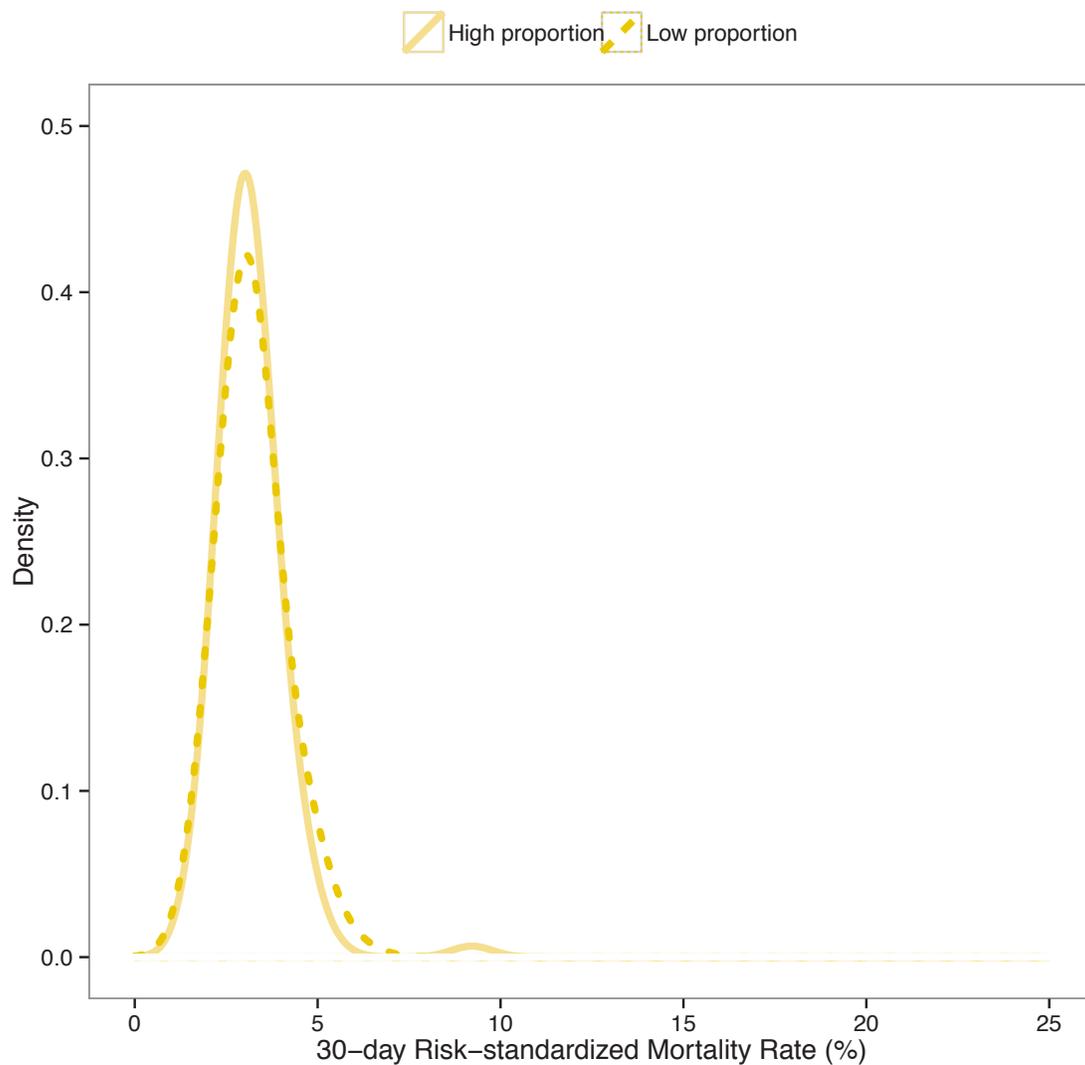


► Performance on the isolated coronary artery bypass graft surgery mortality measure: **Hospitals that serve high and low proportions of Medicaid patients.**

The Centers for Medicare & Medicaid Services (CMS) 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 isolated coronary artery bypass graft (CABG) surgery [1]. The CABG mortality measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older [2]. "Isolated" CABG procedures are those performed without concomitant high-risk cardiac and non-cardiac procedures, such as valve replacement [2]. The CABG mortality measure assesses the occurrence of death for any cause within 30 days after hospital admission for CABG [2]. The CABG mortality measure has been publicly reported on [Hospital Compare](#) since 2015 [3].

FIGURE I Distributions of isolated CABG RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid patients, July 2011-June 2014.



Prepared for CMS by Yale New Haven Health Services Corporation (YNHHSC) Center for Outcomes Research and Evaluation (CORE) September 2015

Variation in RSMRs reflects differences in performance among hospitals; lower RSMRs suggest better quality, and higher RSMRs suggest worse quality. To understand the impact of caring for Medicaid patients, we examined RSMRs among hospitals with high and low proportions of Medicaid patients. Therefore, we compared the CABG RSMRs for the 107 hospitals with the lowest overall proportion of Medicaid patients ($\leq 8.1\%$ of a hospital's patients) to the 107 hospitals with the highest overall proportion of Medicaid patients ($\geq 29.8\%$ of a hospital's patients) for the July 2011 – June 2014 reporting period. Hospitals with the lowest and highest proportions of Medicaid patients are designated as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying admissions, respectively. The proportion of Medicaid patients for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2013 [4]. 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 [4].

TABLE I Distribution of isolated CABG RSMRs (%) for hospitals with the lowest and highest proportions of Medicaid patients, July 2011-June 2014.

	CABG RSMR (%)	
	Lowest proportion ($\leq 8.1\%$) Medicaid patients; n=107	Highest proportion ($\geq 29.8\%$) Medicaid patients; n=107
Maximum	6.2	9.2
90%	4.5	4.1
75%	3.5	3.5
Median (50%)	3.1	3.0
25%	2.6	2.7
10%	2.3	2.3
Minimum	1.8	1.6

The median CABG RSMR for hospitals with the highest proportions of Medicaid patients was 3.0% (interquartile range [IQR]: 2.7%-3.5%). The median CABG RSMR for hospitals with the lowest proportions of Medicaid patients was 3.1% (IQR: 2.6%-3.5%; Figure 1 and Table 1).

Hospitals with the lowest proportion of Medicaid patients had a median CABG RSMR that was 0.1 percentage points higher than that of hospitals with the highest proportion.

1. Medicare Hospital Quality Chartbook 2014: Performance Report on Outcome Measures. Prepared by Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation for the Centers for Medicare and Medicaid Services 2014; <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Downloads/Medicare-Hospital-Quality-Chartbook-2014.pdf>. Accessed 16 June 2015.
2. Desai N, Suter L, Zhang W, et al. 2015 Procedure-Specific Mortality Measure Updates and Specifications Report: Isolated Coronary Artery Bypass Graft (CABG) Surgery – Version 2.0; <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1163010421830>. Accessed 26 June 2015.
3. “Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals, Final Rule.” Federal Register / 22 August 2014; <http://federalregister.gov/a/2014-18545>. Accessed 16 June 2015.
4. AHA Annual Survey Database Fiscal Year 2013; <http://www.ahadataviewer.com/book-cd-products/aha-survey/>. Accessed 26 June 2015.

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