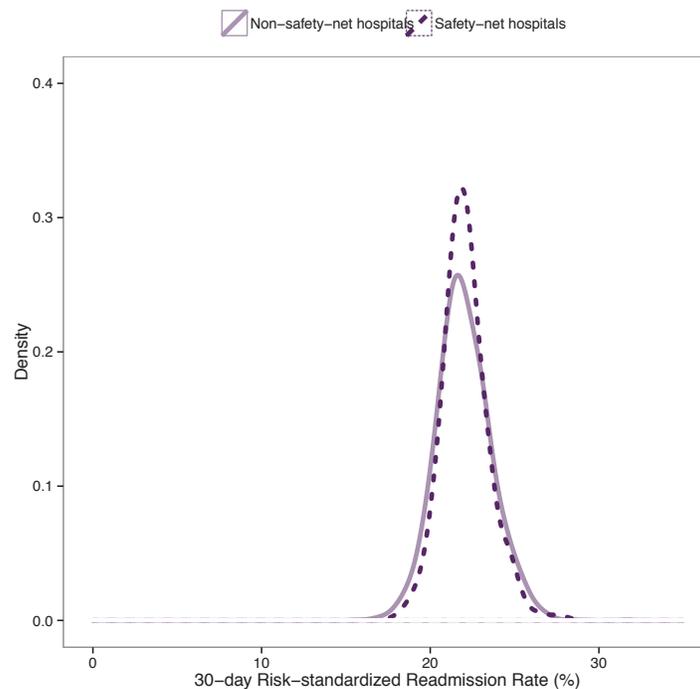


HOSPITAL CHARACTERISTICS

► Performance on the heart failure 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 heart failure [1]. The heart failure readmission measure includes Medicare fee-for-service (FFS) and Veterans Health Administration (VA) beneficiaries aged 65 or older [2]. The heart failure readmission measure assesses unplanned readmissions for any reason within 30 days of discharge from a hospital stay for heart failure [2]. Patients can be readmitted to the same hospital or to a different hospital [2]. The heart failure readmission measure has been publicly reported on [Hospital Compare](#) since 2009 and was implemented in the Hospital Readmissions Reduction Program (HRRP) in 2012 [3].

FIGURE I Distributions of hospital RSRRs (%) for heart failure 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 these characteristics with 25 or more qualifying discharges. Therefore, we evaluated the heart failure RSRRs for a total of 3,810 hospitals by comparing 1,003 safety net hospitals against 2,807 non-safety-net hospitals, 1,098 teaching hospitals against 2,712 non-teaching hospitals, and 3,043 urban hospitals against 767 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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To ensure accurate assessment of each hospital, the heart failure 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 heart failure by teaching status, July 2011-June 2014.

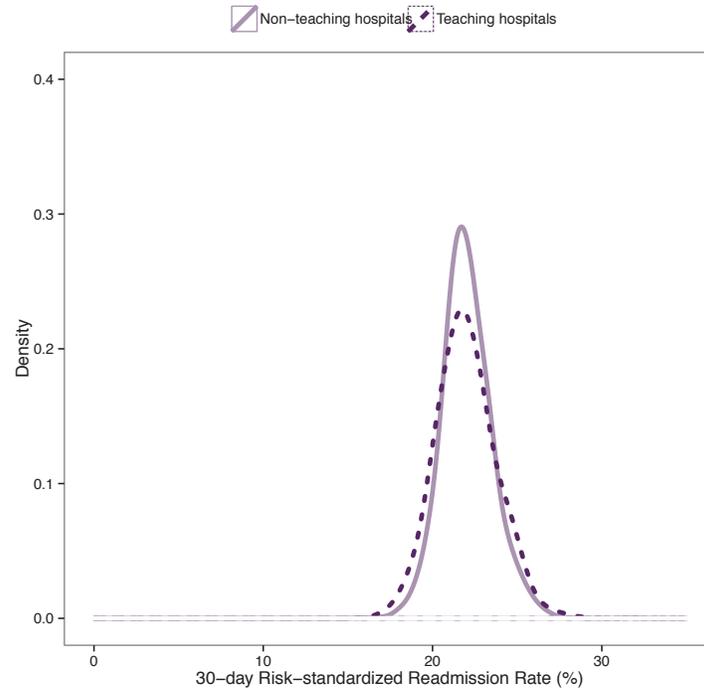


TABLE I Distributions of hospital RSRRs (%) for heart failure overall, by safety-net status, teaching status, and urban or rural location, July 2011-June 2014.

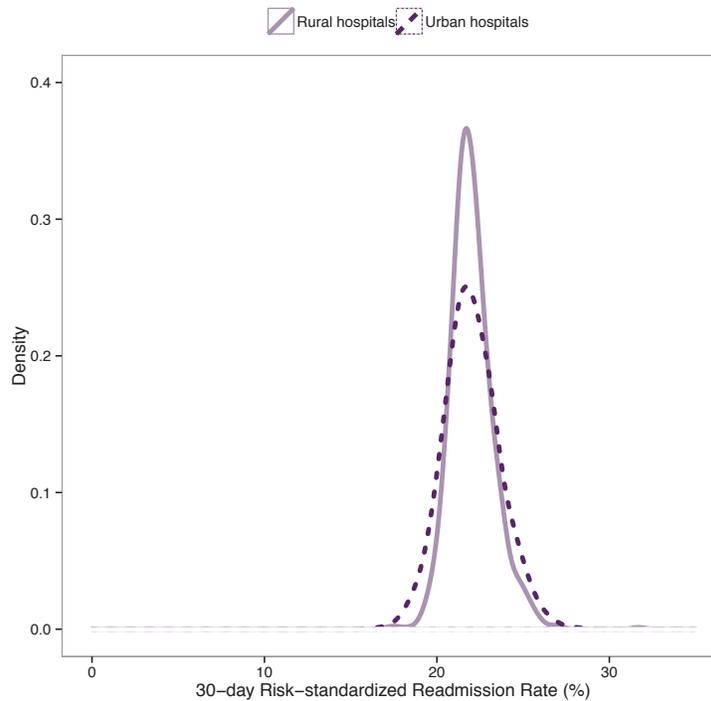
	Heart failure RSRR (%)						
	Overall; n=3810	Safety-net hospitals; n=1003	Non-safety-net hospitals; n=2807	Teaching hospitals; n=1098	Non-teaching hospitals; n=2712	Urban hospitals; n=3043	Rural hospitals; n=767
Maximum	31.7	28.2	31.7	28.8	31.7	28.8	31.7
90%	24.1	23.8	24.1	24.4	23.9	24.2	23.6
75%	23.0	22.8	23.0	23.1	22.9	23.0	22.7
Median (50%)	21.9	22.0	21.9	21.9	21.9	21.9	21.9
25%	21.0	21.2	20.9	20.8	21.1	20.9	21.3
10%	20.1	20.5	20.0	19.8	20.3	20.0	20.6
Minimum	15.8	17.7	15.8	16.8	15.8	15.8	17.3

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The median heart failure RSRR for all hospitals was 21.9% (interquartile range [IQR]: 21.0%-23.0%; Table 1). The median heart failure RSRR for safety-net hospitals was 22.0% (IQR: 21.2%-22.8%) and for non-safety-net hospitals was 21.9% (IQR: 20.9%-23.0%; Figure 1 and Table 1). The median heart failure RSRR for teaching hospitals was 21.9% (IQR: 20.8%-23.1%) and for non-teaching hospitals was 21.9% (IQR: 21.1%-22.9%; Figure 2 and Table 1). The median heart failure RSRR for urban hospitals was 21.9% (IQR: 20.9%-23.0%) and for rural hospitals was 21.9% (IQR: 21.3%-22.7%; Figure 3 and Table 1).

FIGURE 3 Distributions of hospital RSRRs (%) for heart failure by urban or rural location, July 2011-June 2014.



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

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 16 June 2015.
2. Dorsey K, Grady J, Desai N, et al. 2015 Condition-Specific Measures Updates and Specifications Report Hospital-Level 30-Day Risk-Standardized Readmission Measures: Acute Myocardial Infarction – Version 8.0, Heart Failure – Version 8.0, Pneumonia – Version 8.0, Chronic Obstructive Pulmonary Disease – Version 4.0, Stroke – Version 4.0; <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1219069855841>. Accessed 26 June 2015.
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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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