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Ms. Lori Wing-Heier
Director, Alaska Division of Insurance
550 West 7th Avenue, Suite 1560
Anchorage, AK 99501-2567

Subject: **Updated Provider Reimbursement Rate Summary – Physician Services**

Dear Director Wing-Heier:

As requested, we have updated an analysis of reimbursement rates relative to Medicare for professional services to incorporate an additional year of claims data. This analysis has been completed to help the Alaska Division of Insurance (the Division) better understanding whether commercial healthcare costs for certain types of services, or services provided by certain types of physicians and other healthcare professionals, in Alaska have escalated more quickly than other types of services or specialties. Similar to the previous version of the analysis, this analysis also compares reimbursement levels relative to Medicare in Alaska for professional services, including the rate at which the reimbursement levels have changed, to other geographic locations specified by the Division. The following memorandum provides a brief description of the methodology used to complete the analysis and a summary of the results. The accompanying Excel file titled "Physician Reimbursement Summary - 01052019.xlsx" (Excel file) contains a more detailed view of the results of the analyses.

Description of Methodology

Allowed claims data from the IBM Watson Health MarketScan® Database (MarketScan®) was used to calculate average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule reimbursement levels for services provided by physicians and other healthcare professionals for each of the following geographies: Alaska, North Dakota, Idaho, Montana, and Seattle. MarketScan® data for services performed in 2014, 2015, 2016, and 2017 were included in the analysis, with each year analyzed independently.

Relative to the prior analysis, we have incorporated information using 2017 MarketScan® data. It is important to note that the geographic indicator in the 2017 MarketScan® data is populated for fewer enrollees relative to the MarketScan® data from prior years in order to maintain the confidentiality of reimbursement rates for carriers with a large presence in a given state. Most notably, enrollment in the 2017 MarketScan® data was 30% lower in Alaska and 72% lower in Idaho relative to the 2016 MarketScan® data, which introduces additional variability in the results of our analysis. The change in enrollment in the other geographies included in the analysis was significantly less noticeable.

As a first step, the applicable Medicare Fee Schedule reimbursement amount was calculated for each claim line in the selected data set (i.e., professional claims in the specified states with dates of service in 2014, 2015, 2016, and 2017). When calculating the Medicare Fee Schedule reimbursement amount for a given claim, the Medicare Conversion Factor, Geographic Pricing Cost Indices (GPCIs), and Relative Value Unit (RVU) applicable to the year, and Current Procedure Terminology (CPT) code were attached and considered in the calculation. Further, any claim payment modifiers included on the claim record that indicate an adjustment would be applied to the reimbursement amount under the Medicare Fee Schedule were considered (e.g., modifiers that indicate only the technical component of a radiology services is being billed for).

Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule amount were then analyzed by service category groupings, and separately by provider specialty groupings. Service category groupings were defined using CPT codes and represent similar types of services (e.g., office visits, cardiology surgeries, high-cost imaging services, etc.). Services billed using Healthcare Common Procedure Coding System (HCPCS) codes were not included in the analysis due to the miscellaneous/ancillary nature of these codes, and the relatively small proportion of total dollars represented by these services. Provider specialties, as reported on each claim records, were grouped together for similar specialties (e.g., pathology, pediatric pathology, and laboratory were grouped together as lab/pathology). The top ten provider specialties in Alaska were determined by Medicare Fee Schedule reimbursement amounts across all four years of data (2014 through 2017) were analyzed, with the remaining provider specialties grouped together. It should be noted that incorporating an additional year of data will result in slight changes to the top ten provider specialties relative to the prior analysis.

Average commercial reimbursement rates by provider specialty were analyzed further for three broad service category groupings: evaluation and management (E&M) services, surgical services, and all other services. The broad service category groupings were defined as follows:

- E&M services: CPT codes 99201-99499
- Surgical services: CPT codes 10021-69799
- Other services: All other CPT codes

Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule amount in Alaska were compared to average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule amount for each of the other geographies to inform our understanding of service category groupings or provider specialties that have anomalously higher reimbursement levels in Alaska. To ensure the reimbursement levels for each geography were calculated using a consistent market basket of services, the weights applied to each service category grouping and provider specialty grouping were based on the distribution of Medicare Fee Schedule reimbursement amounts for professional services using the combined 2014, 2015, 2016, and 2017 MarketScan® data, limited to Alaska. An adjustment was made to normalize for annual changes in the Medicare Fee Schedule conversion factor. The resulting distribution used to weight each service category grouping and provider specialty was

approximately representative of a distribution of Medicare relative value units for four years of utilization statistics. Four years of combined reimbursements, evaluated at Medicare Fee Schedule reimbursement levels, were used to enhance the credibility of our results. It should be noted that the distribution of Medicare Fee Schedule reimbursements in Alaska was relatively stable each year, including the 2017 data, despite the significant reduction in the number of enrollees underlying the 2017 data relative to the 2016 data. It should also be noted that incorporating an additional year of data into the weight assigned to each service category grouping results in slight changes to the average reimbursement rate as a percentage of the applicable Medicare Fee Schedule across all services, relative to the prior analysis using 2014, 2015, and 2016 MarketScan® data.

Average unit costs for each service category or provider specialty grouping (at both commercial and Medicare Fee Schedule reimbursement levels) reflect a weighted average of unit costs across all CPT codes within the service category or provider specialty grouping. The average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule was calculated by comparing the average commercial unit cost for a given service category grouping to the average Medicare unit cost for the same service category, assuming the same mix of services.

Overview of the Excel File

The Excel file associated with this analysis includes eight worksheets of summarized data. The “Svrc Category – 2014,” “Svrc Category – 2015,” “Svrc Category – 2016,” and “Svrc Category – 2017” worksheets are summarized similarly, as are the “Prov Specialty – 2014,” “Prov Specialty – 2015,” “Prov Specialty – 2016,” and “Prov Specialty – 2017” worksheets. An overview of the information summarized within each worksheet or worksheet grouping is as follows:

- “Svrc Category...”: These worksheets summarize the average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule by service category grouping for each geography, separately for each calendar year of MarketScan® data. Additionally, these worksheets compare the average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule by service category grouping in Alaska to the corresponding average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule for each geography, separately for each calendar year of MarketScan® data.
- “Prov Specialty...”: These worksheets summarize the average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule by provider specialty grouping for each geography, separately for each calendar year of MarketScan® data. Additionally, these worksheets compare the average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule by provider specialty grouping in Alaska to the corresponding average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule for each geography, separately for each calendar year of MarketScan® data.
- “Proc Code Summary”: Summarizes the average commercial reimbursement rate relative to the applicable Medicare Fee Schedule for the top 50 procedures in Alaska. The top 50

procedures are defined in two different manners: 1) the top 50 procedures as represented by the procedure codes with the highest frequency among services provided by physicians and other healthcare professionals in Alaska in 2017 (noting that the prior analysis utilized 2016 data); and 2) the top 50 procedures as represented by procedure codes with the highest total commercial spend for services provided by physicians and other healthcare professionals in Alaska in 2017 (noting that the prior analysis utilized 2016 data). The corresponding reimbursement rates as a percentage of the applicable Medicare Fee Schedule are also shown for each geography for comparative purposes.

- “Provider Specialty Mapping”: Summarizes the mapping of the provider specialties noted in the MarketScan® data to the provider specialty groupings shown in the analysis. The “OW Provider Specialty Grouping” field was used to identify the top ten provider specialties. Given the granular nature of the data presented in this worksheet, the results of some procedure codes may not be credible.
- “Alaska MSA Summary”: Summarizes the average commercial reimbursement rate as a percentage of the applicable Medicare Fee Schedule by MSA, separately for each calendar year of MarketScan® data. Given the granularity of the data, significant volatility in the results from year to year should not be unexpected.

Results

Across all services, the average commercial reimbursement rate as a percentage of the Medicare Fee Schedule increased between 2014 and 2017 in Alaska, noting that there is likely some additional volatility associated with the results for 2017 given the reduction in enrollment relative to 2014 through 2016. Additionally, the 2017 MarketScan® data suggests average commercial reimbursements rates as a percentage of the Medicare Fee Schedule may be increasing faster in Alaska relative to most other geographies. Table 1 below summarizes the average commercial reimbursement rate as a percentage of the Medicare Fee Schedule by year for each geography and a comparison of the average commercial reimbursement rate as a percentage of the Medicare Fee Schedule in Alaska to the corresponding average for each geography.

Table 1 – Summary of Commercial Reimbursement Rates

Geography	Average Reimbursement Rate (% of Medicare)				Alaska Relative to Each Geography			
	2014	2015	2016	2017	2014	2015	2016	2017
Alaska	269%	268%	275%	281%				
Idaho	155%	156%	158%	155%	1.73	1.72	1.74	1.81
Montana	161%	156%	158%	154%	1.67	1.72	1.74	1.82
North Dakota	181%	186%	192%	202%	1.49	1.44	1.43	1.39
Seattle, WA	143%	145%	147%	148%	1.88	1.85	1.87	1.90

When analyzing the results by service category grouping as shown in the “Svrc Category...” worksheets in the Excel file, most of the key observations that were noted in the prior analysis are still applicable to the updated analysis. Below are a couple of key observations to note:

- Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule were approximately three times higher in Alaska relative to the other geographies for the following service category groupings: Cardiovascular Procedures, Neurology and Neuromuscular Procedures, Surgical Procedures on the Nervous System, and Radiology – Other.
- The relativity of average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule in Alaska for radiology and imaging services (Diagnostic Radiology (Diagnostic Imaging) Procedures, Diagnostic Ultrasound Procedures, and Radiology – Other service category groupings) generally increased relative to the other geographies. For example, average reimbursement rates as a percentage of the applicable Medicare Fee Schedule for Diagnostic Radiology (Diagnostic Imaging) Procedures increased in Alaska from 491% in 2014 to 530% in 2017, whereas in most other geographies the average reimbursement rate as a percentage of the applicable Medicare Fee Schedule decreased or the rate of increase was not as rapid over the four year period.
- Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule for Physical Medicine, New Patient Office Visit of Other Outpatient Service, and Established Patient Office Visit of Other Outpatient Service in Alaska increased faster relative to the other geographies. However, given the volume of claim dollars associated with these service category groupings, the impact over time could be significant if the current trajectory continues.

When analyzing the results by provider specialty grouping, as shown in the “Prov Specialty...” worksheets in the Excel file, caution should be used since some of the cohorts when analyzing the data by broad service category grouping lack credibility. Most of the key observations that were noted in the prior analysis are still applicable to the updated analysis. Below are a couple of key observations to note:

- Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule for the Radiology – General provider specialty grouping generally increased faster in Alaska relative to the other geographies.
- Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule for Surgical Services are approximately twice as high in Alaska relative to the other geographies and nearly twice as high as E&M services. In the other geographies, average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule for Surgical Services are comparable to E&M Services. Additionally, the average reimbursement rate as a percentage of the applicable Medicare Fee Schedule for Surgical Services in Alaska appears to be increasing over time relative to other geographies.
- Average commercial reimbursement rates as a percentage of the applicable Medicare Fee Schedule for E&M Services are increasing at the same rate as the other geographies.

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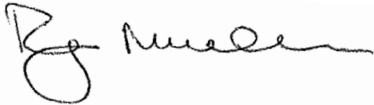
Limitations

This analysis was developed to provide the Division with a summary of changes in physician reimbursement rates in Alaska by service category and provider specialty grouping, and a comparison of changes in physician reimbursement rates in Alaska relative to other geographies specified by the Division. In completing the analysis, several assumptions were made including:

- Procedure codes that did not have a corresponding Medicare Fee Schedule reimbursement rate were excluded from the analysis. Additionally, HCPCS codes and temporary procedure codes were excluded from the analysis.
- Not all claims in the MarketScan® data had a provider specialty reported or the provider was associated with multiple specialties. For these instances, we did not attempt to recategorize the provider specialty and instead maintained the provider specialty assigned (e.g., multispecialty physician group).
- Variations in Medicare Fee Schedule reimbursement rates by geography were assumed to accurately reflect differences in provider costs associated with delivering care.

If you have any questions regarding our analysis, please feel free to contact me. I can be reached at 414 277 4680.

Sincerely,



Ryan Mueller, FSA, MAAA
Senior Consultant

Copy: Anna Latham, Alaska Division of Insurance
Tammy Tomczyk, Oliver Wyman Actuarial Consulting, Inc.