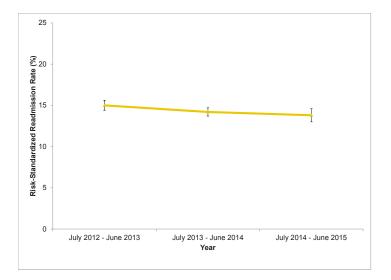
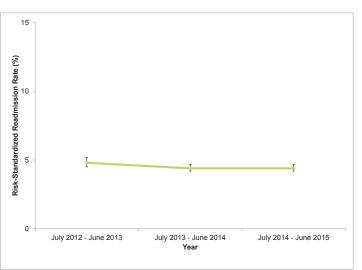
Trends in readmission rates following isolated coronary artery bypass graft surgery and elective primary total hip arthroplasty and/or total knee arthroplasty.

The Centers for Medicare and Medicaid Services (CMS) periodically provides an overview of national performance trends in readmission following hospitalizations for specific surgical procedures [1]. The procedure-specific readmission measures assess unplanned readmissions for any reason within 30 days of the date of discharge from a hospitalization for isolated coronary artery bypass graft (CABG) surgery or elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA). "Isolated" CABG procedures are those performed without concomitant high-risk cardiac and non-cardiac procedures, such as valve replacement [2]. The measures include Medicare fee-for-service (FFS) beneficiaries aged 65 or older [2]. Patients can be readmitted to the same hospital or to a different hospital [2]. CMS began publicly reporting hospital-level 30-day risk-standardized readmission rates (RSRRs) following elective primary THA/TKA in 2013 and RSRRs following isolated CABG surgery in 2015 [3]. Publicly reported measure results are updated annually on the *Hospital Compare* website. The THA/TKA readmission measure has been included in the Hospital Readmissions Reduction Program (HRRP) since Fiscal Year 2015, and the CABG readmission measure will be included in HRRP in Fiscal Year 2017 [4].

**FIGURE I.** Trend in the median hospital RSRR (%) for CABG, July 2012-June 2015.



**FIGURE 2.** Trend in the median hospital RSRR (%) for THA/TKA, July 2012-June 2015.



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 2012-June 2015 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 [2].

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**TABLE 1.** Trend in the median hospital RSRR (%) for CABG, July 2012-June 2015.

## Median (IQR) of Hospital RSRR (%) Iuly 2013-Iune 2014 Iuly 20

|      | July 2012-June 2013 | July 2013-June 2014 | July 2014-June 2015 |
|------|---------------------|---------------------|---------------------|
| CABG | 15.0                | 14.2                | 13.8                |
|      | (14.4, 15.6)        | (13.7, 14.7)        | (13.0, 14.6)        |

**TABLE 2.** Trend in the median hospital RSRR (%) for THA/TKA, July 2012-June 2015.

## Median (IQR) of Hospital RSRR (%)

|         | <b>July 2012-June 2013</b> | <b>July 2013-June 2014</b> | <b>July 2014-June 2015</b> |
|---------|----------------------------|----------------------------|----------------------------|
| THA/TKA | 4.8                        | 4.4                        | 4.4                        |
|         | (4.5, 5.2)                 | (4.2, 4.7)                 | (4.2, 4.7)                 |

The median hospital RSRR following CABG surgery declined by 1.2 percentage points between July 2012 and June 2015 (Figure 1 and Table 1). Over this three-year period, the median hospital RSRR following THA/TKA declined by 0.4 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 1.2 and 0.4 percentage points, respectively, between July 2012 and June 2015.

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