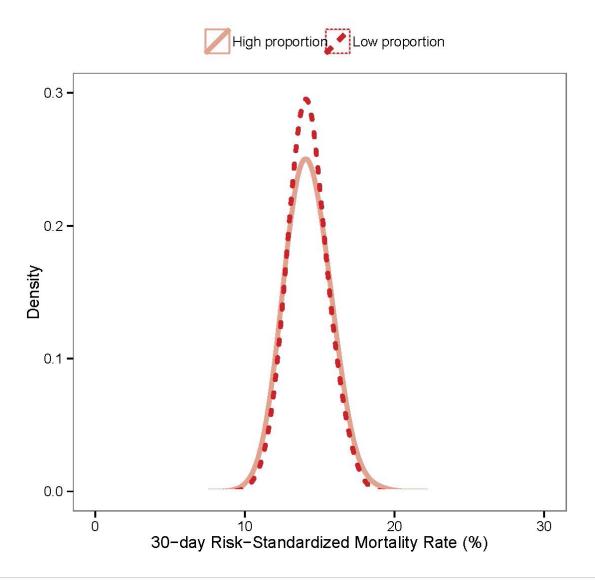
▶ **Performance on the acute myocardial infarction mortality measure:** Hospitals that serve high and low proportions of African-American patients.

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 acute myocardial infarction (AMI) [1]. The AMI mortality measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older and assesses the occurrence of death for any cause within 30 days after the date of hospital admission for AMI [2]. The AMI mortality measure has been publicly reported on *Hospital Compare* since 2007 and has been included in the Hospital Value-Based Purchasing (HVBP) Program since 2013 [3, 4].

FIGURE 1. Distributions of AMI RSMRs (%) 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 (YNHHSC/CORE) September 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 African-American patients might impact a hospital's RSMR, we examined RSMRs among hospitals with high and low proportions of African-American patients. We compared the AMI RSMRs for the 244 hospitals with the lowest overall proportion of African-American Medicare FFS patients (0% of a hospital's Medicare FFS patients) to the 245 hospitals with the highest overall proportion of African-American Medicare FFS patients ($\geq 23.6\%$ 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 AMI 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].

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

Lowest proportion (0%) Highest proportion (≥ 23.6%) African-American patients; African-American patients; n = 244n = 245Maximum 17.1 18.6 90% 15.7 15.8 75% 14.9 15.0 14.2 14.1 Median (50%) 13.4 25% 13.3 10% 12.8 12.6

AMI RSMR (%)

The median AMI RSMR for hospitals with the lowest proportion of African-American patients was 14.2% (interquartile range [IQR]: 13.4%-14.9%; Figure 1 and Table 1). The median AMI RSMR for hospitals with the highest proportion of African-American patients was 14.1% (IQR: 13.3%-15.0%; Figure 1 and Table 1).

10.5

Hospitals with the lowest proportion of African-American patients had a median AMI RSMR that was 0.1 percentage points higher than that of hospitals with the highest proportion.

11.2

Minimum

- 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, Desai N, et al. 2016 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Mortality Measures: Acute Myocardial Infarction Version 10.0, Chronic Obstructive Pulmonary Disease Version 5.0, Heart Failure Version 10.0, Pneumonia Version 10.0, Stroke Version 5.0. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1163010421830. Accessed May 9, 2016.
- $3. \ Hospital \ Inpatient \ Quality \ Reporting \ (IQR) \ Program \ Overview. \ Quality \ Net \ website. \ \underline{https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2F-Page&2FQnetTier2&cid=1138115987129. \ Accessed \ March 1, 2016.$
- 4. Hospital Value-Based Purchasing (HVBP) Overview. QualityNet website. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnet-Tier2&cid=1228772039937. Accessed March 1, 2016.

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





