NC RHRP

Findings Brief
NC Rural Health Research Program

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Medicare Covers a Lower Percentage of Outpatient Costs in Hospitals Located in Rural Areas

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BACKGROUND

For decades now, health care has been shifting from inpatient care to outpatient care. As hospitals reduce inpatient care, revenue from outpatient care becomes critically important.[1] In most rural hospitals, the greatest portion of net patient revenue is from outpatient services[2] versus urban hospitals that have, on average, about half from outpatient and half from inpatient services.[3] In addition, Medicare accounts for a higher percentage of outpatient revenue in rural hospitals.[2] Therefore, outpatient services in total, and Medicare as a payer for outpatient services, are more important in rural hospitals than urban hospitals.

Medicare reimburses hospitals for outpatient services in different ways, depending on their payment classification:

- *Prospective Payment System (PPS).* Most hospitals are classified as PPS for which outpatient services are reimbursed using the Outpatient Prospective Payment System (OPPS; see the Appendix for explanation).
- *Medicare Dependent Hospitals (MDH).* To qualify as an MDH, hospitals must be rural, have less than or equal to 100 acute beds, and at least 60% of their inpatient days or discharges must be for Medicare Part A beneficiaries. MDHs are reimbursed by the OPPS and have a special payment for inpatient services.
- *Sole Community Hospitals (SCH).* To qualify as an SCH, hospitals must be the only hospital that provides short-term, acute care in the area (distance requirements vary based on location, weather, topography, etc.). SCHs are reimbursed by the OPPS and are given an additional adjustment of 7.1%, excluding drugs and biologics.
- *Rural Referral Centers (RRC).* To qualify as an RRC, hospitals must be rural and have a high volume of patients. Criteria to classify as high volume vary on the number of acute beds (275+), distance from other providers, and case mix. RRCs are reimbursed by the OPPS and also receive a reclassified wage index. An increasing number of RRCs are found in urban areas.
- *Critical Access Hospitals (CAHs)* are reimbursed via cost-based reimbursement, a very different model from OPPS, and are not considered in this brief.

The purpose of this brief is to describe differences in Medicare OPPS payments between rural and urban hospitals by Medicare payment classification and by number of acute beds.

KEY FINDINGS

- Compared to acute, short-term urban hospitals, Medicare Outpatient Prospective Payment System (OPPS) payments to rural hospitals:
  - are a higher percent of their total net patient revenue;
  - cover a lower percentage of the cost of outpatient services across all Medicare payment classifications except Rural Referral Centers; and
  - cover a lower percentage of outpatient cost in hospitals with 0-25 beds.
- Among rural hospitals, OPPS payments:
  - are the highest percent of total net patient revenue in Rural Referral Centers and the lowest percentage in Prospective Payment System hospitals;
  - cover the lowest percentage of outpatient cost in Medicare Dependent Hospitals, and the highest percentage in Rural Referral Centers.

METHOD

The hospital sample included all short-term, acute care hospitals except those that are exempt from the OPPS and paid under different methodologies, including:

- 1,350 critical access hospitals, for which inpatient and outpatient payment rates are made based on hospitals' allowable costs;
- 47 hospitals in Maryland, for which inpatient and outpatient rates are set using a global budget construct under a state waiver;
- 55 children's hospitals and 11 cancer hospitals, for which outpatient payments are determined by the OPPS but with special payment adjustments; and
- 31 Indian Health Service hospitals, for which outpatient payments rates are 100 percent of their costs of care.

Each hospital was designated as either rural or urban based on the geographic location of the hospital, and using the rural definition specified by the Federal Office of Rural Health Policy.[4] This is an important point because there are PPS hospitals, MDHs, SCHs, and RRCs located in both rural and urban areas. Each hospital was assigned to one of the following groups in Table 1.

Table 1. Rural and Urban Hospital Classifications

Hospital classification label	Hospital groups
Urban	All PPS hospitals, MDHs, SCHs, and RRCs located in *urban* areas
PPS	PPS hospitals located in *rural* areas
SCH	SCHs located in *rural* areas
MDH	MDHs located in *rural areas*
RRC	RRCs located in *rural* areas

All financial data came from the Centers for Medicare & Medicaid Services (CMS) Healthcare Cost Report Information System (HCRIS 3-31-2020). Table 2 lists two ratios that were calculated with variables from the most recent cost reports with days in period > 360.

Table 2. Study Ratios

Ratio	Formula	Cost report data	Interpretation
OPPS payment as a percent of total net patient revenue	$\frac{\text{OPPS payment}}{\text{Net patient revenue}}$	$\frac{\text{Worksheet E, Part B, row 3}}{\text{Worksheet G-3, line 3}}$	Is OPPS payment an important source of patient revenue to a hospital?
OPPS payment as a percent of Medicare outpatient cost	$\frac{\text{OPPS payment}}{\text{Medicare outpatient cost}}$	$\frac{\text{Worksheet E, Part B, row 3}}{\text{Worksheet E, Part B, row 2}}$	What portion of the hospital's outpatient care cost for Medicare beneficiaries does the OPPS payment cover?

Ratios were calculated for each hospital and summarized for each group based on rural or urban location and for three groups based on the number of acute beds: 0-25 beds, 26-50 beds, and > 50 beds. OPPS payment does not include outpatient services reimbursed by fee schedule, such as most therapy services.

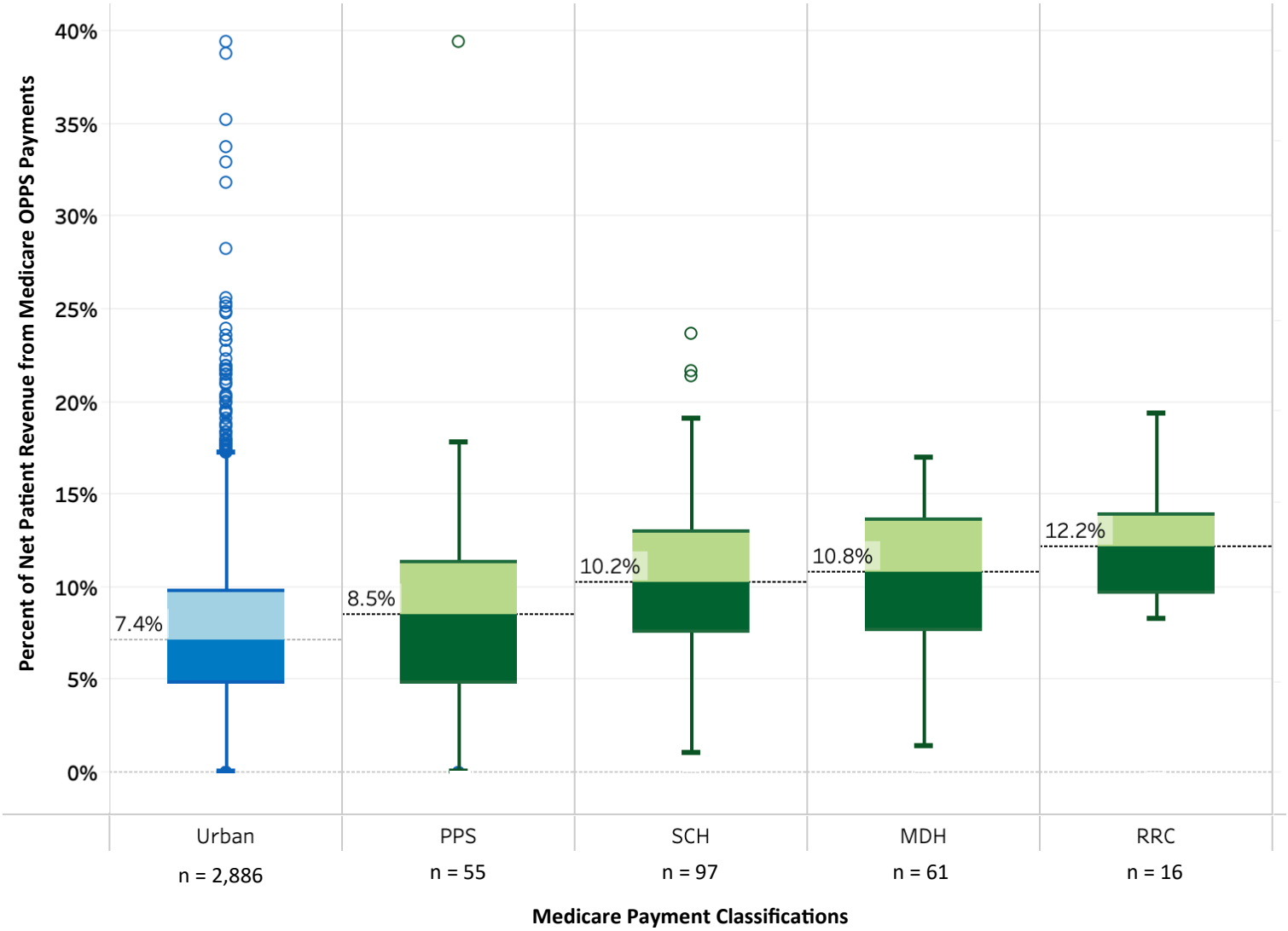
RESULTS

Medicare OPPS Payment as a Percent of Total Net Patient Revenue

Figure 1 is a boxplot of the percentages of the Medicare OPPS payments as a proportion of total net patient revenue across Medicare hospital payment classifications. In the shaded box, the horizontal line in the middle is the median, the top of the box is the 75th percentile, and the bottom of the box is the 25th percentile. The difference between the 25th and 75th percentiles is called the interquartile range, and the "whiskers" below and above the shaded box are the values of total net patient revenue that are 1.5 times the interquartile range. The circles above or below the whiskers are outliers.

Figure 1 shows that OPPS payments to rural hospitals make up a higher percent of total net patient revenue than in urban hospitals. Among rural hospitals, OPPS payments are the highest percentage of total net patient revenue in RRCs and the lowest percentage in PPS hospitals.

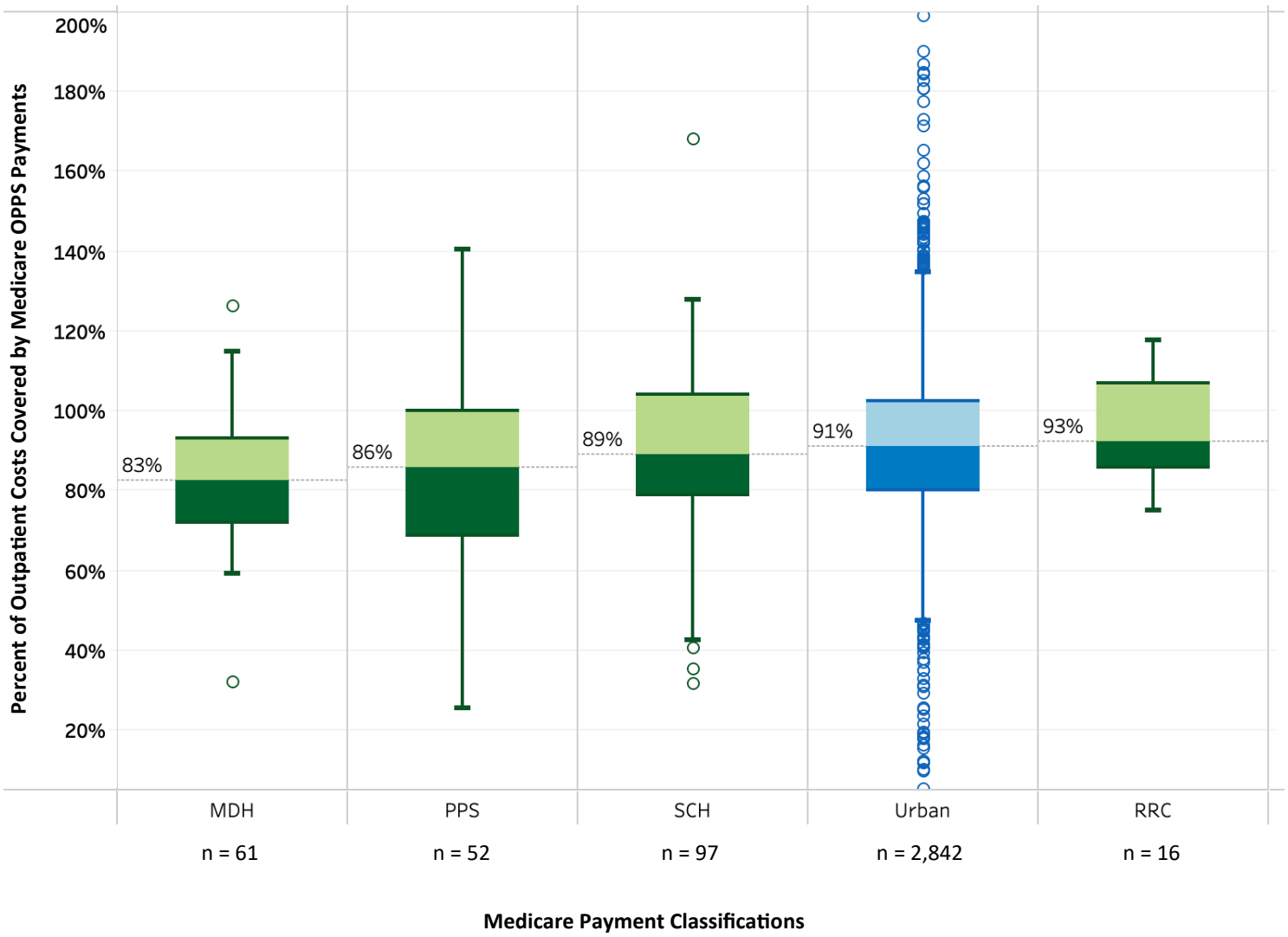
Figure 1. Medicare OPPS Payments as a Percent of Total Net Patient Revenue



Medicare OPPS Payment as a Percent of Outpatient Costs of Medicare Beneficiaries by Hospital Payment Classification

Figure 2 shows that compared to urban hospitals, OPPS payments to rural hospitals cover a lower percentage of the outpatient cost across all Medicare payment classifications except RRCs. Among rural hospitals, OPPS payments cover the lowest percentage of the outpatient cost in MDHs and the highest percentage in RRCs.

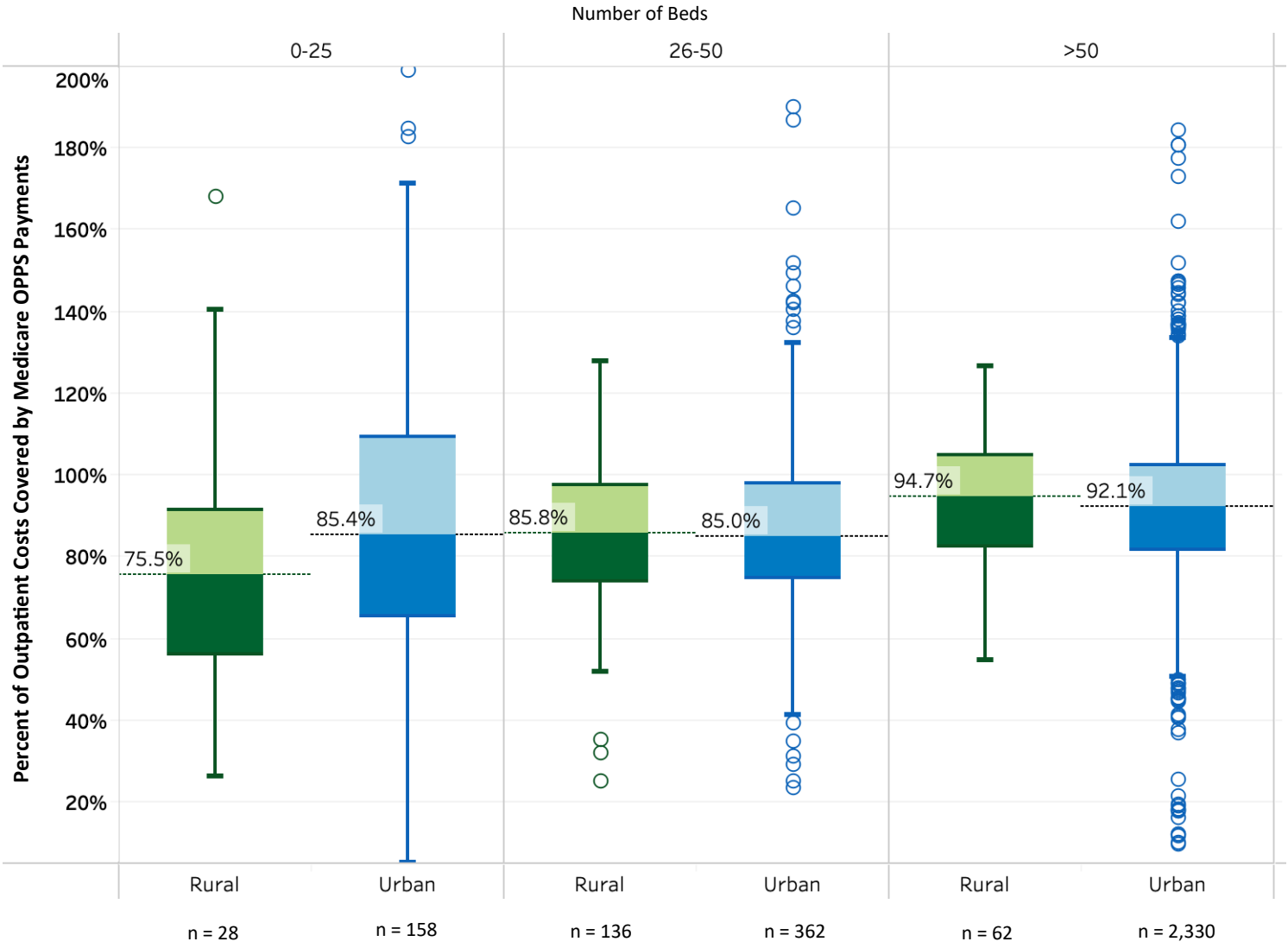
Figure 2. OPPS Payment as a Percent of Medicare Outpatient Cost by Hospital Payment Classification



Medicare OPPS Payment as a Percent of Medicare Outpatient Cost by Number of Acute Beds

Figure 3 shows that OPPS payments to rural hospitals with 0-25 beds cover a lower percentage of the outpatient cost than in urban hospitals with 0-25 beds. Among rural hospitals, OPPS payments cover the lowest percentage of the outpatient cost in hospitals with 0-25 acute beds and the highest percentage in hospitals with > 50 beds.

Figure 3. OPPS Payment as a Percent of Medicare Outpatient Cost by Number of Acute Beds



SUMMARY

The purpose of this brief is to describe differences in Medicare OPPS payments between hospitals in rural and urban areas by Medicare payment classification and by number of acute beds. The study found that, compared to urban hospitals, OPPS payments to rural hospitals are a higher percent of total net patient revenue, and cover a lower percentage of the cost of outpatient services across all Medicare payment classifications (except RRCs) and in hospitals with 0-25 beds. Among rural hospitals, the study found that OPPS payments 1) are the highest percent of total net patient revenue in RRCs and the lowest percentage in PPS hospitals; 2) cover the lowest percentage of the cost of outpatient services in MDHs and the highest percentage in RRCs; and 3) cover the lowest percentage of the outpatient cost in hospitals with 0-25 acute beds and the highest percentage in hospitals with > 50 beds.

In 2006, CMS undertook a study that found an OPPS payment adjustment of 7.1 percent for rural SCHs was warranted.[5] CMS decided on this adjustment for rural SCHs because their analysis showed that SCHs demonstrated significantly higher cost per unit than urban hospitals after controlling for labor input prices, service-mix complexity, volume, facility size, and type of hospital. Further research could focus on the reasons why there is a lower percentage of outpatient cost covered by Medicare in rural hospitals, for example:

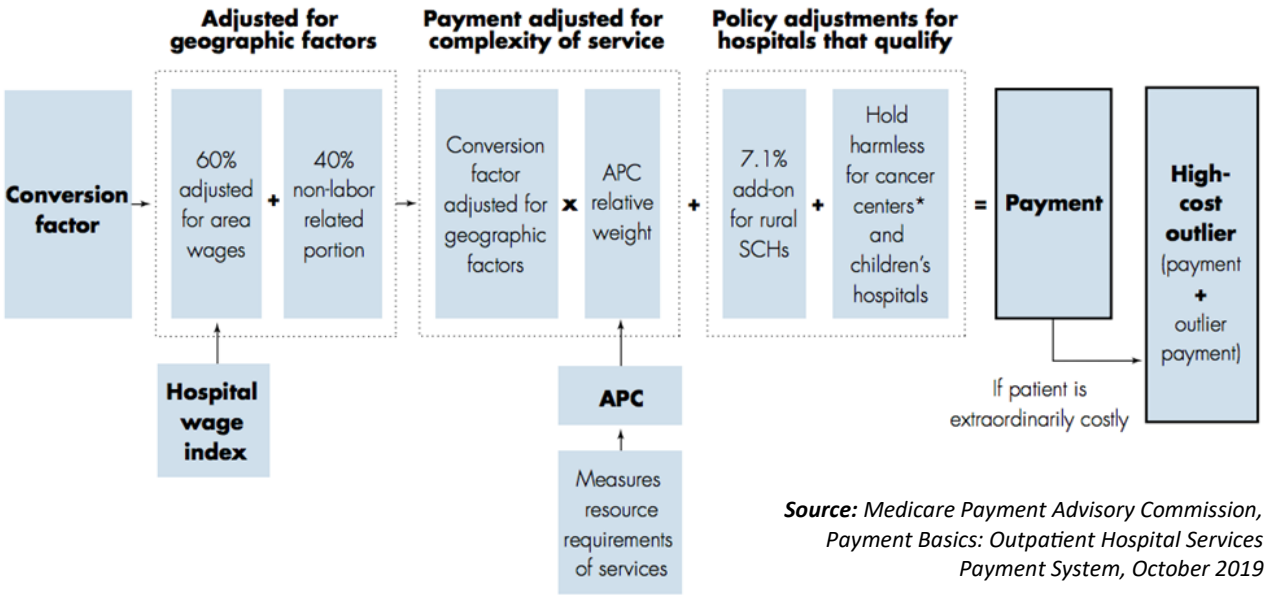
- Are costs higher because of scale or scope diseconomies, the cost allocation method specified in the cost report, reporting variations, or other reasons?
- Are revenues lower because of a lower average wage index, lower average Ambulatory Payment Classification weight, policy effects, or other reasons?

If costs are higher for justifiable reasons, the findings suggest that MDHs and PPS hospitals and hospitals with 0-25 beds located in rural areas may demonstrate need for a payment adjustment to cover more of their costs.

APPENDIX

The Medicare *outpatient prospective payment system* (OPPS) is used to calculate payments for outpatient services. There are codes for each distinct service, which are grouped based on clinical and cost similarity by CMS into *ambulatory payment classifications* (APCs). APCs have relative weights based on the median cost of services in each APC. The weights reflect the resource requirements of the services. These relative weights are multiplied by conversion factors to set payments for each APC. The payments are then adjusted for geographical differences. Figure 4 depicts the OPPS calculation method.

Figure 4. Outpatient Prospective Payment System Rate Calculation



Source: *Medicare Payment Advisory Commission, Payment Basics: Outpatient Hospital Services Payment System, October 2019*

The figure shows three adjustment factors are used to determine the OPPS payment:

- **Geographic factors** – The wage index is used to adjust payments based on geographical differences in wage levels in different labor markets. CMS calculates the wage index by determining the average hourly wage for each urban and rural area and a national average hourly wage. The wage index for each labor market is the ratio of its average hourly wage to the national average hourly wage. It is revised every year based on new wage data. In a previous study, we found that rural hospitals have significantly lower wage indices than urban hospitals.[6]
- **Complexity of services** – The APC relative weight measures the resource requirements of services, and it changes over time. MedPAC reported that the average APC relative weight among OPPS services increased by 2.5 percent between 2017 and 2018.[7]
- **Policy adjustments** – SCHs receive an additional 7.1 percent above standard payment rates on all OPPS services except drugs and biologics.[8] CMS created this adjustment for rural SCHs because their analysis showed that SCHs demonstrated significantly higher cost per unit than urban hospitals after controlling for labor input prices, service-mix complexity, volume, facility size, and type of hospital.

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