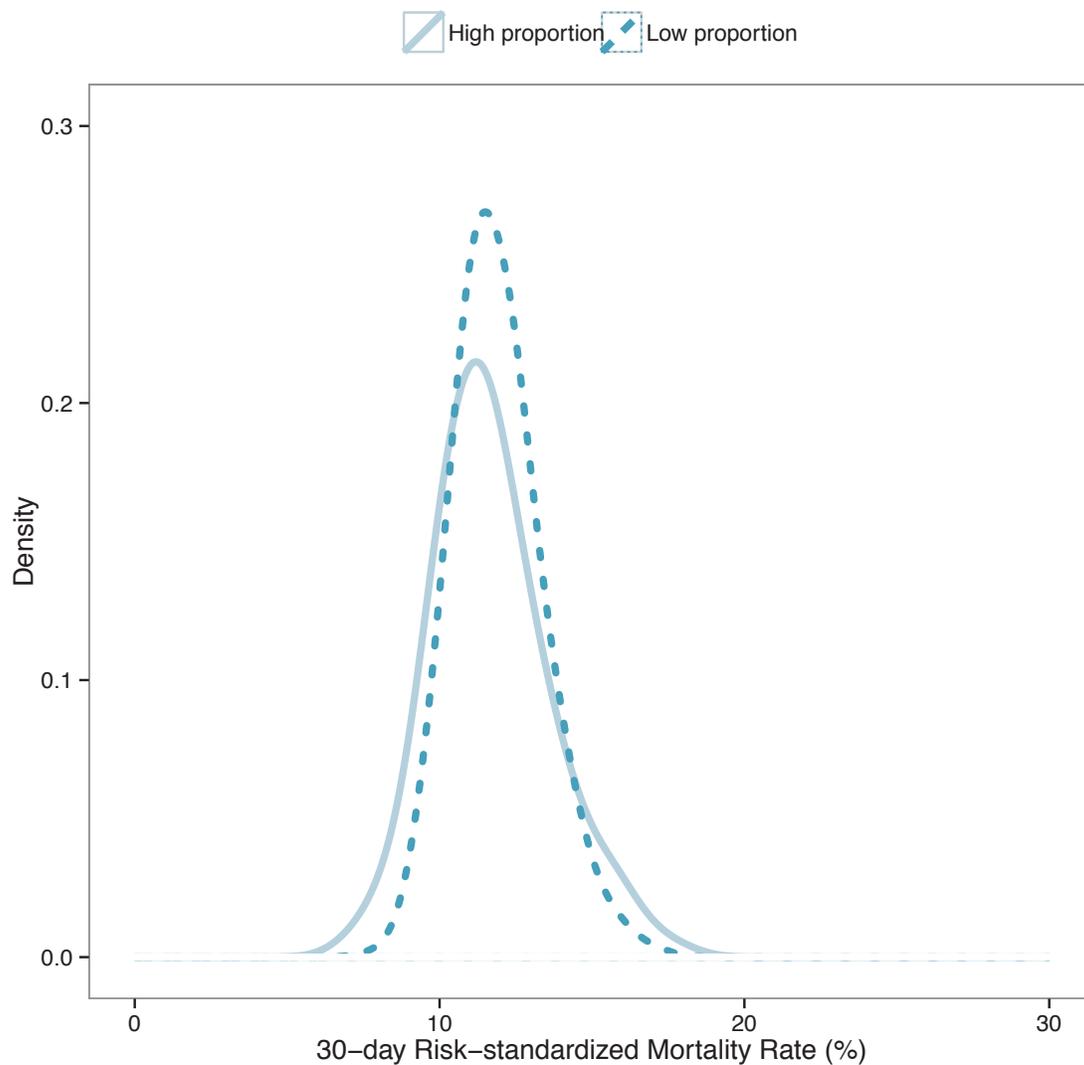


## SOCIODEMOGRAPHIC STATUS

► Performance on the pneumonia mortality measure: **Hospitals that serve high and low proportions of African-American patients.**

The Centers for Medicare & Medicaid Services (CMS) periodically investigates select hospital practices that may impact a hospital's performance on the following mortality measure: hospital-level 30-day risk-standardized mortality rate (RSMR) following pneumonia [1]. The pneumonia mortality measure includes Medicare fee-for-service (FFS) and Veterans Health Administration (VA) beneficiaries aged 65 or older [2]. The pneumonia mortality measure assesses the occurrence of death for any cause within 30 days after hospital admission for pneumonia [2]. The pneumonia mortality measure has been publicly reported on [Hospital Compare](#) since 2008 and has been included in the Hospital Value-Based Purchasing (HVBP) Program since 2013 [3].

**FIGURE I** Distributions of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of African-American patients, July 2011-June 2014.



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## SOCIODEMOGRAPHIC STATUS

Variation in RSMRs reflects differences in performance among hospitals; lower RSMRs suggest better quality, and higher RSMRs suggest worse quality. To understand the impact of caring for African-American patients, we examined RSMRs among hospitals with high and low proportions of African-American patients. Therefore, we compared the pneumonia RSMRs for the 826 hospitals with the lowest overall proportion of African-American Medicare FFS patients (0% of a hospital's Medicare FFS patients) to the 422 hospitals with the highest overall proportion of African-American Medicare FFS patients ( $\geq 22.1\%$  of a hospital's Medicare FFS patients) for the July 2011 – June 2014 reporting period. Hospitals with the lowest and highest proportions of African-American patients are designated as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions, respectively. The proportion of African-American Medicare FFS patients for each hospital was determined using the Medicare Part A Inpatient Claims from 2013. All hospitals with 0% African-American patients were included in the lowest decile. To ensure accurate assessment of each hospital, the pneumonia mortality 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 mortality outcome [2]. Please note that VA hospitals are not included in this analysis.

**TABLE I** Distribution of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of African-American patients, July 2011-June 2014.

	Pneumonia RSMR (%)	
	Lowest proportion (0%) African-American patients; n=826	Highest proportion ( $\geq 22.1\%$ ) African-American patients; n=422
Maximum	17.2	17.9
90%	13.8	14.2
75%	12.7	12.8
Median (50%)	11.8	11.5
25%	10.9	10.4
10%	10.2	9.7
Minimum	7.7	6.9

The median pneumonia RSMR for hospitals with the highest proportion of African-American patients was 11.5% (interquartile range [IQR]: 10.4%-12.8%). The median pneumonia RSMR for hospitals with the lowest proportion of African-American patients was 11.8% (IQR: 10.9%-12.7%; Figure 1 and Table 1).

Hospitals with the lowest proportion of African-American patients had a median pneumonia RSMR that was 0.3 percentage points higher than that of hospitals with the highest proportion.

1. Medicare Hospital Quality Chartbook 2014: Performance Report on Outcome Measures. Prepared by Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation for the Centers for Medicare and Medicaid Services 2014; <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Downloads/Medicare-Hospital-Quality-Chartbook-2014.pdf>. Accessed 16 June 2015.

2. Dorsey K, Grady J, Desai N, et al. 2015 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Mortality Measures: Acute Myocardial Infarction – Version 9.0, Heart Failure – Version 9.0, Pneumonia – Version 9.0, Chronic Obstructive Pulmonary Disease – Version 4.0, Stroke – Version 4.0; <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1163010421830>. Accessed 26 June 2015.

3. “Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals, Final Rule.” Federal Register / 22 August 2014; <http://federalregister.gov/a/2014-18545>. Accessed 16 June 2015.

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