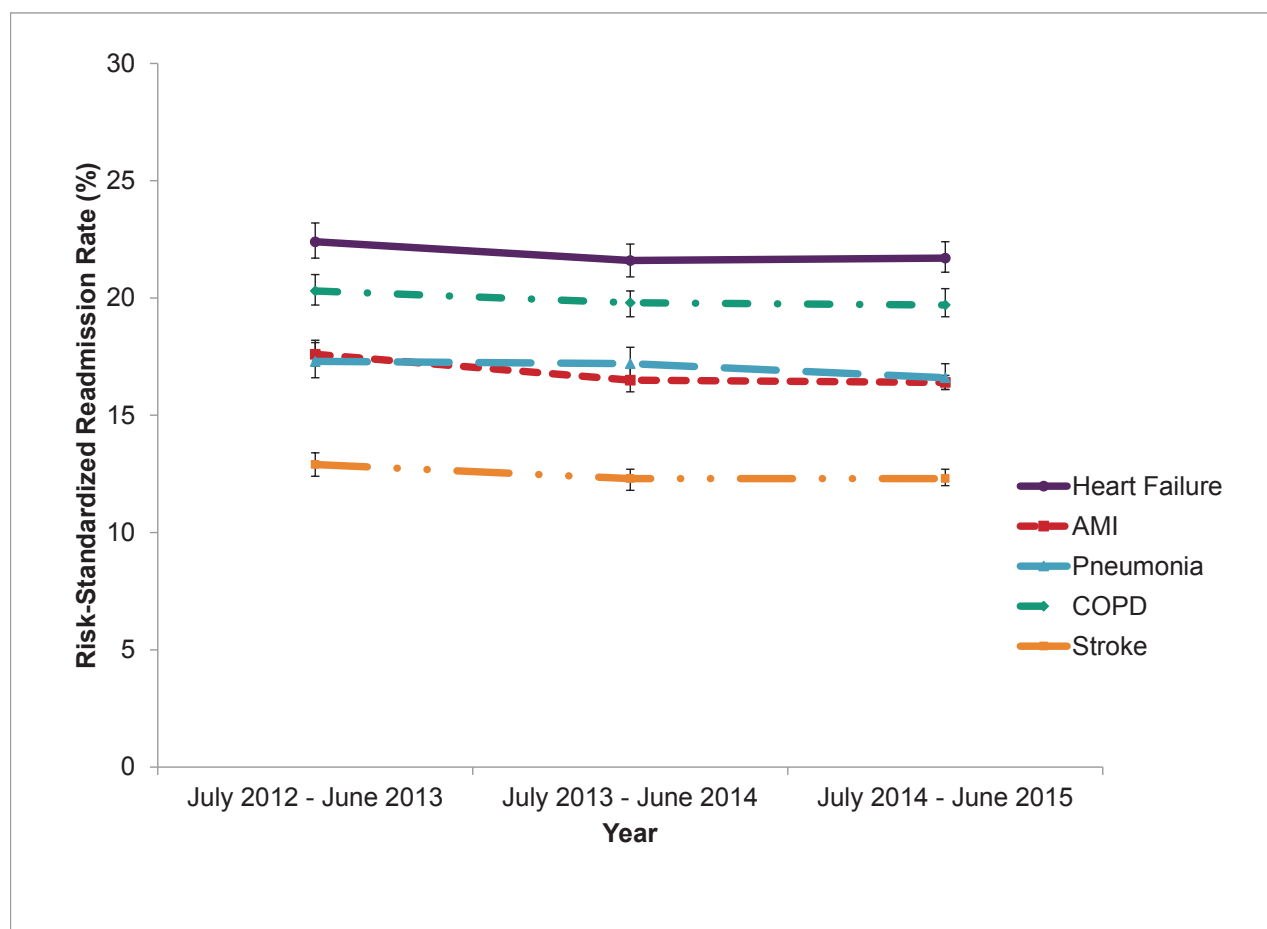**HOSPITAL CHARACTERISTICS**

▶ Trends in readmission rates following hospitalizations for acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, and acute ischemic stroke.

The Centers for Medicare and Medicaid Services (CMS) periodically provides an overview of national performance trends in readmission following hospitalizations for specific medical conditions [1]. The condition-specific readmission measures assess unplanned readmissions for any reason within 30 days of the date of discharge from hospitalizations for acute myocardial infarction (AMI), chronic obstructive pulmonary disease (COPD), heart failure, pneumonia, or acute ischemic stroke [2]. Patients can be readmitted to the same hospital or to a different hospital [2].The measures include Medicare fee-for-service (FFS) beneficiaries aged 65 or older [2]. CMS began publicly reporting 30-day risk-standardized readmission rates (RSRRs) following hospitalizations for AMI, heart failure, and pneumonia in 2009 and for COPD and stroke in 2014 [3]. Publicly reported measure results are updated annually on the *Hospital Compare* website. For 2016 public reporting, the pneumonia readmission measure cohort has been expanded to include aspiration pneumonia and non-severe sepsis patients [2]. The AMI, heart failure, and pneumonia readmission measures have been included in the Hospital Readmissions Reduction Program (HRRP) since October 2012, and the COPD readmission measure has been included in HRRP since Fiscal Year 2015 [4].

FIGURE I. *Trends in the median hospital RSRRs (%) for AMI, COPD, heart failure, pneumonia, and stroke, July 2012-June 2015.*

Examining trends in hospital performance on the condition-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].

TABLE I. *Trends in the median hospital RSRRs (%) for AMI, COPD, heart failure, pneumonia, and stroke, July 2012-June 2015.*

Median (IQR) of Hospital RSRRs (%)

	July 2012-June 2013	July 2013-June 2014	July 2014-June 2015
AMI	17.6 (17.1, 18.2)	16.5 (16.0, 17.0)	16.4 (16.1, 16.7)
COPD	20.3 (19.7, 21.0)	19.8 (19.2, 20.3)	19.7 (19.2, 20.4)
Heart Failure	22.4 (21.7, 23.2)	21.6 (20.9, 22.3)	21.7 (21.1, 22.4)
Pneumonia	17.3 (16.6, 18.1)	17.2 (16.6, 17.9)	16.6 (16.1, 17.2)
Stroke	12.9 (12.4, 13.4)	12.3 (11.8, 12.7)	12.3 (12.0, 12.7)

The median hospital RSRR for AMI 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 for COPD declined by 0.6 percentage points; the median hospital RSRR for heart failure declined by 0.8 percentage points between July 2012 and June 2014 and then rose by 0.1 percentage points by June 2015; the median hospital RSRR for pneumonia declined by 0.7 percentage points; and the median hospital RSRR for stroke declined by 0.6 percentage points (Figure 1 and Table 1). The bars on the graph in Figure 1 represent the interquartile range (IQR).

Hospital RSRRs for AMI, COPD, pneumonia, and stroke declined by 1.2, 0.6, 0.7, and 0.6 percentage points, respectively, between July 2012 and June 2015. Heart failure declined by 0.8 percentage points between July 2012 and June 2014 and then rose by 0.1 percentage points.

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 May 9, 2016.

2. Karen Dorsey, Jacqueline N. Grady, Nihar Desai, et al. 2016 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Readmission Measures: Acute Myocardial Infarction – Version 9.0, Chronic Obstructive Pulmonary Disease – Version 5.0, Heart Failure – Version 9.0, Pneumonia – Version 9.0, Stroke – Version 5.0. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1219069855841. Accessed May 9, 2016.

3. 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 4, 2016.

4. Hospital Readmissions Reduction Program Overview. QualityNet website. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772412458. Accessed March 4, 2016.

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