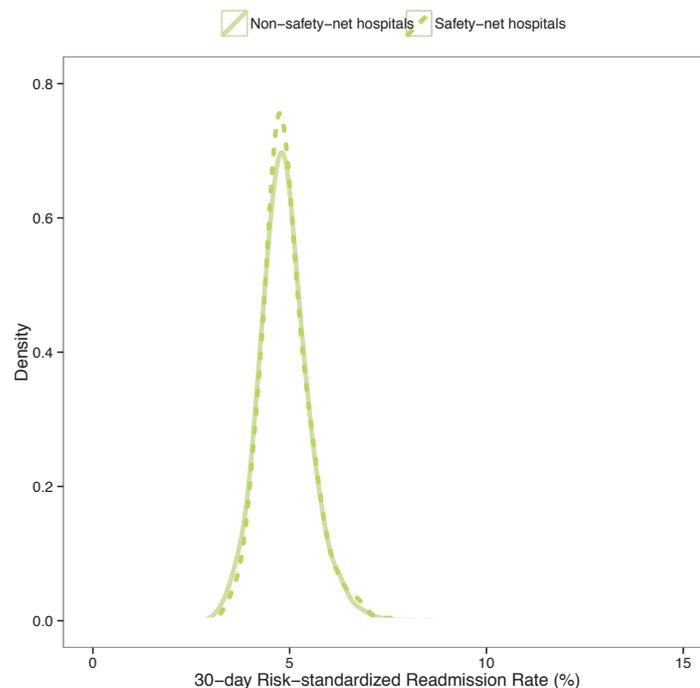


► Performance on the elective primary total hip arthroplasty and/or total knee arthroplasty readmission measure by hospital characteristics: **safety-net status, teaching status, and urban or rural location.**

The Centers for Medicare & Medicaid Services (CMS) periodically investigates select hospital characteristics that may impact a hospital's performance on the following readmission measure: hospital-level 30-day risk-standardized readmission rate (RSRR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) [1]. The THA/TKA readmission measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older [2]. The THA/TKA readmission measure assesses unplanned readmissions for any reason within 30 days of discharge from a hospital stay for elective primary THA/TKA [2]. Patients can be readmitted to the same hospital or to a different hospital [2]. The THA/TKA readmission measure has been publicly reported on [Hospital Compare](#) since 2013 and has been included in the Hospital Readmissions Reduction Program (HRRP) since Fiscal Year 2015 [3].

**FIGURE I** Distributions of hospital RSRRs (%) for THA/TKA by safety-net status, July 2011-June 2014.



Variation in RSRRs reflects differences in performance among hospitals; lower RSRRs suggest better quality, and higher RSRRs suggest worse quality. To understand the impact of hospital safety-net status, teaching status, and urban or rural location, we examined RSRRs among hospitals with 25 or more qualifying discharges. Therefore, we evaluated the THA/TKA RSRRs for a total of 2,749 hospitals by comparing 535 safety-net hospitals against 2,214 non-safety-net hospitals, 934 teaching hospitals against 1,815 non-teaching hospitals, and 2,515 urban hospitals against 234 rural hospitals for the July 2011 – June 2014 reporting period.

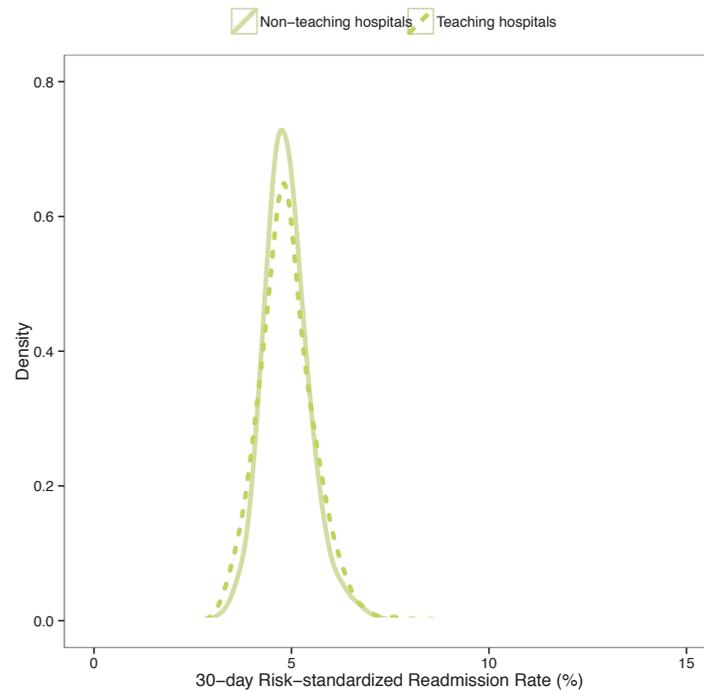
Safety-net hospitals are defined as those committed to caring for populations without stable access to care, specifically public hospitals or private hospitals with a Medicaid caseload greater than one standard deviation above their respective state's mean private hospital Medicaid caseload [4]. Teaching Hospitals provide post-graduate education for physicians completing residency and fellowship [4].

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## HOSPITAL CHARACTERISTICS

To ensure accurate assessment of each hospital, the stroke readmission 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 readmission outcome [2].

**FIGURE 2** Distributions of hospital RSRRs (%) for THA/TKA by teaching status, July 2011-June 2014.



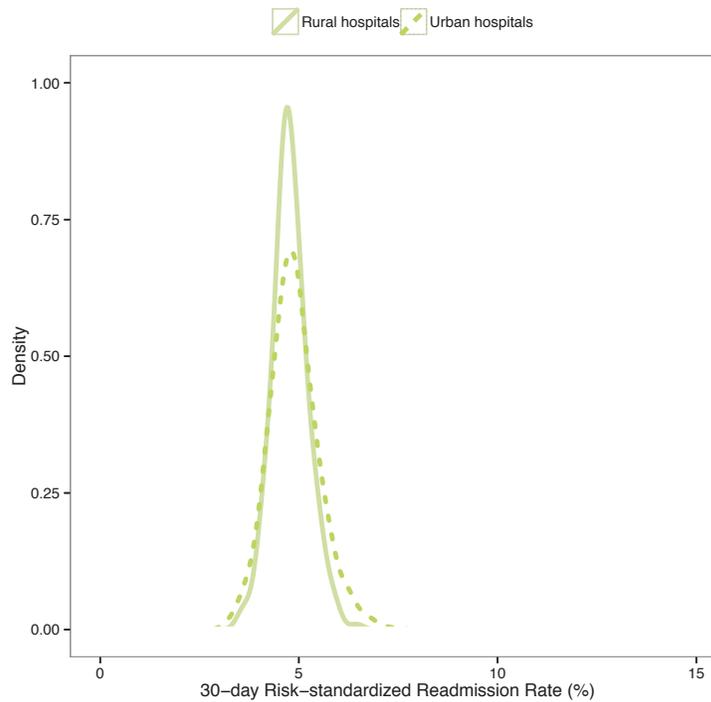
**TABLE I** Distributions of hospital RSRRs (%) for THA/TKA overall, by safety-net status, teaching status, and urban or rural location, July 2011-June 2014.

	THA/TKA RSRR (%)						
	Overall; n=2749	Safety-net hospitals; n=535	Non-safety-net hospitals; n=2214	Teaching hospitals; n=934	Non-teaching hospitals; n=1815	Urban hospitals; n=2515	Rural hospitals; n=234
Maximum	8.5	7.6	8.5	8.5	7.3	8.5	6.5
90%	5.7	5.7	5.7	5.8	5.6	5.7	5.4
75%	5.2	5.2	5.2	5.3	5.2	5.2	5.0
Median (50%)	4.8	4.8	4.8	4.8	4.8	4.8	4.7
25%	4.5	4.5	4.5	4.4	4.5	4.5	4.5
10%	4.1	4.2	4.1	4.0	4.2	4.1	4.2
Minimum	3.1	3.4	3.1	3.2	3.1	3.1	3.6

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The median THA/TKA RSRR for all hospitals was 4.8% (interquartile range [IQR]: 4.5%-5.2%; Table 1). The median THA/TKA RSRR for safety-net hospitals was 4.8% (IQR: 4.5%-5.2%) and for non-safety-net hospitals was 4.8% (IQR: 4.5%-5.2%; Figure 1 and Table 1). The median THA/TKA RSRR for teaching hospitals was 4.8% (IQR: 4.4%-5.3%) and for non-teaching hospitals was 4.8% (IQR: 4.5%-5.2%; Figure 2 and Table 1). The median THA/TKA RSRR for urban hospitals was 4.8% (IQR: 4.5%-5.2%) and for rural hospitals was 4.7% (IQR: 4.5%-5.0%; Figure 3 and Table 1).

**FIGURE 3** Distributions of hospital RSRRs (%) for THA/TKA by urban or rural location, July 2011-June 2014.



Safety-net hospitals had a median THA/TKA RSRR that was equal to that of non-safety-net hospitals, teaching hospitals had a median THA/TKA RSRR that equal to that of non-teaching hospitals, and urban hospitals had a median COPD RSRR that was 0.1 percentage points higher than rural hospitals.

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2. Suter L; Desai N, Zhang W, et al. 2015 Procedure-Specific Readmission Measures Updates and Specifications Report: Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) – Version 4.0, Isolated Coronary Artery Bypass Graft (CABG) Surgery – Version 2.0; <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1219069855841>. 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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