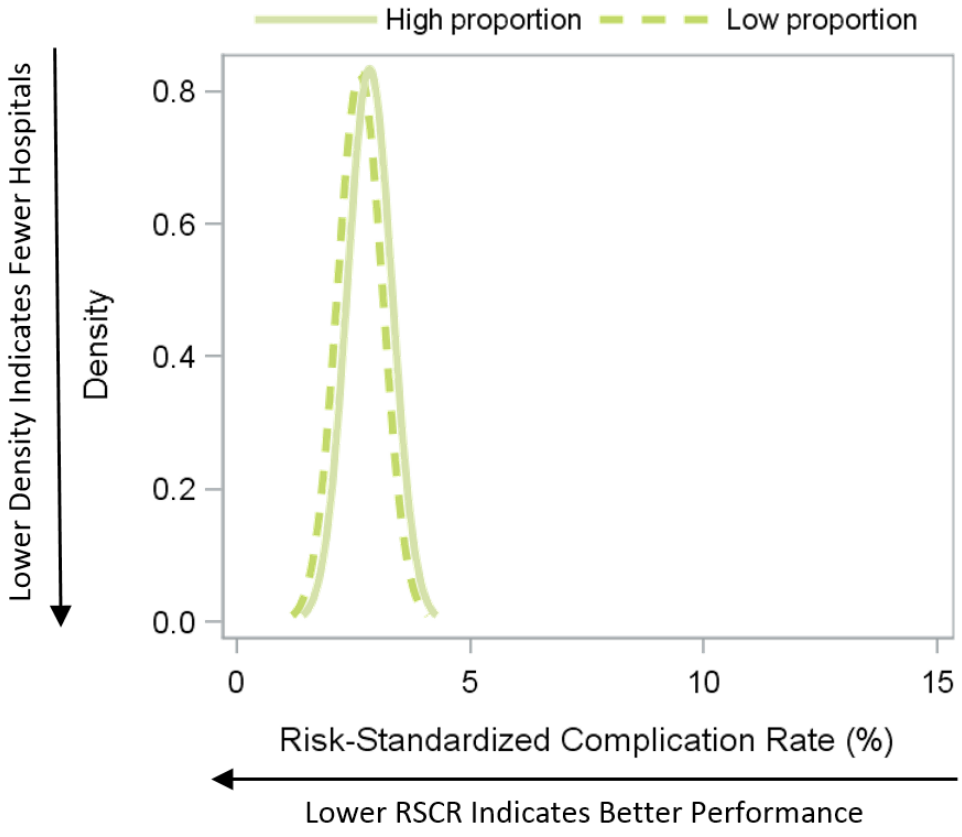
## ▶ Performance on the elective primary total hip arthroplasty and/or total knee arthroplasty complication measure: Hospitals that serve high and low proportions of Medicaid patients.

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 allows CMS to better understand the current state of care within U.S. hospitals. The elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) complication measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older and assesses the occurrence of significant medical and/or surgical complications within 7 to 90 days, depending on the complication, from the date of admission for elective primary THA/TKA. Medical and surgical complications include:

- acute myocardial infarction (AMI), pneumonia, or sepsis/septicemia during hospitalization or within 7 days from the date of admission;
- surgical site bleeding, pulmonary embolism or death during the index admission or within 30 days from the date of the index admission; or
- mechanical complications, periprosthetic joint infection, or wound infection during the index admission or within 90 days from the date of the index admission [1].

CMS began publicly reporting risk-standardized complication rates (RSCRs) following elective primary THA/TKA in 2013 [2]. Publicly reported measure results are updated annually on the *Hospital Compare* website. The THA/TKA complication measure will be included in the Hospital Value-Based Purchasing (HVBP) Program beginning in 2019 [3, 4].

**FIGURE I.** *Distributions of THA/TKA RSCRs (%) for hospitals with low and high proportions of Medicaid admissions, April 2013-March 2016.*



## SOCIAL RISK FACTORS

Variation in RSCRs reflects differences in performance among hospitals; lower RSCRs suggest better quality and higher RSCRs suggest worse quality. To understand how caring for Medicaid patients might impact a hospital's RSCR, we examined RSCRs among hospitals with high and low proportions of Medicaid patients. We compared the THA/TKA RSCRs for the 276 hospitals with ≤7.3% Medicaid admissions to the 275 hospitals with ≥30.8% Medicaid admissions for the April 2013 – March 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= 2,755). 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 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 [1].

**TABLE I.** *Distributions of THA/TKA RSCRs (%) for hospitals with low and high proportions of Medicaid admissions, April 2013-March 2016.*

| | THA/TKA RSCR (%) | |
|---|---|---|
| | Hospitals with low proportions (≤ 7.3%) of Medicaid admissions n = 276 | Hospitals with high proportions (≥ 30.8%) of Medicaid admissions n = 275 |
| Maximum | 4.2 | 4.5 |
| 90% | 3.2 | 3.5 |
| 75% | 2.9 | 3.1 |
| Median (50%) | 2.6 | 2.8 |
| 25% | 2.4 | 2.5 |
| 10% | 2.0 | 2.3 |
| Minimum | 1.4 | 1.9 |

The median THA/TKA RSCR for hospitals with low proportions of Medicaid admissions was 2.6% (interquartile range [IQR]: 2.4%-2.9%; Figure 1 and Table 1). The median THA/TKA RSCR for hospitals with high proportions of Medicaid admissions was 2.8% (IQR: 2.5%- 3.1%; Figure 1 and Table 1).

Hospitals with low proportions of Medicaid admissions had a median THA/TKA RSCR that was 0.2 percentage points lower 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 Risk-Standardized Complication Measure: Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) – Version 6.0. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228772782693. 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. Centers for Medicare and Medicaid Services. Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals, Final Rule Fiscal Year 2016. 80 FR 49325. Federal Register website. https://federalregister.gov/a/2015-19049. Published August 17, 2015. Effective October 1, 2015. Accessed March 1, 2017.

4. 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.

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