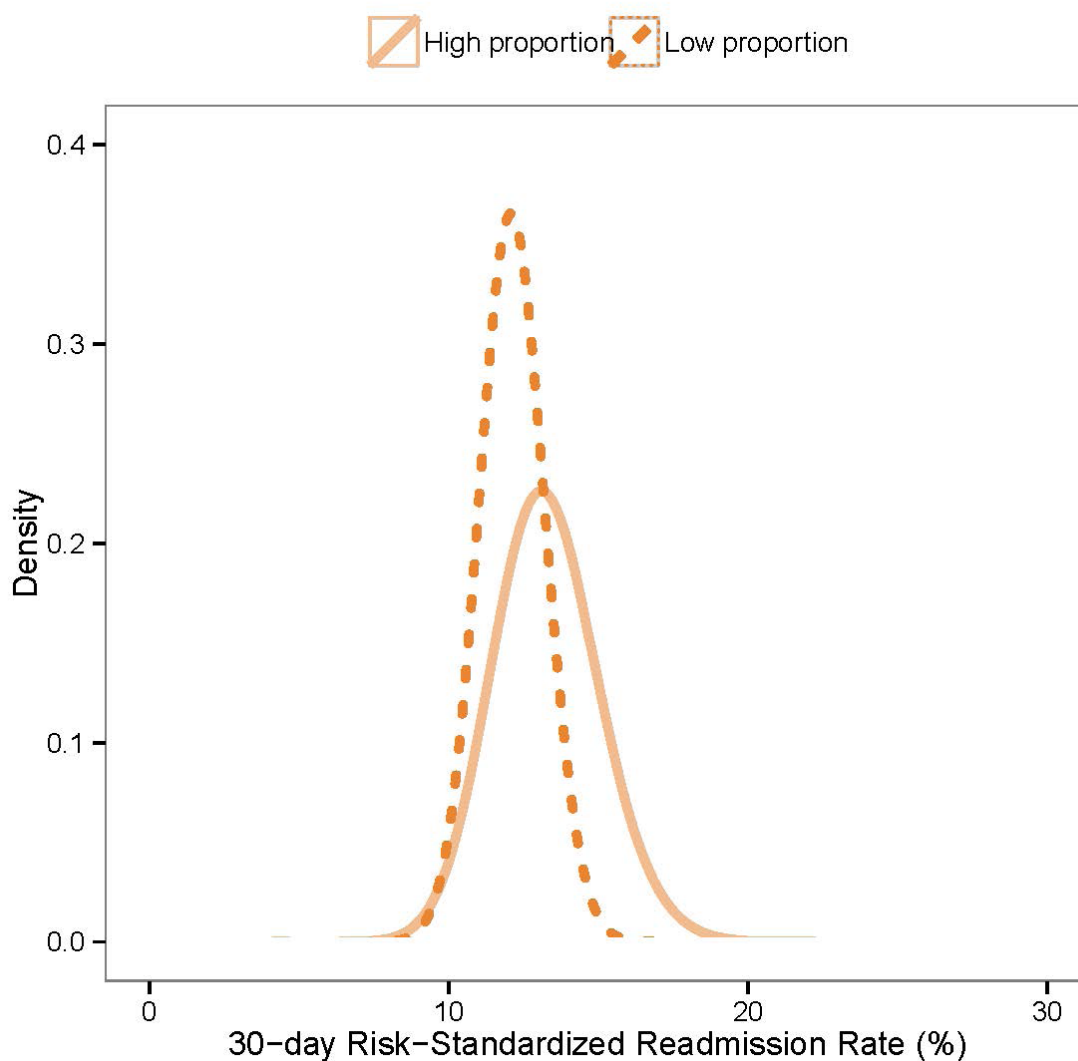


► **Performance on the acute ischemic stroke readmission measure:** Hospitals that serve high and low proportions of African-American patients.

The Centers for Medicare & Medicaid Services (CMS) periodically investigates select hospital practices that may impact a hospital's performance on the following readmission measure: hospital-level 30-day risk-standardized readmission rate (RSRR) following acute ischemic stroke [1]. The stroke readmission measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older and assesses the occurrence of unplanned readmission for any cause within 30 days after the date of discharge from hospitalization for acute ischemic stroke [2]. The stroke readmission measure has been publicly reported on [Hospital Compare](#) since 2014 [3].

**FIGURE I.** Distributions of stroke RSRRs (%) for hospitals with the lowest and highest proportions of African-American patients, July 2012-June 2015.



Prepared for CMS by Yale New Haven Health Services Corporation – Center for Outcomes Research and Evaluation (YNHHC/CORE) September 2016

Variation in RSRRs reflects differences in performance among hospitals; lower RSRRs suggest better quality and higher RSRRs suggest worse quality. To understand how caring for African-American patients might impact a hospital's RSRR, we examined RSRRs among hospitals with high and low proportions of African-American patients. We compared the stroke RSRRs for the 268 hospitals with the lowest overall proportion of African-American Medicare FFS patients (0% of a hospital's Medicare FFS patients) to the 269 hospitals with the highest proportion of African-American Medicare FFS patients ( $\geq 23.4\%$  of a hospital's Medicare FFS patients) for the July 2012 – June 2015 reporting period. We defined hospitals with the lowest and highest proportions of African-American patients as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions. The proportion of African-American Medicare FFS patients for each hospital was determined using the Medicare Part A Inpatient Claims from 2014. All hospitals with 0% African-American patients were included in the lowest decile. To ensure accurate assessment of each hospital, the stroke readmission 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 readmission outcome [2].

**TABLE I.** Distributions of stroke RSRRs (%) for hospitals with the lowest and highest proportions of African-American patients, July 2012-June 2015.

	Stroke RSRR (%)	
	Lowest proportion (0%) African-American patients; n=268	Highest proportion ( $\geq 23.4\%$ ) African-American patients; n=269
Maximum	14.3	17.3
90%	13.0	14.7
75%	12.6	14.0
Median (50%)	12.1	13.1
25%	11.6	12.4
10%	11.3	11.9
Minimum	10.1	11.0

The median stroke RSRR for hospitals with the lowest proportion of African-American patients was 12.1% (interquartile range [IQR]: 11.6%-12.6%; Figure 1 and Table 1). The median stroke RSRR for hospitals with the highest proportion of African-American patients was 13.1% (IQR: 12.4%-14.0%; Figure 1 and Table 1).

Hospitals with the lowest proportion of African-American patients had a median stroke RSRR that was 1.0 percentage point lower than hospitals with the highest proportion.

1. 2015 Medicare Hospital Quality Chartbook. Prepared by Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation for the Centers for Medicare and Medicaid Services. <https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/hospitalqualityinits/outcomemeasures.html>. Accessed March 1, 2016.

2. Dorsey, K., Grady, J. N., Desai, N., et al. 2016 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Readmission Measures: Acute Myocardial Infarction – Version 9.0, Chronic Obstructive Pulmonary Disease – Version 5.0, Heart Failure – Version 9.0, Pneumonia – Version 9.0, Stroke – Version 5.0. <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1219069855841>. Accessed May 9, 2016.

3. 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, 2016.