

HOSPITAL CHARACTERISTICS

► Trends in readmission rates following isolated coronary artery bypass graft surgery and elective primary total hip arthroplasty and/or total knee arthroplasty.

The Centers for Medicare & Medicaid Services (CMS) evaluates the trends in measure results over time in order to monitor patterns, changes, and potential unintended consequences in the measure results. This information allows CMS to better understand the current state of care within U.S. hospitals.

The procedure-specific readmission measures assess unplanned readmissions for any reason within 30 days of the date of discharge from a hospitalization for elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) or isolated coronary artery bypass graft (CABG) surgery [1]. “Isolated” CABG procedures are those performed without concomitant high-risk cardiac and non-cardiac procedures, such as valve replacement. Patients can be readmitted to the same hospital or to a different hospital. The measures include Medicare fee-for-service (FFS) beneficiaries aged 65 or older.

CMS began publicly reporting 30-day risk-standardized readmission rates (RSRRs) following elective primary THA/TKA in 2013 and following isolated CABG surgery in 2015 [2]. Publicly reported measure results are updated annually on the [Hospital Compare](#) website. The THA/TKA and CABG readmission measures have been included in the Hospital Readmissions Reduction Program (HRRP) since 2015 and 2017, respectively, [3].

FIGURE 1. Trend in the median hospital RSRR (%) for CABG, July 2013-June 2016.

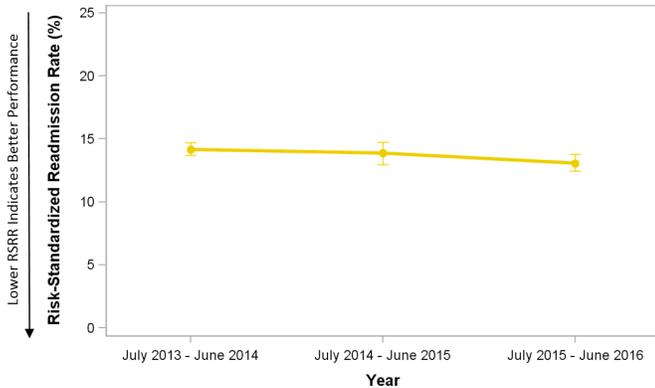
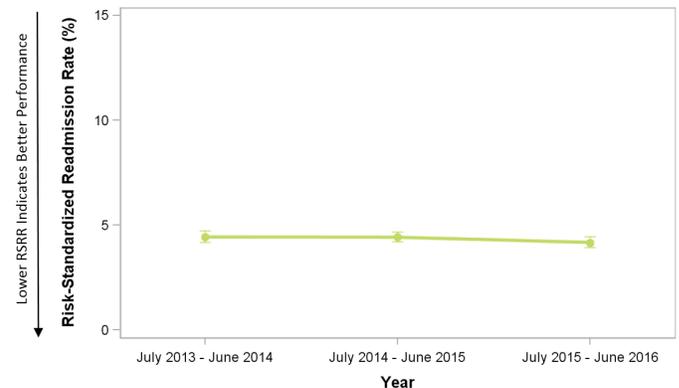


FIGURE 2. Trend in the median hospital RSRR (%) for THA/TKA, July 2013-June 2016.



Examining trends in hospital performance on the procedure-specific readmission measures provides insight into whether hospital quality varies from year to year. To determine the trends in national performance on these measures, we examined hospitals' RSRRs for each year of the July 2013-June 2016 reporting period. We included hospitals with 25 or more qualifying cases. To ensure accurate assessment of each hospital, the measures use a statistical model to adjust for key differences in patient risk factors that are clinically relevant and that have strong relationships with the readmission outcome [1].

Prepared for CMS by Yale New Haven Health Services Corporation - Center for Outcomes Research and Evaluation (YNHHSC/CORE) September 2017

TABLE 1. *Trend in the median hospital RSRR (%) for CABG, July 2013-June 2016.*

	Median (IQR) of Hospital RSRRs (%)		
	July 2013 - June 2014 (654 hospitals)	July 2014 - June 2015 (642 hospitals)	July 2015 - June 2016 (656 hospitals)
CABG	14.2 (13.7, 14.7)	13.9 (13.0, 14.7)	13.1 (12.4, 13.8)

TABLE 2. *Trend in the median hospital RSRR (%) for THA/TKA, July 2013-June 2016.*

	Median (IQR) of Hospital RSRRs (%)		
	July 2013 - June 2014 (2189 hospitals)	July 2014 - June 2015 (2178 hospitals)	July 2015 - June 2016 (2191 hospitals)
THA/TKA	4.4 (4.2, 4.7)	4.4 (4.2, 4.7)	4.2 (3.9, 4.5)

The median hospital RSRR following CABG surgery declined by 1.1 percentage points between June 2014 and June 2016 (Figure 1 and Table 1). Over this three-year period, the median hospital RSRR following THA/TKA declined by 0.2 percentage points (Figure 2 and Table 2). The bars on the graphs in Figures 1 and 2 represent the interquartile range (IQR).

Hospital RSRRs following CABG surgery and THA/TKA declined by 1.1 and 0.2 percentage points, respectively, between June 2014 and June 2016.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Procedure-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Readmission Measures: Isolated Coronary Artery Bypass Graft (CABG) Surgery – Version 4.0 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=1219069855841>. 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 Readmissions Reduction Program Overview. QualityNet website. <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772412458>. Accessed March 1, 2017.