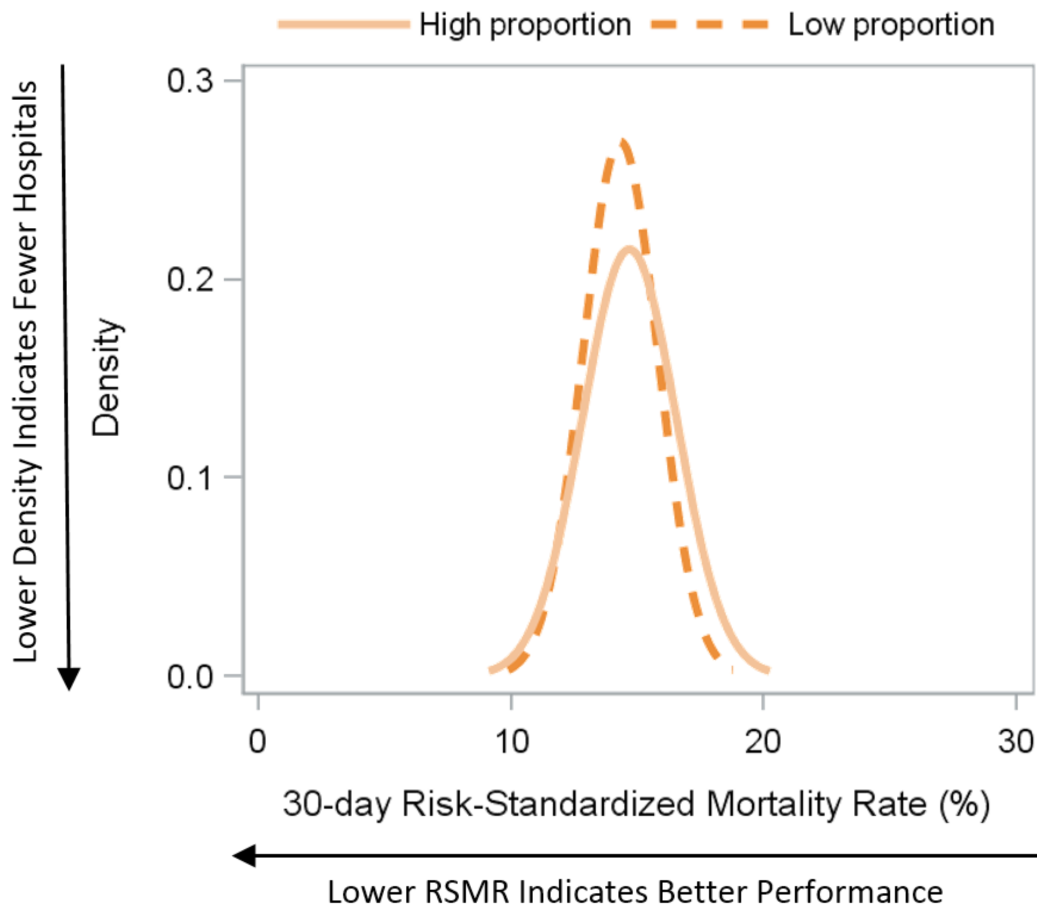
Performance on the acute ischemic stroke mortality measure: Hospitals that serve high and low proportions of Medicaid patients.

The Centers for Medicare & Medicaid Services (CMS) evaluates hospital performance in relation to the proportion of Medicaid 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 stroke 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 acute ischemic stroke [1].

CMS began publicly reporting 30-day risk-standardized mortality rates (RSMRs) following admissions for stroke in 2014 [2]. Publicly reported measure results are updated annually on the *Hospital Compare* website.

FIGURE I. *Distributions of stroke RSMRs (%) for hospitals with low and high proportions of Medicaid admissions, July 2013-June 2016.*



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 stroke RSMRs for the 267 hospitals with ≤9.2% Medicaid admissions to the 268 hospitals with ≥32.3% Medicaid admissions for the July 2013 – June 2016 reporting period. We defined hospitals with low and high proportions of Medicaid admissions as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions (N= 2,677). The proportion of Medicaid admissions for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2015 [3]. To ensure accurate assessment of each hospital, the stroke 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 [1].

TABLE I. *Distribution of stroke RSMRs (%) for hospitals with low and high proportions of Medicaid admissions, July 2013-June 2016.*

	Stroke RSMR (%)	
	Hospitals with low proportions (≤ 9.2%) of Medicaid admissions n = 267	Hospitals with high proportions (≥ 32.3%) of Medicaid admissions n = 268
Maximum	20.0	21.5
90%	16.4	17.2
75%	15.3	15.6
Median (50%)	14.1	14.5
25%	13.4	13.6
10%	12.5	12.3
Minimum	10.2	9.6

The median stroke RSMR for hospitals with low proportions of Medicaid admissions was 14.1% (interquartile range [IQR]: 13.4%- 15.3%; Figure 1 and Table 1). The median stroke RSMR for hospitals with high proportions of Medicaid admissions was 14.5% (IQR: 13.6%- 15.6%; Figure 1 and Table 1).

Hospitals with low proportions of Medicaid admissions had a median stroke RSMR that was 0.4 percentage points lower than that of hospitals with high proportions.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Mortality Measures: Acute Myocardial Infarction – Version 11.0 Chronic Obstructive Pulmonary Disease – Version 6.0 Heart Failure – Version 11.0 Pneumonia – Version 11.0 Stroke – Version 6.0. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1163010421830. 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%2F-Page%2FQnetTier2&cid=1138115987129. Accessed March 1, 2017.

3. AHA Annual Survey Database Fiscal Year 2014; http://www.ahadataviewer.com/book-cd-products/AHA-Survey/. Accessed March 2, 2017.