

HOSPITAL CHARACTERISTICS

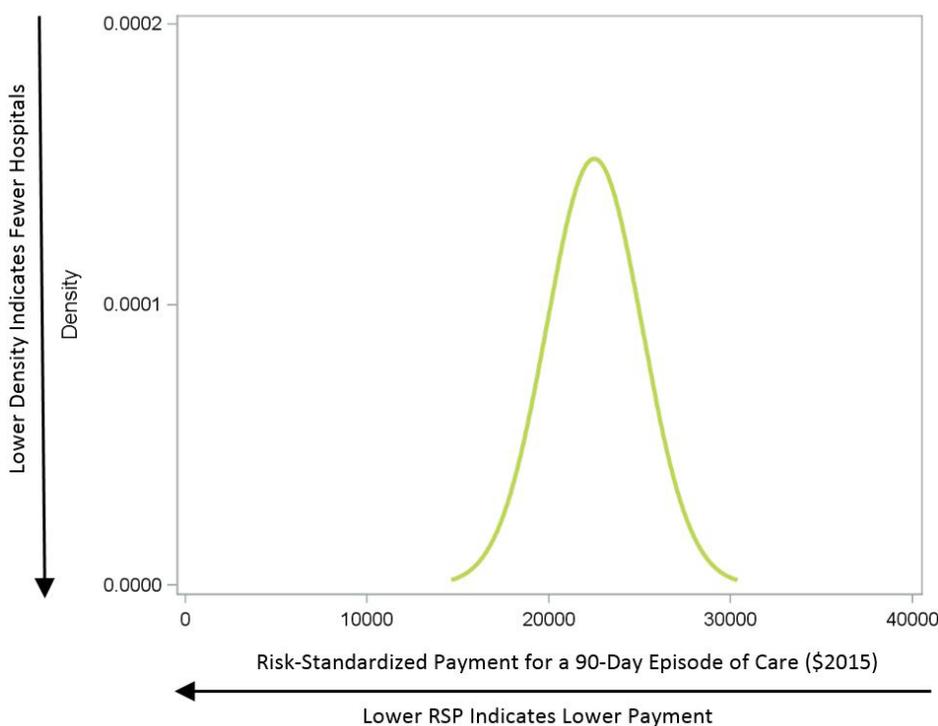
► Variation in risk-standardized payments across hospitals for a 90-day episode of care following admission for elective primary total hip arthroplasty and/or total knee arthroplasty.

The Centers for Medicare & Medicaid Services (CMS) evaluates the distribution of measure results in order to monitor patterns, changes, and potential unintended consequences in the measure results. This information allows CMS to better understand the current state of care within U.S. hospitals.

The payment measures assess 90-day episode-of-care payments that begin with an index admission for elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) [1]. The measures include admissions for Medicare fee-for-service (FFS) beneficiaries aged 65 or older. This measure captures payments across multiple care settings, services, and supplies (this includes inpatient, outpatient, skilled nursing facility, home health, hospice, physician/clinical laboratory/ambulance services, durable medical equipment, prosthetics/orthotics, and supplies). To isolate payment variation that reflects practice patterns rather than factors unrelated to clinical care, geographic differences and policy adjustments in payment rates for individual services are removed from the total payment for that service. Standardizing the payment in this way allows for comparison across hospitals based solely on payments for decisions related to clinical care. However, it's important to note that the THA/TKA payment measure results alone are not indicators of quality.

CMS began publicly reporting risk-standardized payments (RSPs) associated with a 90-day episode of care for THA/TKA in 2017 [2]. Publicly reported measure results are updated annually on the [Hospital Compare](#) website.

FIGURE I. Distribution of hospital RSPs (\$2015) for THA/TKA, April 2013-March 2016.



Variation in RSPs reflects different patterns in care decisions and resource utilization (for example, treatment, supplies, or services) among hospitals for a hospital's patients both at the hospital and after they leave. Wider distributions suggest more variation in payments, and narrower distributions suggest less variation in payments. To determine the extent of variation present in these measures, we examined hospital RSPs for the April 2013 – March 2016 reporting period. To ensure accurate assessment of each hospital, the measures use a statistical model to adjust for key differences in patient risk factors that are clinically relevant and that have strong relationships with the payment outcome [1]. Additionally, for this reporting period, all payments were inflation-adjusted to 2015 dollars.

Prepared for CMS by Yale New Haven Health Services Corporation - Center for Outcomes Research and Evaluation (YNHHSC/CORE) September 2017

TABLE I. *Distribution of hospital RSPs (\$2015) for THA/TKA, April 2013-March 2016.*

Distribution of THA/TKA RSPs (\$2015)
Number of hospitals 2,796

Maximum	49,496
90%	25,829
75%	23,966
Median (50%)	22,270
25%	20,670
10%	19,435
Minimum	15,481

Hospital RSPs for THA/TKA were normally distributed and centered at \$22,270 (Figure 1 and Table 1). Additionally, hospital RSPs were distributed over an interquartile range of \$3,296 (Table 1).

For the THA/TKA payment measure, half of the hospitals have RSPs within \$3,296 of the median hospital RSP. Additionally, the range in RSPs for the THA/TKA payment measure was \$34,015. This demonstrates that there is variation in payment for THA/TKA episodes of care.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Measure Updates and Specifications Report Hospital-Level Risk-Standardized Payment Measures: Acute Myocardial Infarction – Version 6.0 Heart Failure – Version 4.0 Pneumonia – Version 4.0 Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) – Version 3.0. <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228774267858>. Available as of April 4, 2017.

2. Hospital Inpatient Quality Reporting (IQR) Program Overview. QualityNet website. <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1138115987129>. Accessed March 1, 2017.