Appendix F contains rate ratio scatterplots for all year three services, except dental services. Appendix F does not contain any assertions or conclusions on the sufficiency of Medicaid rates to provide adequate access to care.
Rate Ratio Scatterplot Instructions

In January 2018, the Department published preliminary year three analyses that included rate ratio scatterplots. Presented here are updated scatterplots which incorporate analyses conducted by Optumas, an actuarial firm the Department contracted with to assist in the comparison of Colorado Medicaid provider rates to those of other payers. All information is based on calendar year (CY) 2016 claims data.

Rate ratio scatterplots display the rate ratio, utilization, and total paid amount for individual procedure codes, specifically:

- **Vertical axis (y-axis)** – the rate ratio of Colorado Medicaid rates to the benchmark rates for each service code. The dark horizontal line represents the rate benchmark comparison for the service grouping.
- **Horizontal axis (x-axis)** – the total paid amount for each service code.
- **Circles** – each circle represents a specific service code. The size of the circle indicates the total paid units, which is a proxy for that service code’s utilization.

Underneath the rate ratio scatterplots, the bar chart represents the total paid based on facility and non-facility place of service. For more information regarding place of service designations, see the Center for Medicare and Medicaid Services’ (CMS) place of service definitions, found on CMS’s [Place of Service Codes for Professional Claims website](https://www.cms.gov/Medicare/Coding/PlaceofService/PlaceofServiceCodes.html).

For visualization purposes, five service codes were excluded from the scatterplots. Additionally, a small number of service codes that were analyzed this year are not included in the scatterplots, including 16 service codes that replaced seven service codes in a one-to-many crosswalk. For a list of these codes, see [Appendix B – Rate Comparison Analysis Methodology](#) (Table 2, p.3).

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1 Service codes, as well as their service grouping and corresponding rate ratios, that were excluded from the scatterplots for visualization purposes were: 90713, Evaluation & Management and Primary Care, with a rate ratio of 313%; 77790 (modifier 0), radiology services, with a rate ratio of 397%; 50592, surgeries, with a rate ratio of 330%; 50325, surgeries, with a rate ratio of 260%; and 50323, surgeries, with a rate ratio of 246%.
Rate Comparison Analysis:
Other Physician (CY 2016)

The graph shows a scatter plot of CY 2016 Paid Units against CY 2016 Paid Amount, with different symbols indicating payment levels (30, 100, 200, and 313,685). The Rate Benchmark is 66.96%. Below the scatter plot, there is a bar chart comparing Facility and Non-facility payment amounts, with Facility at 26.71% and Non-facility at 73.29% of CY 2016 Paid Dollars.