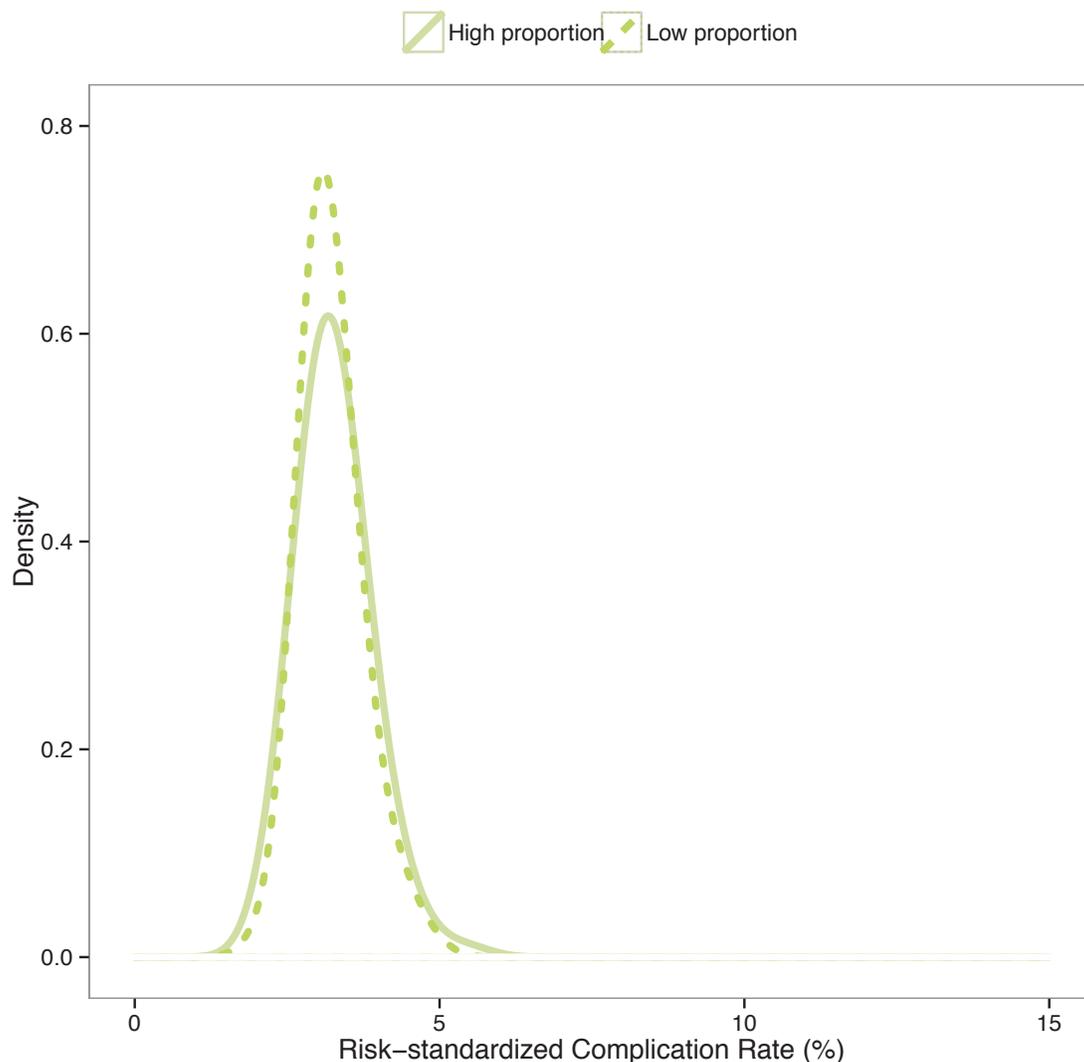


► Performance on the elective primary total hip arthroplasty and/or total knee arthroplasty complication measure: **Hospitals that serve high and low proportions of African-American patients.**

The Centers for Medicare & Medicaid Services (CMS) periodically investigates select hospital practices that may impact a hospital's performance on the following complication measure: hospital-level risk-standardized complication rate (RSCR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) [1]. The THA/TKA complication measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older [2]. The THA/TKA complication measure assesses the occurrence of significant medical and/or surgical complications within 7 to 90 days, depending on the complication, following hospitalization for elective primary THA/TKA. Medical and surgical complications include: acute myocardial infarction (AMI), pneumonia, or sepsis/septicemia during hospitalization or within 7 days of admission; surgical site bleeding, pulmonary embolism or death during hospitalization or within 30 days of admission; or mechanical complications, periprosthetic joint infection, or wound infection during hospitalization or within 90 days of admission [2]. The THA/TKA complication measure has been publicly reported on [Hospital Compare](#) since 2013, and in Fiscal Year 2019, it will be included in the Hospital Value-Based Purchasing (HVBP) program [3].

**FIGURE I** Distributions of THA/TKA RSCRs (%) for hospitals with the lowest and highest proportions of African-American patients, April 2011-March 2014.



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## SOCIODEMOGRAPHIC STATUS

Variation in RSCRs reflects differences in performance among hospitals; lower RSCRs suggest better quality, and higher RSCRs suggest worse quality. To understand the impact of caring for African-American patients, we examined RSCRs among hospitals with high and low proportions of African-American patients. Therefore, we compared the THA/TKA RSCRs for the 279 hospitals with the lowest proportion of African-American Medicare FFS patients (0% of a hospital's Medicare FFS patients) to the 280 hospitals with the highest proportion of African-American Medicare FFS patients (> 18.9% of a hospital's Medicare FFS patients) for the April 2011 – March 2014 reporting period. Hospitals with the lowest and highest proportions of African-American 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 African-American Medicare FFS patients for each hospital was determined using the Medicare Part A Inpatient Claims from 2013. All hospitals with 0% African-American patients were included in the lowest decile. To ensure accurate assessment of each hospital, the THA/TKA complication 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 specified complications [2].

**TABLE I** Distribution of THA/TKA RSCRs (%) for hospitals with the lowest and highest proportions of African-American patients, April 2011-March 2014.

	THA/TKA RSCR (%)	
	Lowest proportion (0%) African-American patients; n=279	Highest proportion (≥ 18.9%) African-American patients; n=280
Maximum	4.9	5.5
90%	3.8	4.0
75%	3.5	3.6
Median (50%)	3.2	3.2
25%	2.9	2.9
10%	2.7	2.6
Minimum	2.0	2.0

The median THA/TKA RSCR for hospitals with the highest proportion of African-American patients was 3.2% (interquartile range [IQR]: 2.9%-3.6%). The median THA/TKA RSCR for hospitals with the lowest proportion of African-American patients was also 3.2% (IQR: 2.9%-3.5%; Figure 1 and Table 1).

Hospitals with the lowest proportion of African-American patients had a median RSCR that was equal to 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. Suter L, Zhang W, Parzynski C, et al. 2015 Procedure-Specific Complication Measure Updates and Specifications Report: Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) Measure – Version 4.0; <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnet-Tier4&cid=1228772782693>. Accessed 16 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.

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