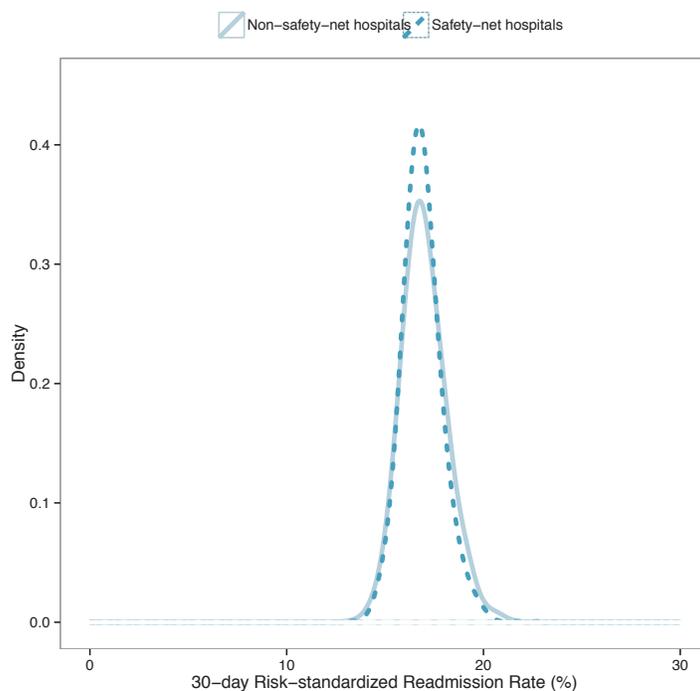


## HOSPITAL CHARACTERISTICS

► Performance on the pneumonia 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 pneumonia [1]. The pneumonia readmission measure includes Medicare fee-for-service (FFS) and Veterans Health Administration (VA) beneficiaries aged 65 or older [2]. The pneumonia readmission measure assesses unplanned readmissions for any reason within 30 days of discharge from a hospital stay for pneumonia [2]. Patients can be readmitted to the same hospital or to a different hospital [2]. The pneumonia 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 pneumonia 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 pneumonia RSRRs for a total of 4,181 hospitals by comparing 1,215 safety net hospitals against 2,966 non-safety-net hospitals, 1,133 teaching hospitals against 3,048 non-teaching hospitals, and 3,169 urban hospitals against 1,012 rural hospitals for the July 2011 – June 2014 reporting period.

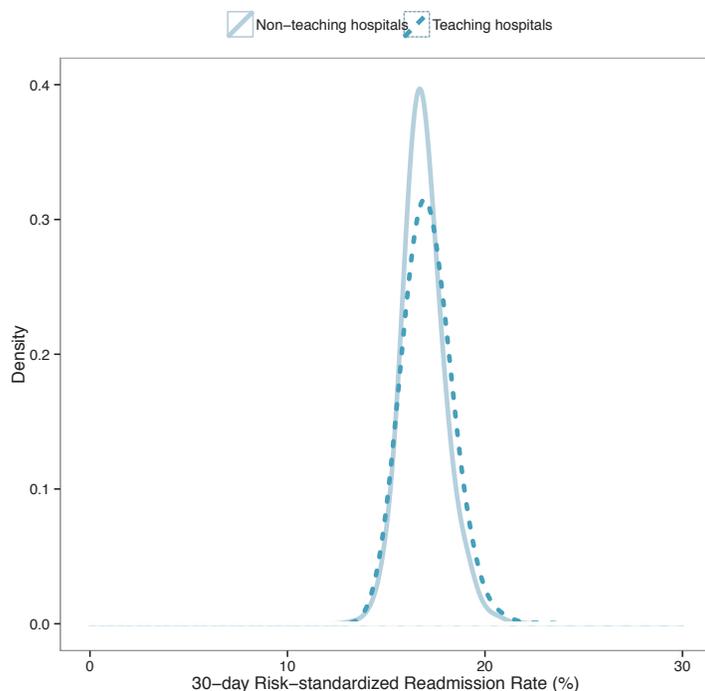
Safety-net hospitals are defined as those committed to caring for populations without stable access to care, specifically public hospitals or private hospitals with a Medicaid caseload greater than one standard deviation above their respective state's mean private hospital Medicaid caseload [4]. Teaching Hospitals provide post-graduate education for physicians completing residency and fellowship [4]. Urban and rural hospitals are defined by hospital self-identification [4].

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To ensure accurate assessment of each hospital, the pneumonia 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 pneumonia by teaching status, July 2011-June 2014.



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

	Pneumonia RSRR (%)						
	Overall; n=4181	Safety-net hospitals; n=1215	Non-safety-net hospitals; n=2966	Teaching hospitals; n=1133	Non-teaching hospitals; n=3048	Urban hospitals; n=3169	Rural hospitals; n=1012
Maximum	22.9	22.9	21.8	22.9	21.8	22.9	21.0
90%	18.4	18.1	18.5	18.6	18.3	18.5	18.0
75%	17.6	17.4	17.7	17.9	17.5	17.7	17.3
Median (50%)	16.9	16.8	16.9	17.0	16.8	16.9	16.8
25%	16.2	16.2	16.2	16.3	16.2	16.2	16.3
10%	15.7	15.7	15.6	15.6	15.7	15.6	15.8
Minimum	13.2	13.4	13.2	14.1	13.2	13.2	14.5

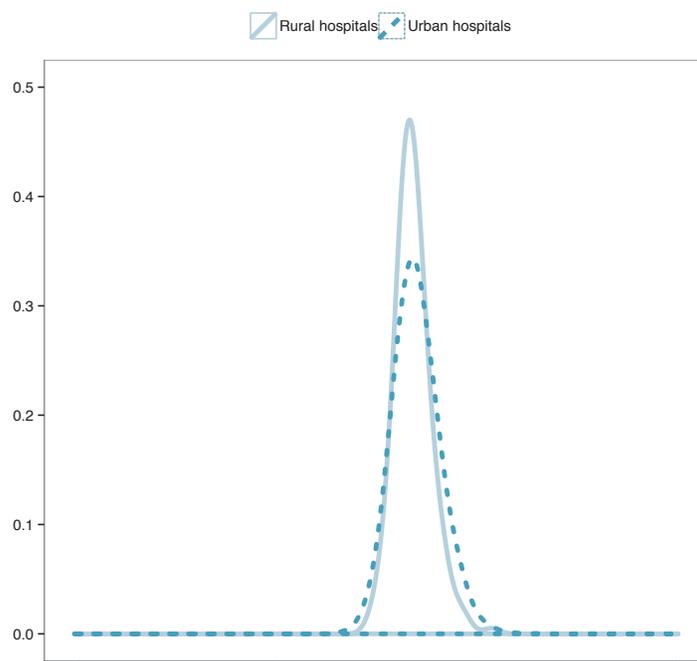
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The median pneumonia RSRR for all hospitals was 16.9% (interquartile range [IQR]: 16.2%-17.6%; Table 1). The median pneumonia RSRR for safety-net hospitals was 16.8% (IQR: 16.2%-17.4%) and for non-safety-net hospitals was 16.9% (IQR: 16.2%-17.7%; Figure 1 and Table 1). The median pneumonia RSRR for teaching hospitals was 17.0% (IQR: 16.3%-17.9%) and for non-teaching hospitals was 16.8% (IQR: 16.2%-17.5%; Figure 2 and Table 1). The median pneumonia RSRR for urban hospitals was 16.9% (IQR: 16.2%-17.7%) and for rural hospitals was 16.8% (IQR: 16.3%-17.3%; Figure 3 and Table 1).

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



Safety-net hospitals had a median pneumonia RSRR that was 0.1 percentage points lower than non-safety-net hospitals, teaching hospitals had a median pneumonia RSRR that was 0.2 percentage points higher than non-teaching hospitals, and urban hospitals had a median pneumonia RSRR that was 0.1 percentage points higher than 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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