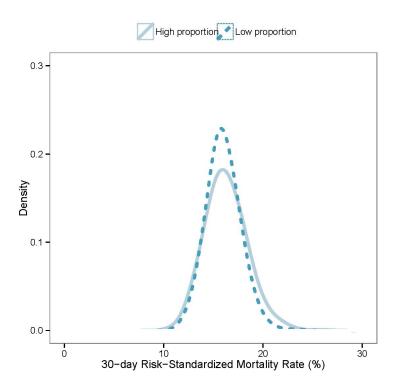
## ▶ **Performance on the pneumonia mortality measure:** Hospitals that serve high and low proportions of Medicaid patients.

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) beneficiaries aged 65 or older and assesses the occurrence of death from any cause within 30 days after the date of 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, 4]. For 2016 public reporting, the pneumonia mortality measure cohort has been expanded to include aspiration pneumonia and non-severe sepsis patients [2].

**FIGURE I.** Distributions of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid admissions, July 2012-June 2015.



Variation in RSMRs reflects differences in performance among hospitals; lower RSMRs suggest better quality and higher RSMRs suggest worse quality. To understand how caring for Medicaid patients might impact a hospital's RSMR, we examined RSMRs among hospitals with high and low proportions of Medicaid patients. We compared the pneumonia RSMRs for the 422 hospitals with the lowest overall proportion of Medicaid admissions ( $\leq 5.7\%$  of a hospital's admissions) to the 423 hospitals with the highest overall proportion of Medicaid admissions ( $\geq 28.6\%$  of a hospital's admissions) for the July 2012 – June 2015 reporting period. We defined hospitals with the lowest and highest proportions of Medicaid admissions as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions, respectively. The proportion of Medicaid admissions for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2014 [5]. 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].

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**TABLE 1.** Distributions of pneumonia RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid admissions, July 2012-June 2015.

## Pneumonia RSMR (%)

	Lowest proportion ( $\leq 5.7\%$ ) Medicaid admissions; n=422	Highest proportion (≥ 28.6%) Medicaid admissions; n=423
Maximum	23.5	26.0
90%	18.1	19.0
75%	17.1	17.6
Median (50%)	15.9	16.2
25%	14.9	14.9
10%	13.9	13.7
Minimum	11.4	10.8

The median pneumonia RSMR for hospitals with the lowest proportion of Medicaid admissions was 15.9% (interquartile range [IQR]: 14.9%- 17.1%; Figure 1 and Table 1). The median pneumonia RSMR for hospitals with the highest proportion of Medicaid admissions was 16.2% (IQR: 14.9%- 17.6%; Figure 1 and Table 1).

Hospitals with the lowest proportion of Medicaid admissions had a median pneumonia RSMR that was 0.3 percentage points lower than that of hospitals with the highest proportion.

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