY 2018 CHILD CORE SET METRICS

ID	Rate	# Comp.	Performance Percentile	Lowest Quartile	Median	Highest Quartile
Care of Acute and Chronic Conditions						
AMB-CH[1,2]	35.2	40	92%	37.2	43.5	49.9
AMR-CH 1[5]	0.680	29	32%	0.667	0.723	0.765
AMR-CH 2[5]	0.616	29	43%	0.597	0.627	0.663
AMR-CH 3[5]	0.654	28	37%	0.640	0.689	0.713
Dental and Oral Health Services						
PDENT-CH	0.459	51	32%	0.445	0.480	0.524
SEAL-CH	0.240	31	50%	0.209	0.240	0.263
Maternal and Perinatal Health						
CCP-CH 1[4,5]	0.006	19	17%	0.009	0.021	0.032
CCP-CH 2[4,5]	0.035	20	0%	0.133	0.169	0.219
CCP-CH 3[4,5]	0.016	19	17%	0.029	0.037	0.076
CCP-CH 4[4,5]	0.091	20	5%	0.312	0.408	0.466
CCW-CH 1[4,5]	0.058	16	60%	0.045	0.053	0.069
CCW-CH 2[4,5]	0.225	17	19%	0.229	0.272	0.321
LBW-CH[1,4]	NA	NA	NA	NA	NA	NA
PPC-CH[4]	0.560	3	NA	NA	NA	NA
Primary Care Access and Preventive Care						
AWC-CH	NA	NA	NA	NA	NA	NA
CAP-CH 1	0.911	40	5%	0.946	0.958	0.966
CAP-CH 2	0.823	41	3%	0.865	0.884	0.902
CAP-CH 3	0.856	41	5%	0.896	0.912	0.938
CAP-CH 4	0.830	41	5%	0.880	0.912	0.926
CHL-CH	0.582	41	75%	0.451	0.493	0.582
CIS-CH	0.705	20	47%	0.655	0.706	0.754
DEV-CH	NA	NA	NA	NA	NA	NA
IMA-CH 1	NA	NA	NA	NA	NA	NA
IMA-CH 2	0.413	20	63%	0.277	0.363	0.453
W15-CH[4]	NA	NA	NA	NA	NA	NA
W34-CH	0.754	16	53%	0.678	0.738	0.789
WCC-CH	NA	NA	NA	NA	NA	NA
Behavioral Healthcare						
ADD-CH 1[3]	0.436	38	27%	0.428	0.487	0.565
ADD-CH 2[3]	0.525	37	25%	0.525	0.618	0.659
APC-CH[1,3]	0.033	34	30%	0.019	0.029	0.035
APP-CH[3,5]	0.591	26	32%	0.582	0.630	0.691
FUH-CH 1[3]	0.804	37	97%	0.563	0.652	0.742
FUH-CH 2[3]	0.678	38	95%	0.349	0.428	0.544

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.

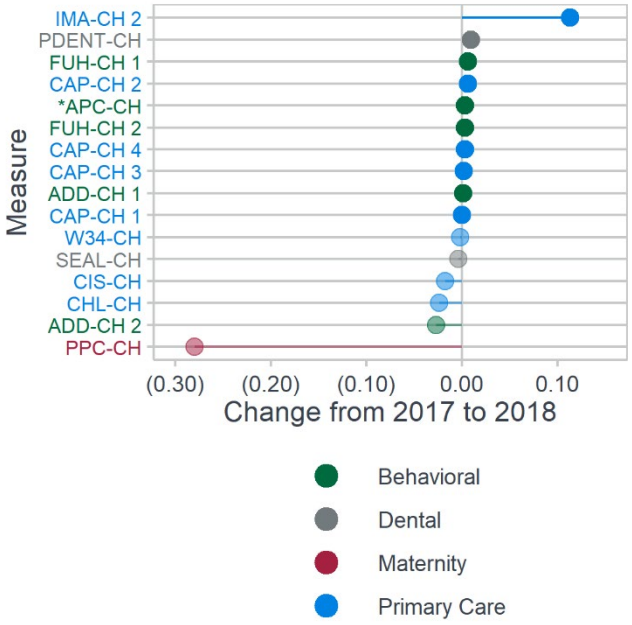
4. These measures are part of the Maternity Core Set.

5. These measures are newly available in the 2018 Core Set. They could be either new measures entirely, or 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."

Additionally, as noted above, since the radar charts no longer display lines for two years, we added another visualization that displays performance changes over time. These charts display the change in actual performance rates from year to year. The previous charts from last year's analysis showed changes in performance percentiles between years, which could be influenced by changes in other states, whereas this new visualization isolates the change for the selected state only. An example is shown below:

FIGURE 3: CALIFORNIA CHILD CORE SET PERFORMANCE CHANGES FROM 2017 TO 2018



- 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.
- Metrics 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 metrics 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 measures made available by CMS are dependent upon the underlying data behind the measures. To the extent a state has difficulty in reporting a measure or incomplete data, it will influence the quality metric's performance rate. Data for this report was obtained through data.medicaid.gov in September 2019. Values are displayed without modification.

- **Future reporting.** As CMS refines the Core Set measurements 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.

Behavioral health focus

We conclude this report with a deeper dive into the new behavioral health measures to shine a light on this critical component of today's healthcare landscape. The opioid epidemic continues to be a major health crisis and societal issue in the United States. While this situation affects many individuals across the nation, the Medicaid population has been found to be particularly vulnerable.[15] In response, the federal and state governments have placed particular emphasis on substance use disorder (SUD) treatment, and behavioral health more generally in recent years. The Administration has issued letters to State Medicaid Directors exploring additional initiatives for treatment of SUD and serious mental illness (SMI) in the form of section 1115 waivers.[16] [17] Many states have taken advantage of these opportunities as the nation works together towards a solution.[18] [19]

This emphasis on behavioral healthcare has extended to the Scorecard in the form of newly reported measures, greater granularity for certain measures, and the creation of the targeted Behavioral Health Core Set. Given the significance of this topic, we analyzed these metrics in greater detail. We do not intend for this to be a complete report on the state of behavioral health in Medicaid today, but rather a closer look at these quality metrics that may encourage readers to consider how this data may be used to facilitate best practices that lead to improved outcomes.

PERFORMANCE DIFFERENCES BETWEEN STATES

The behavioral health metrics indicate significant variation in performance between states. When sorting all metrics according to standard deviation (controlling for reporting methodology and population), we found many of the behavioral health metrics to be among the most widely dispersed. This is not always the case – for example, Primary Care Access and Preventive Care measures related to immunizations for children and adolescents (CIS-CH and IMA-CH, respectively) exhibit wide variation, whereas the Behavioral Healthcare measure of multiple concurrent antipsychotic usage (APC-CH) features a tight distribution – but behavioral health generally seems to be the domain with the greatest nationwide variance.

To illustrate this point, see the plots below contrasting some behavioral health metrics with other measures that are more consistent between states. For all measures, the top performing states are indicated.

[15] MACPAC (June 2017). Chapter 2: Medicaid and the Opioid Epidemic. Retrieved December 12, 2019, from https://www.macpac.gov/wp-content/uploads/2017/06/Medicaid-and-the-Opioid-Epidemic.pdf.

[16] CMS (November 1, 2017). Letter to State Medicaid Directors RE: Strategies to Address the Opioid Epidemic. Retrieved December 12, 2019, from https://www.medicaid.gov/federal-policy-guidance/downloads/smd18011.pdf.

[17] CMS (November 13, 2018). Letter to State Medicaid Directors RE: Opportunities to Design Innovative Service Delivery Systems for Adults with a Serious Mental Illness or Children with a Serious Emotional Disturbance. Retrieved December 12, 2019, from https://www.medicaid.gov/federal-policy-guidance/downloads/smd17003.pdf.

[18] CMS. Section 1115 Demonstrations: Substance Use Disorders, Serious Mental Illness, and Serious Emotional Disturbance. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/section-1115-demo/substance-use-disorder-demonstrations/index.html.

[19] KFF. Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State. Retrieved December 12, 2019, from https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/.

FIGURE 4: BEHAVIORAL HEALTH EXAMPLE – SUBSTANTIAL VARIATION

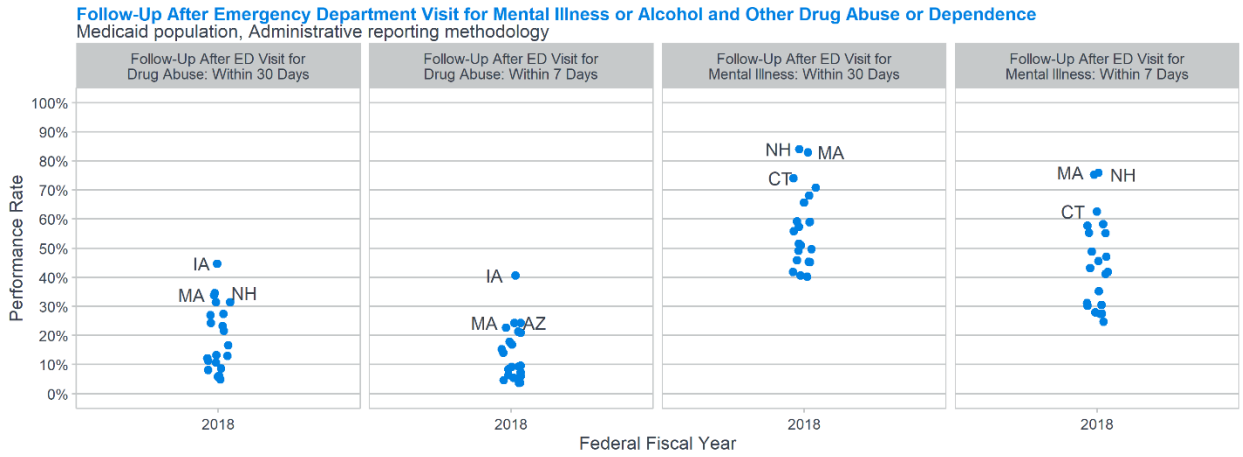
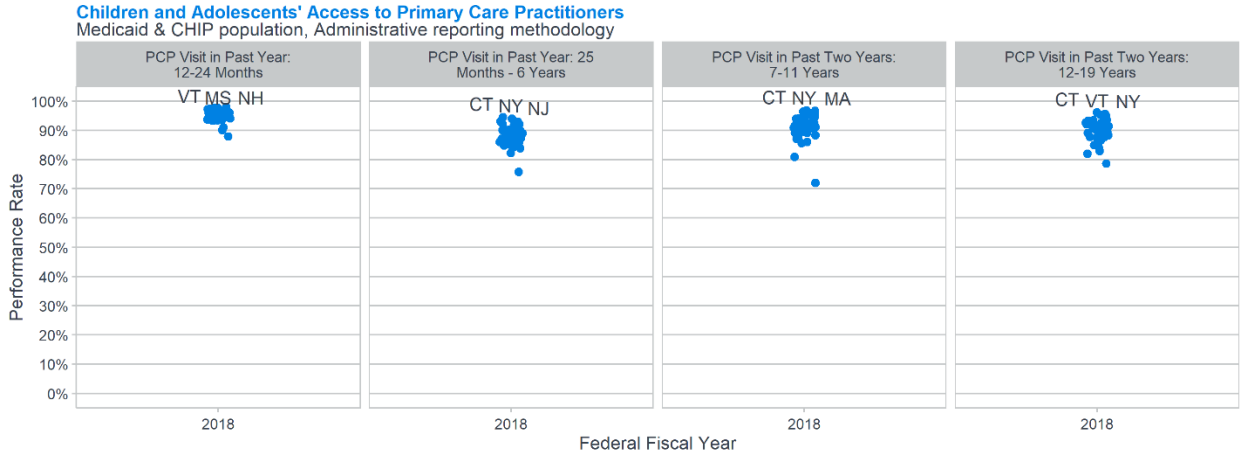


FIGURE 5: NON-BEHAVIORAL HEALTH EXAMPLE – LESS VARIATION



It is evident that for these behavioral health metrics, there is less uniformity among states. It could be worth researching best practices and treatment protocols utilized by top performing states to see if similar programs could be implemented in other states (or perhaps the collection and reporting of data needs to be improved). Consideration of both of those items are in alignment with the Scorecard goals of transparently tracking progress and developing best practices. Hopefully over time, this leads to improved outcomes across the board as all stakeholders work to close these performance gaps.

ADDITIONAL MEASURES

Another takeaway when looking into the behavioral healthcare metrics is the proliferation of measures. This manifests itself in two ways:

1. The inclusion of newly reported measures, such as the use of first-line psychosocial care for children and adolescents on antipsychotics (APP-CH), or
2. The division of an existing measure into several distinct measures

We would like to dig deeper into an example of the second item listed above: the initiation and engagement of alcohol and other drug abuse or dependence treatment (IET-AD). In previous years, this was recorded as two separate measures, as there was already a distinction between *initiation* (starting treatment within 14 days of diagnosis) and *engagement* (starting treatment and receiving two or more additional services within 34 days of initiation).[20] In the latest Adult Core Set, these measures have been split out into eight distinct measures: two that correspond to the original aggregate measures, but also more narrowly focused measures that specifically address alcohol, opioid, and other drug diagnoses separately.[21] The plots below illustrate the large increase in the relevant information now available for this topic. As discussed earlier, there continues to be quite a bit of variation between state performance levels, but we can see that there are some distinct high performers for each of the separate SUD categories. Performance differences between the different drug diagnosis categories is evident as well.

FIGURE 6: PREVIOUS IET-AD MEASURES

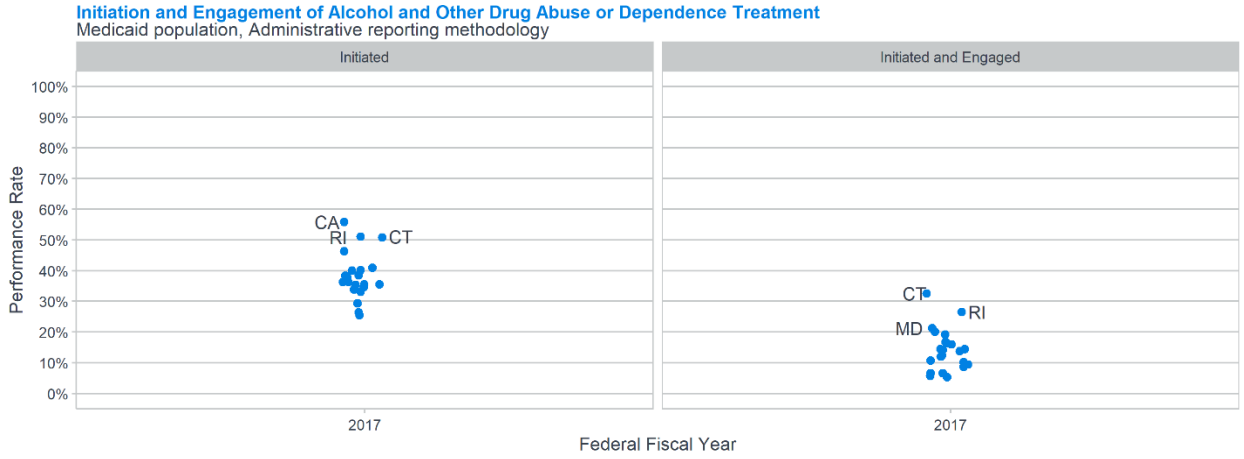
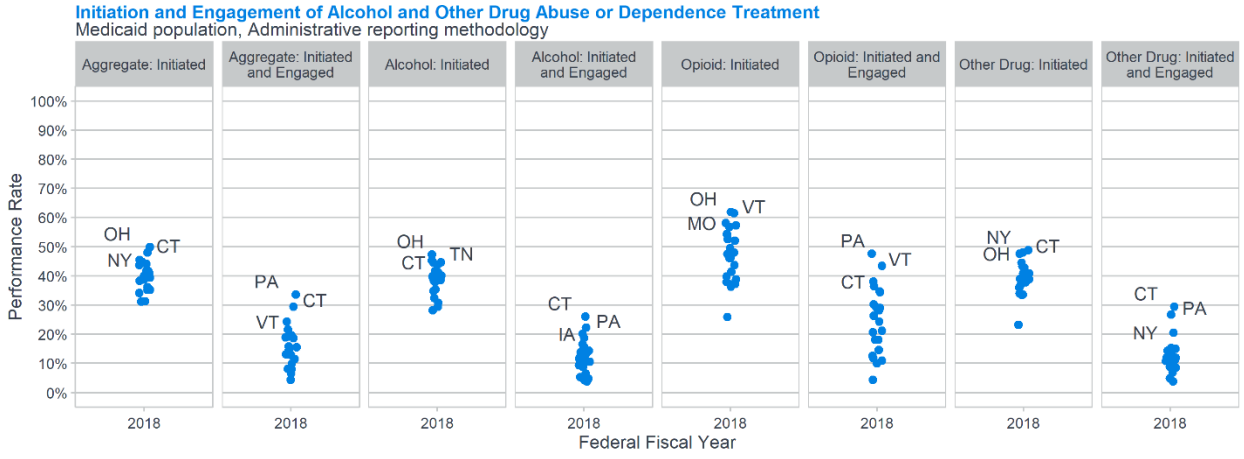


FIGURE 7: LATEST IET-AD MEASURES



[20] CMS (August 2019). Core Set of Adult Healthcare Quality Measures for Medicaid. Retrieved December 12, 2019, from https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf.

[21] Note that the aggregate measure does not simply represent the sum of the more specific measures, as the denominators for each vary.

KEY CONSIDERATIONS

As one evaluates this information, the general caveats and comments pertinent to all measures (such as data reliance) certainly apply, but we also would like to highlight some more specific considerations that apply to the behavioral health metrics.

- **Varying impact of the opioid epidemic.** Just as there are differences between states in terms of how they report the data and for which populations, different states may also be affected disproportionately by the opioid epidemic.[22] Similar to the consideration of social determinants of health, disparities between states should be recognized when evaluating results and opportunities for improvement.
- **Performance improvement lag.** There will be a gap between the timing of when an initiative or program change is implemented and when the results start to manifest in the data. For example, many states have taken advantage of the new 1115 waiver or state plan amendment opportunities related to SUD and SMI[23], but it may take some time before meaningful change is measured and realized in the Scorecard data. The timing of programs and policies should be kept in mind when evaluating state results.

[22] For more information, please see: https://www.milliman.com/en/Insight/opioid-use-disorder-in-the-united-states-diagnosed-prevalence-by-payer-age-sex-and-sta.

[23] For more information, please see: https://www.milliman.com/en/Insight/medicaids-winding-path-through-institutions-of-mental-disease.

Appendix 1: 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 0-19
AMR-CH 1[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5-11
AMR-CH 2[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 12-18
AMR-CH 3[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5-18
Dental and Oral Health Services	
PDENT-CH	Percentage with at Least 1 Preventive Dental Service: Ages 1-20
SEAL-CH	Percentage at Elevated Risk of Dental Caries (Moderate or High Risk) who Received a Sealant on a Permanent First Molar Tooth: Ages 6-9
Maternal and Perinatal Health	
CCP-CH 1[4, 5]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery: Ages 15-20
CCP-CH 2[4, 5]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery: Ages 15-20
CCP-CH 3[4, 5]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery: Ages 15-20
CCP-CH 4[4, 5]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery: Ages 15-20
CCW-CH 1[4, 5]	Percentage of Women at Risk for Unintended Pregnancy Provided a Long-Acting Reversible Method of Contraception: Ages 15 to 20
CCW-CH 2[4, 5]	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 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 2018 Core Set. They could be either new measures entirely, or did not previously meet reporting thresholds.

Appendix 1: Child Core Set Measures (cont.)

ID	Definition
Primary Care Access and Preventive Care	
AWC-CH	Percentage with at Least 1 Well-Care Visit with a Primary Care Practitioner or an Obstetrical/Gynecological Practitioner: Ages 12-21
CAP-CH 1	Percentage with a PCP Visit in the Past Year: Ages 12-24 Months
CAP-CH 2	Percentage with a PCP Visit in the Past Year: Ages 25 Months-6 Years
CAP-CH 3	Percentage with a PCP Visit in the Past Two Years: Ages 7-11 Years
CAP-CH 4	Percentage with a PCP Visit in the Past Two Years: Ages 12-19 Years
CHL-CH	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16-20
CIS-CH	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday
DEV-CH	Percentage Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool: Ages 0-3
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 of Children 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 3-6
WCC-CH	Percentage who had an Outpatient Visit with a Primary Care Practitioner or Obstetrical/Gynecological Practitioner who had Body Mass Index Percentile Documented in the Medical Record: Ages 3-17
Behavioral Healthcare	
ADD-CH 1[3]	Percentage Newly Prescribed ADHD Medication with 1 Follow-Up Visit During the 30-Day Initiation Phase: Ages 6-12
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 6-12
APC-CH[1, 3]	Percentage on Two or More Concurrent Antipsychotic Medications: Ages 1-17
APP-CH[3, 5]	Percentage who had a New Prescription for an Antipsychotic Medication and had Documentation of Psychosocial Care as First-Line Treatment: Ages 1-17
FUH-CH 1[3]	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 30 Days of Discharge: Ages 6-20
FUH-CH 2[3]	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 7 Days of Discharge: Ages 6-20

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 2018 Core Set. They could be either new measures entirely, or did not previously meet reporting thresholds.

Appendix 2: Adult Core Set Measures

ID	Definition
Care of Acute and Chronic Conditions	
AMR-AD 1[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 19-50
AMR-AD 2[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 19-64
AMR-AD 3[5]	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 51-64
CBP-AD	Percentage who had a Diagnosis of Hypertension and Whose Blood Pressure was Adequately Controlled During the Measurement Year: Ages 18-64
HA1C-AD	Percentage with Diabetes (Type 1 or Type 2) who had a Hemoglobin A1c (HbA1c) Test: Ages 18-64
HPC-AD[1]	Percentage with Diabetes (Type 1 or Type 2) who had Hemoglobin A1c in Poor Control (>9.0%): Ages 18-64
MPM-AD	Percentage who Received at Least 180 Treatment Days of Ambulatory Medication Therapy and Annual Monitoring: Ages 18-64
PCR-AD[2, 5]	Ratio of Observed All-Cause Readmissions to Expected Readmissions: Ages 18-64
PQI01-AD[1, 2]	Inpatient Hospital Admissions for Diabetes Short-Term Complications per 100,000 Beneficiary Months: Ages 18-64
PQI05-AD[1, 2]	Inpatient Hospital Admissions for Chronic Obstructive Pulmonary Disease (COPD) or Asthma per 100,00 Beneficiary Months: Ages 40-64
PQI08-AD[1, 2]	Inpatient Hospital Admissions for Heart Failure per 100,000 Beneficiary Months: Ages 18-64
PQI15-AD[1, 2]	Inpatient Hospital Admissions for Asthma per 100,000 Beneficiary Months: Ages 18-39
Maternal and Perinatal Health	
CCP-AD 1[4, 5]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery: Ages 21-44
CCP-AD 2[4, 5]	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery: Ages 21-44
CCP-AD 3[4, 5]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery: Ages 21-44
CCP-AD 4[4, 5]	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery: Ages 21-44
PPC-AD[4]	Percentage of Women Delivering a Live Birth who had a Postpartum Care Visit on or Between 21 and 56 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 18-64 Years
BCS-AD	Percentage of Women who had a Mammogram to Screen for Breast Cancer: Ages 50-64
CCS-AD	Percentage of Women Screened for Cervical Cancer: Ages 21-64
CHL-AD	Percentage of Sexually Active Women Screened for Chlamydia: Ages 21-24

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Appendix 2: 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 18-64
AMM-AD 2[3]	Percentage Diagnosed with Major Depression who were Treated with and Remained on Antidepressant Medication for 6 Months: Ages 18-64
FUA/M-AD 1[3, 5]	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 18-64
FUA/M-AD 2[3, 5]	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 18-64
FUA/M-AD 3[3, 5]	Percentage of Emergency Department (ED) Visits for Mental Illness with a Follow-Up Visit Within 30 Days of the ED Visit: Ages 18-64
FUA/M-AD 4[3, 5]	Percentage of Emergency Department (ED) Visits for Mental Illness with a Follow-Up Visit Within 7 Days of the ED Visit: Ages 18-64
FUH-AD 1[3]	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 30 Days of Discharge: Ages 21-64
FUH-AD 2[3]	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 7 Days of Discharge: Ages 21-64
IET-AD 1[3, 5]	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 18-64
IET-AD 2[3, 5]	Percentage with a New Episode of Alcohol or Other Drug Abuse or Dependence who Engaged in Alcohol or Other Drug Treatment within 34 Days of the Initiation Visit: Ages 18-64
IET-AD 3[3, 5]	Percentage with a New Episode of Alcohol Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18-64
IET-AD 4[3, 5]	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 18-64
IET-AD 5[3, 5]	Percentage with a New Episode of Opioid Abuse or Dependence who Initiated Alcohol or Other Drug Treatment within 14 Days of the Diagnosis: Ages 18-64
IET-AD 6[3, 5]	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 18-64
IET-AD 7[3, 5]	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 18-64
IET-AD 8[3, 5]	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 18-64
SAA-AD[3]	Percentage with Schizophrenia who were Dispensed and Remained on Antipsychotic Medication for at Least 80 Percent of their Treatment Period: Ages 19-64
SSD-AD[3]	Percentage with Schizophrenia or Bipolar Disorder who were Dispensed an Antipsychotic Medication and had a Diabetes Screening Test: Ages 18-64

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