

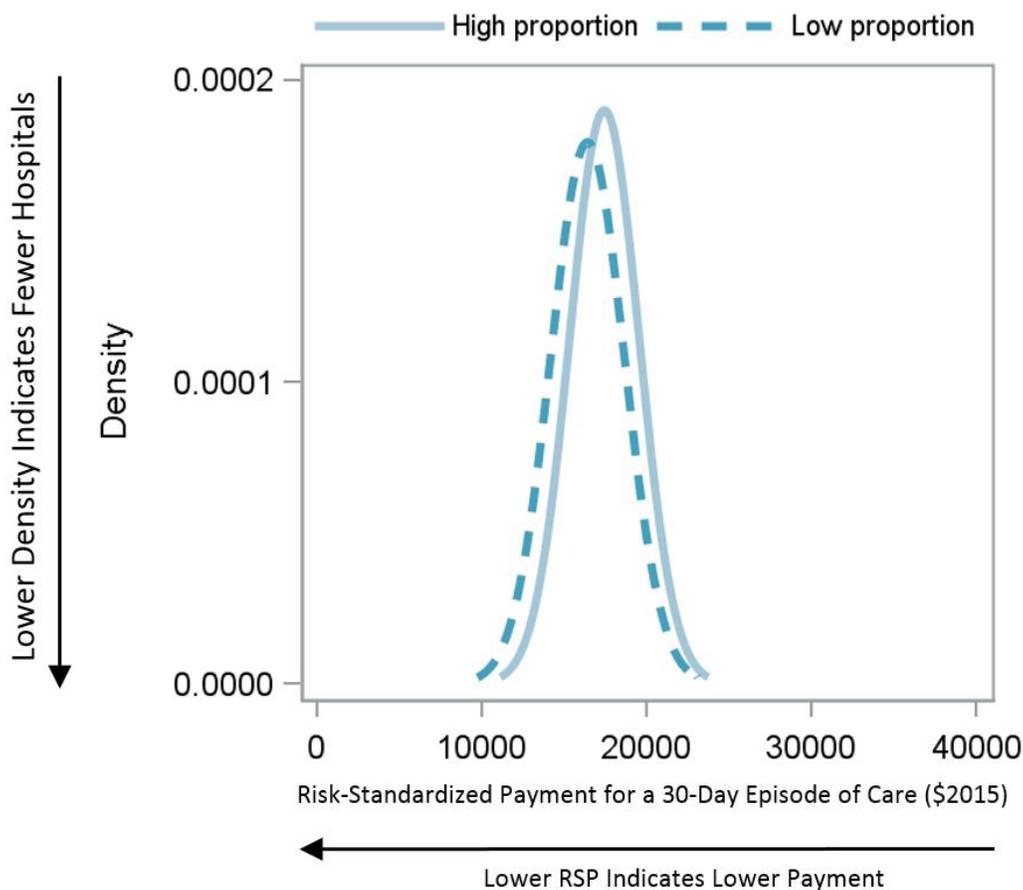
► **Risk-standardized payments across hospitals for a 30-day episode of care following admission for pneumonia:** Hospitals that serve high and low proportions of African-American patients.

The Centers for Medicare & Medicaid Services (CMS) evaluates hospital performance in relation to the proportion of African-American patients served 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 pneumonia payment measure includes admissions for Medicare fee-for-service (FFS) beneficiaries aged 65 or older [1]. The pneumonia payment 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, and durable medical equipment, prosthetics/orthotics, and supplies) [1]. 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 [1]. 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 pneumonia payment measure results alone are not an indication of quality. For 2017 public reporting, the pneumonia payment measure cohort has been expanded to align with the pneumonia mortality cohort, including aspiration pneumonia and non-severe sepsis patients. [1].

CMS began publicly reporting risk-standardized payments (RSPs) associated with a 30-day episode of care for pneumonia in 2015 [2]. Publicly reported measure results are updated annually on the [Hospital Compare](#) website.

**FIGURE I.** Distributions of pneumonia RSPs (\$2015) for hospitals with low and high proportions of African-American patients, July 2013-June 2016.



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

## SOCIAL RISK FACTORS

Variation in pneumonia 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. To understand how caring for high or low proportions of African-American patients might impact a hospital's resource utilization, we examined RSPs among hospitals with high and low proportions of African-American patients. We compared the pneumonia RSP for a 30-day episode of care for the 786 hospitals with 0% African-American Medicare FFS patients to the 417 hospitals with  $\geq 21.2\%$  African-American Medicare FFS patients for the July 2013 – June 2016 reporting period. We defined hospitals with low and high proportions of African-American patients as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions (N= 4,164). The proportion of African-American Medicare FFS patients for each hospital was determined using the Medicare Part A Inpatient Claims from 2015. All hospitals with 0% African-American patients were included in the lowest decile. To ensure accurate assessment of each hospital, the pneumonia payment measure uses a statistical model to adjust for key differences in patient risk factors that are clinically relevant and that have a strong relationship with the payment outcome [1]. Additionally, all payments were inflation-adjusted to 2015 dollars.

**TABLE I.** Distributions of pneumonia RSPs (\$2015) for hospitals with low and high proportions of African-American patients, July 2013-June 2016.

	Pneumonia RSP (\$2015)	
	Hospitals with low proportions (0%) of African-American patients n = 786	Hospitals with high proportions ( $\geq 21.2\%$ ) of African-American patients n = 417
Maximum	23,976	26,601
90%	19,239	19,853
75%	17,726	18,453
Median (50%)	16,206	17,229
25%	14,889	16,238
10%	13,902	15,035
Minimum	10,778	12,611

The median pneumonia RSP for hospitals with low proportions of African-American patients was \$16,206 (interquartile range [IQR]: \$14,889 - \$17,726; Figure 1 and Table 1). The median pneumonia RSP for hospitals with high proportions of African-American patients was \$17,229 (IQR: \$16,238 - \$18,453; Figure 1 and Table 1).

Hospitals with low proportions of African-American patients had a median pneumonia RSP that was \$1,023 lower than that of hospitals with high proportions.

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.