2018 Medicaid Provider Rate Review Analysis Report

Appendix C – Access to Care Analysis Methodology

Appendix C outlines the methodology used to create the Access to Care Index (ACI) and analyze access to care for the 2018 Medicaid Provider Rate Review Analysis Report (2018 Analysis Report). Appendix C does not contain any assertions or conclusions on the sufficiency of Medicaid rates to provide adequate access to care.

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Access to Care Index Methodology

The Access to Care Index (ACI) is a method to standardize the access to care metrics across each service grouping. Standardization is necessary because the service groupings have inherently different utilization patterns, so it is expected and appropriate for one service grouping to have lower utilization than another. Comparing a penetration rate across service groupings without standardizing the results could lead to misleading results and inappropriate conclusions.

The ACI combines five access-related metrics:

- Penetration Rate – the percent of full time-equivalent (FTE) members who used the service.[1]
  - In the case of maternity services, it is a prenatal care rate – the percent of women who delivered who received prenatal care.
- Distance – the percent of the population that traveled within 30 miles to receive services (measured in a straight line from the geographic center of the utilizer's zip code to the geographic center of the provider's zip code).
- Member to Provider Ratio – the ratio of FTE members compared to active providers.
- Active Provider Months – the average number of months that providers billed Medicaid, displayed over a 24-month time frame.
- Panel Estimate – the average number of members seen per rendering provider.

For each service grouping, and for each of the 21 Health Statistics Regions (regions), the Department attributed points for each metric. Points were then tallied to establish an overall score for each region, allowing the Department to evaluate regional variation across service groupings. For all metrics except distance, the Department assigned 20 points to regions in the top quartile, 15 points to regions in the second quartile, 10 points to regions in the third quartile, and 5 points to regions in the bottom quartile. For distance, points were assigned based on the percent of the population that traveled within 30 miles; 20 points were assigned to regions where this percent was above 90%, 15 points to regions between 80-90%, 10 points to regions between 70-80%, and 5 points to regions below 70%. While the total possible points a region could receive equals 100 points, no region received 20 points for all five metrics and no region was attributed 100 points.

Interpreting Regional Performance

The ACI combines metrics that attempt to capture a broad picture of access to these services, by measuring realized access (penetration rate and distance), potential access (member to provider ratio), and provider availability (panel estimates and active months). Combining them into an index allows the Department to gain a broader picture of access to care and provides a tool to determine where potential issues may exist. This allows the Department to focus follow-up efforts to specific regions. The ACI also helps indicate the source of potential issues (e.g., low utilization, low provider supply, etc.).

Regions in the top quartile of the ACI performed better on access metrics than other regions in the state, however, at this time, the ACI does not indicate how Medicaid client access to services in those regions compared to access for individuals with other insurance, or to the uninsured population. Conversely, regions in the bottom quartile of the ACI performed worse on the access metrics relative to other regions, however, this does not necessarily mean that there are access issues present in these regions. Additionally, administrative claims data alone do not provide

[1] FTE calculations are obtained from monthly enrollment files over a 12-month period. For example, if one client was enrolled for nine months and another client was enrolled for three months, together they qualify as one FTE.

information regarding clients who were unable to access services, or why it was difficult for them to access services, which limits the ACI in its ability to identify specific access issues and barriers to care. The Department is exploring how to leverage additional data sources, such as the All-Payers Claim Database, Colorado Division of Insurance (DOI) Network Adequacy Standards, and survey data, to compare utilization and other access metrics to other payers by geographic area.

It is also difficult for the Department to assess adequacy of service availability compared to other insurance types without applying standards for utilization and availability of services, such as minimum member to provider ratios or drive times and travel distances. The Department is continuing to explore the use of network adequacy standards developed by the Colorado Division of Insurance (DOI) for health benefit plan network adequacy filings for this purpose.

In an effort to align with the Colorado Division of Insurance (DOI), the Department referenced Colorado Insurance Bulletin 4.90 Network Adequacy Standards and Reporting Guidance for Health Benefit Plans. In this bulletin, DOI outlines standards and guidance for health benefit plan network adequacy filings, which serve as measurable requirements for adequate networks. Among wait times and provider to enrollee standards, there are geographic standards outlined for specialties across five geographic county types. The standards outline the maximum road travel distance of any enrollee within each region type for each specialty, the travel distances range from 5 to 140 miles. There are data limitations that prevent the Department from measuring distance in this precise manner:

- Client location is based on the zip code of client residence, not the client's actual home address.
- Provider location is based on the zip code of the billing provider ID location, not the actual location of the practice. In some instances, the rendering provider could be in a different location.
- Provider information is based only on active providers, not 'available' providers. While provider revalidation was completed at the time of this analysis, the data reviewed came from the MMIS and did not have revalidated provider information. Therefore, the Department cannot determine if a client who travelled 45 miles to receive a service had any closer providers available. Future network adequacy analyses will be able to assess provider availability from enrolled providers.
- The analysis is based on health statistics regions, which do not align with the geographic county types outlined by CMS and DOI, as many regions have more than one county type within the region.

Because of these data limitations, the Department attempted to proxy the provider availability within a distance by calculating the metric for the entire population. The Department used 30 miles as the standard because it was reasonable for the entire state. To improve the ACI in future iterations, the Department will explore the possibility of using different mileage thresholds for urban and rural regions.

Evaluating Regional ACI Scores

To identify regions for further research, the Department first identified regions with an ACI score of 50 or below. Because the ACI is relative (e.g., scores were assigned to regions based on how they compared to other regions), certain regions with lower ACI scores, upon closer inspection, were determined not to have potential access issues. Therefore, the Department refined the criteria for further evaluation to only include regions that scored 50 points or lower and had at least three metrics in the bottom quartile, which more accurately identified regions needing additional evaluation.[2]

[2] The only metric that was not stratified by quartiles was the distance metric. For this metric, regions where 70% or less of clients traveled within 30 miles to their provider qualified as the lowest and were attributed five points.

For those regions identified using the criteria above, the following analysis was conducted to identify regions with potential access issues:

- Penetration rate – if the metric was within one standard deviation of the statewide mean,[3] this was attributed to normal variation. For the purposes of this report, this metric trending up indicated improvement on the metric and this metric trending down indicated a decline on the metric. A decline in this metric may indicate potential access issues.
- Member-to-provider ratio – if the metric was within one standard deviation of the statewide mean, this was attributed to normal variation. For the purposes of this report, this metric trending down indicated improvement on the metric and this metric trending up indicated a decline on the metric. A decline in this metric may indicate potential access issues.
- Percent of clients that traveled within 30 miles of the provider – if the metric was within one standard deviation of the statewide mean, this was attributed to normal variation. For the purposes of this report, this metric trending up indicated improvement on the metric and this metric trending down indicated a decline on the metric.

Provider availability was determined using average active billing months and average panel size. For these two metrics, together referred to as "provider metrics", the following analysis was conducted:

- Average active billing months[4] – the Department evaluated the number of providers located in a region. For the purposes of this report, increases in providers indicate an improvement in provider availability.
- Average panel estimate – the Department evaluated the number of active providers located in a region. For the purposes of this report, increases in providers indicate an improvement in provider availability.

If there was improvement on all metrics the Department examined, the Department determined that the analysis did not indicate potential access issues. If there was a decline on any metric evaluated, the Department's analysis was inconclusive, and the Department identified other areas for research. Additionally, there were two instances where the Department evaluated a region with an ACI score of 50 or less and only two metrics in the lowest quartile: maternity services in region 6 and other physician services in region 9. Even though these regions did not meet the criteria for further investigation as outlined above, the Department chose to investigate further because at least one metric did not improve and there was a decline in the number of providers serving clients in the region.

Data

The access to care analyses are based on claims data from calendar year (CY) 2015 and 2016. Clients with dual Medicaid-Medicare enrollment were included, however, crossover claims (in which Medicare pays first and Medicaid is the payer of last resort) were excluded. References to the Medicaid population are full-time equivalent (FTE) calculations, based on member months, obtained in an enrollment table in the decision support system (DSS) called the Client Monthly Table.

Population categories were determined based on client program aid codes, which are indicative of how the client became eligible for Medicaid (e.g., pregnant woman, Home and Community-Based Elderly, Blind and Disabled, or

[3] When investigating the whether this metric, and any other metric, was within one standard deviation of the statewide Medicaid mean, the Department acknowledges that it is not able to determine if the statewide mean is sufficient currently.
[4] Active providers are defined as any provider who billed Medicaid at least once between July 2014 and June 2016 for one of the procedure codes under review.

Foster Care), and budget classifications that are used to determine the percentage of federal match. Clients sometimes move between categories based on various circumstances, such as changing income or increasing age.

Geographic information is not included on claims for clients with presumptive eligibility, therefore these clients have been removed from all geographic comparisons but remain in all other calculations.[5] Since the majority of presumptively eligible clients enroll after the first claim, most claims eventually map to the correct geographic region. For this reason, very few clients are entirely excluded. For all services, less than 0.17% of the service utilizer population was identified as presumptively eligible.

Additional Data Exclusions

Clients enrolled in the Child Health Plan *Plus* (CHP+) and clients enrolled in a managed care organization are excluded from the rate review access to care analyses. These clients are excluded because rates associated with service utilization are excluded from the rate review process. It is important to note these exclusions to better understand true service utilization. For each of these exclusions, the following information can provide context:[6]

- CHP+ - In FY 2015-16, the average monthly caseload was approximately 51,041 children and 668 pregnant individuals were enrolled in CHP+. CHP+ services are available to clients statewide.
- Rocky Mountain Health Plans HMO – In FY 2015-16, the average monthly caseload was approximately 35,356 individuals. Enrolled adults live in Garfield, Gunnison, Mesa, Montrose, Pitkin, and Rio Blanco Counties; those counties are in regions 10, 11, 12, and 19.
- Denver Health & Hospital Authority HMO – In FY 2015-16, the average monthly caseload was approximately 70,103 individuals. Enrolled individuals live in Adams County (region 14), Arapahoe County (region 15), Denver County (region 20), and Jefferson County (region 21).
- Access – Kaiser HMO – In FY 2016-17, the average monthly caseload was approximately 22,316 individuals. Enrolled individuals live in Adams County (region 14), Arapahoe County (region 15), and Douglas County (region 3).

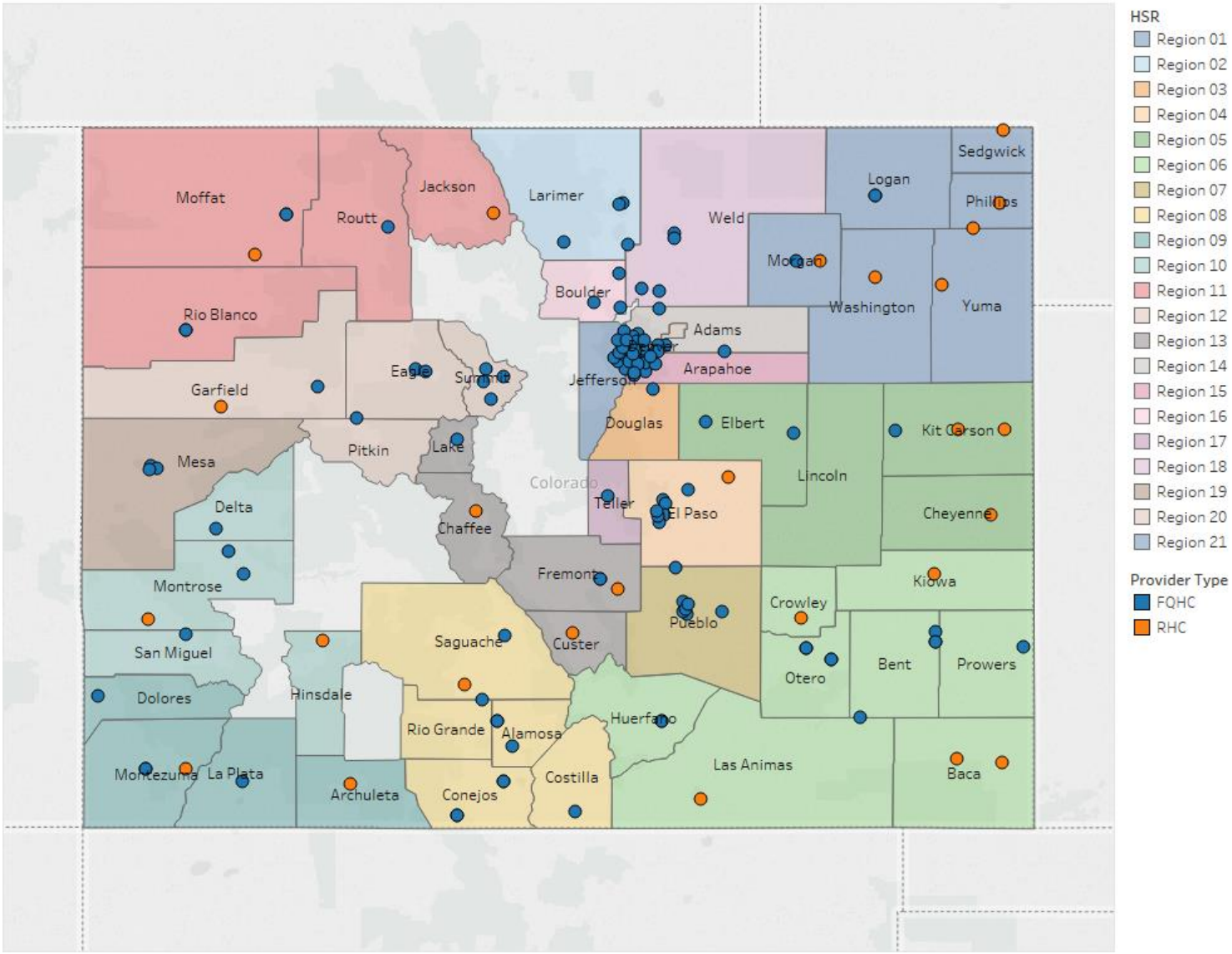
Additionally, certain claims were excluded, based on claim type or place of service, from the rate review access to care analyses because the rates associated with those payments are excluded from the rate review process. This includes claims for federally-qualified health centers (FQHCs) and rural health centers (RHCs), as well as the facility claims, referred to as UB-04 claims, for inpatient and outpatient hospitals. For these exclusions, the following maps can provide additional context regarding where clients may access services.[7]

[5] For more information on presumptive eligibility, see the Department's Presumptive Eligibility webpage.

[6] Caseload data for CHP+, Rocky Mountain Health Plans HMO, and Denver Health & Hospital Authority HMO is pulled from the Department's FY 2015-16 Medical Premiums Expenditure and Caseload Report. Caseload data for Access – Kaiser HMO, which began enrolling clients on January 1, 2016, is pulled from the following year's FY 2016-17 Medical Premiums Expenditure and Caseload Report.

[7] FQHC, RHC, and hospital locations are billing provider locations, pulled from claims data spanning March 1, 2017 to December 31, 2017.

Colorado Federally Qualified Health Centers and Rural Health Clinics Location (2018)



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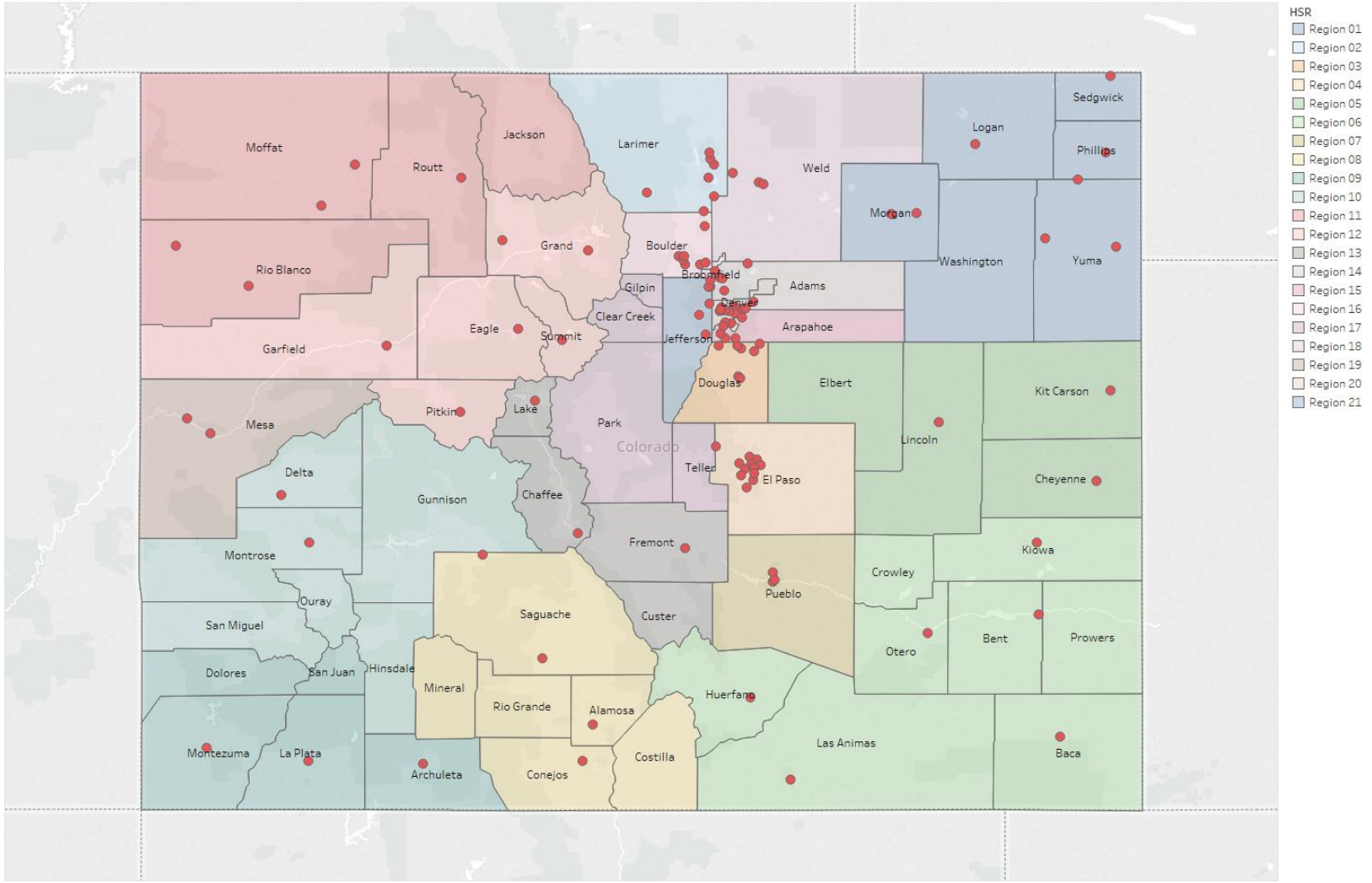
Colorado Hospital Providers Location (2018)



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