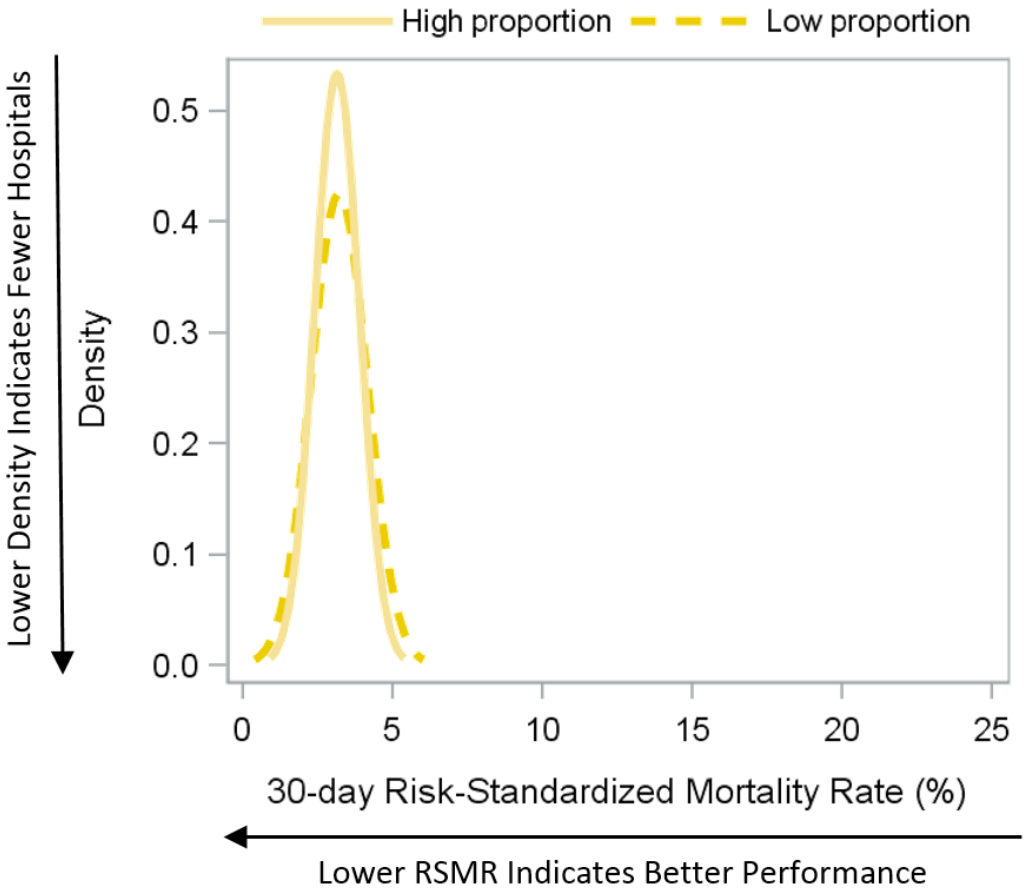
Performance on the isolated coronary artery bypass graft surgery mortality measure: Hospitals that serve high and low proportions of Medicaid patients.

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 care within U.S. hospitals.

The isolated coronary artery bypass graft (CABG) 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 procedure date for CABG [1]. "Isolated" CABG procedures are those performed without concomitant high-risk cardiac and non-cardiac procedures, such as valve replacement [1].

CMS began publicly reporting risk-standardized mortality rates (RSMRs) following isolated CABG surgery in 2015 [2]. Publicly reported measure results are updated annually on the *Hospital Compare* website. The CABG mortality measure will be included in the Hospital Value-Based Purchasing (HVBP) Program beginning in 2022 [3, 4].

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



SOCIAL RISK FACTORS

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 CABG RSMRs for the 103 hospitals with ≤9.0% Medicaid admissions to the 104 hospitals with ≥31.2% 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= 1,034). The proportion of Medicaid admissions for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2015 [5]. To ensure accurate assessment of each hospital, the CABG 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 isolated CABG RSMRs (%) for hospitals with low and high proportions of Medicaid admissions, July 2013-June 2016.*

	CABG RSMR (%)	
	Hospitals with low proportions (≤ 9.0%) of Medicaid admissions n = 103	Hospitals with high proportions (≥ 31.2%) of Medicaid admissions n = 104
Maximum	7.4	5.0
90%	4.4	4.2
75%	3.7	3.7
Median (50%)	3.1	3.0
25%	2.6	2.7
10%	2.3	2.4
Minimum	1.6	1.3

The median CABG RSMR for hospitals with low proportions of Medicaid admissions was 3.1% (interquartile range [IQR]: 2.6%- 3.7%; Figure 1 and Table 1). The median CABG RSMR for hospitals with high proportions of Medicaid admissions was 3.0% (IQR: 2.7%- 3.7%; Figure 1 and Table 1).

Hospitals with low proportions of Medicaid admissions had a median CABG RSMR that was 0.1 percentage points higher than that of hospitals with high proportions.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Procedure-Specific Measure Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Mortality Measure: Isolated Coronary Artery Bypass Graft (CABG) Surgery – Version 4.0. 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%2FPage%2FQnetTier2&cid=1138115987129. Accessed March 1, 2017.

3. Hospital Value-Based Purchasing Overview. QualityNet website. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772039937. Accessed March 1, 2017.

4. Centers for Medicare and Medicaid Services. Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals, Final Rule Fiscal Year 2017. 81 FR 56761. Federal Register website. https://www.federalregister.gov/d/2016-18476. Published August 22, 2016. Effective October 1, 2016. Accessed March 1, 2017.

5.AHA Annual Survey Database Fiscal Year 2015; http://www.ahadataviewer.com/book-cd-products/AHA-Survey/. Accessed March 2, 2017.