

HOSPITAL CHARACTERISTICS

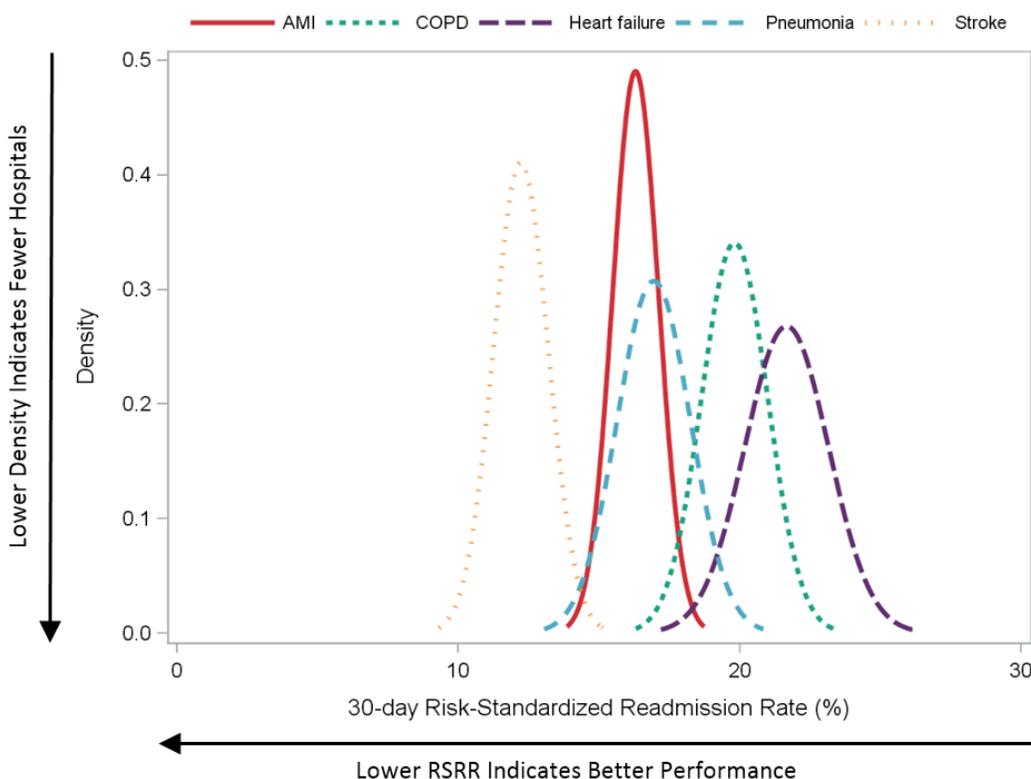
► Variation in 30-day readmission rates across hospitals following hospitalizations for acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, and acute ischemic stroke.

The Centers for Medicare & Medicaid Services (CMS) evaluates the distribution of measure results 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 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 [1]. 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 hospitalizations for AMI, heart failure, and pneumonia in 2009; and for COPD and stroke in 2014 [2]. Publicly reported measure results are updated annually on the [Hospital Compare](#) website. 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 2015 [3].

FIGURE I. Distributions of hospital RSRRs (%) for AMI, COPD, heart failure, pneumonia, and stroke, July 2013-June 2016.



Variation in RSRRs reflects differences in performance among hospitals; wider distributions suggest more variation in quality, and narrower distributions suggest less variation in quality. To determine the extent of variation present in these measures, we examined hospital RSRRs for AMI, COPD, heart failure, pneumonia, and stroke in 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].

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TABLE I. Distributions of hospital RSRRs (%) for AMI, COPD, heart failure, pneumonia, and stroke, July 2012-June 2015.

	Distribution of RSRRs (%)				
	AMI	COPD	Heart Failure	Pneumonia	Stroke
Number of hospitals	2,171	3,723	3,739	4,231	2,618
Maximum	19.5	26.8	30.4	23.1	17.2
90%	17.3	21.3	23.6	18.6	13.5
75%	16.8	20.5	22.6	17.7	12.7
Median (50%)	16.3	19.7	21.6	16.8	12.1
25%	15.8	19.1	20.7	16.1	11.6
10%	15.3	18.5	19.9	15.4	11.2
Minimum	13.5	16.2	15.5	12.9	9.3

Hospital RSRRs for AMI, COPD, heart failure, pneumonia, and stroke were normally distributed and centered at 16.3%, 19.7%, 21.6%, 16.8%, and 12.1%, respectively (Figure 1 and Table 1). Additionally, hospitals were distributed over an interquartile range of 1.0, 1.4, 1.9, 1.6, and 1.1 percentage points, respectively (Table 1).

For the AMI, COPD, heart failure, pneumonia, and stroke readmission measures, half of the hospitals have RSRRs within 1.0, 1.4, 1.9, 1.6, and 1.1 percentage points of the median hospital RSRR for each measure. Additionally, the range in RSRRs for the AMI, COPD, heart failure, pneumonia, and stroke readmission measures was 6.0, 10.6, 14.9, 10.2, and 7.9 percentage points, respectively. This demonstrates that there are continued opportunities for improvement.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Readmission Measures: Acute Myocardial Infarction – Version 10.0 Chronic Obstructive Pulmonary Disease – Version 6.0 Heart Failure – Version 10.0 Pneumonia – Version 10.0 Stroke – 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.