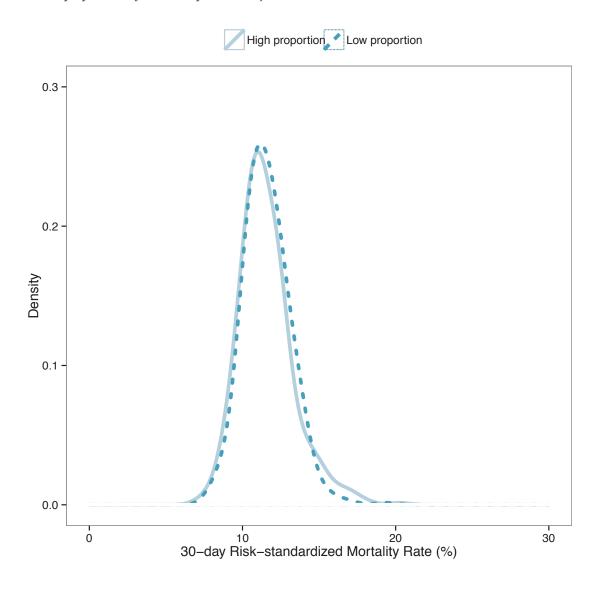
## ▶ Performance on the pneumonia mortality measure: **Hospitals that serve high and low proportions of Medicaid patients.**

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 <a href="Hospital Compare">Hospital Compare</a> since 2008 and has been included in the Hospital Value-Based Purchasing (HVBP) Program since 2013 [3].

**FIGURE 1** Distributions of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid patients, July 2011-June 2014.



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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 Medicaid patients, we examined RSMRs among hospitals with high and low proportions of Medicaid patients. Therefore, we compared the pneumonia RSMRs for the 418 hospitals with the lowest overall proportion of Medicaid patients ( $\leq$  6.2% of a hospital's patients) to the 419 hospitals with the highest overall proportion of Medicaid patients ( $\geq$  28.9% of a hospital's patients) for the July 2011 - June 2014 reporting period. Hospitals with the lowest and highest proportions of Medicaid 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 Medicaid patients for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2013 [4]. 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** Distributions of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid patients, July 2011-June 2014.

## Lowest proportion ( $\leq 6.2\%$ ) Highest proportion (≥ 28.9%) Medicaid patients; Medicaid patients; n = 419n = 41819.3 20.3 Maximum 13.8 90% 13.5 12.4 12.5 75% Median (50%) 11.4 11.3 25% 10.6 10.4 9.9 9.6 10% 7.2 7.7 Minimum

## Pneumonia RSMR (%)

The median pneumonia RSMR for hospitals with the highest proportion of Medicaid patients was 11.3% (interquartile range [IQR]: 10.4%-12.4%). The median pneumonia RSMR for hospitals with the lowest proportion of Medicaid patients was 11.4% (IQR: 10.6%-12.5%; Figure 1 and Table 1).

Hospitals with the lowest proportion of Medicaid patients had a median pneumonia RSMR that was 0.1 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.
- 4. AHA Annual Survey Database Fiscal Year 2013; http://www.ahadataviewer.com/book-cd-products/aha-survey/. Accessed 26 June 2015.

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