

## SOCIAL RISK FACTORS

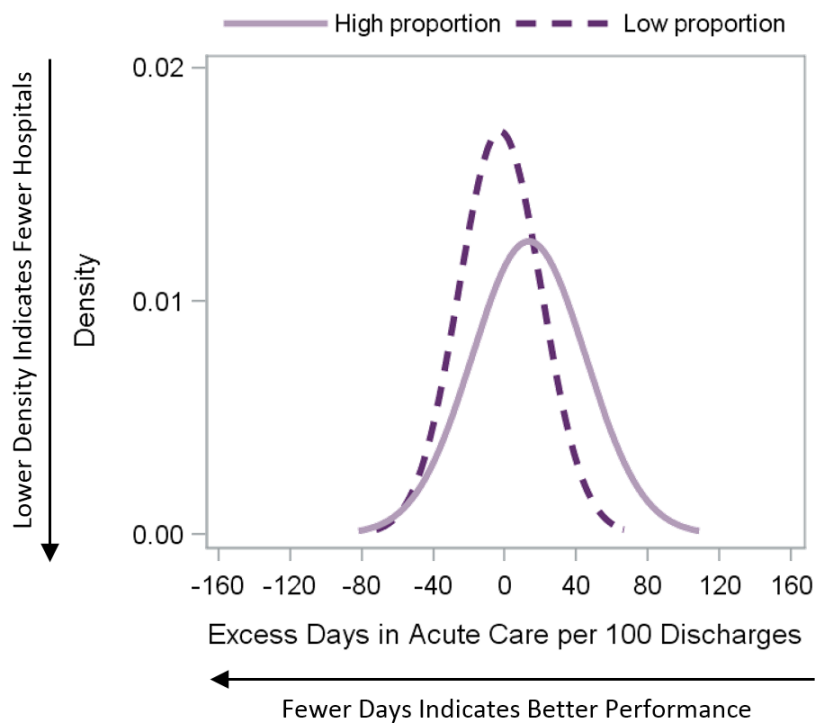
► **Performance on the heart failure excess days in acute care measure:** Hospitals that serve high and low proportions of Medicaid patients.

The Centers for Medicare & Medicaid Services (CMS) evaluates hospital performance in relation to the proportion of Medicaid patients served 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 heart failure excess days in acute care (EDAC) measure counts the number of additional (or fewer) risk-adjusted days a hospital's patients spend in an emergency department (ED), a hospital observation unit, or a hospital inpatient unit during the 30 days following a hospitalization for heart failure, compared to an average hospital [1]. The heart failure EDAC measure reports the EDAC for each hospital per 100 discharges to provide context and allow for comparisons to the national average. For example, an EDAC of 10 indicates that an average group of 100 discharged patients would be expected to spend 10 more days in the ED, under observation, or admitted to the hospital after discharge than expected. The measure includes Medicare fee-for-service (FFS) beneficiaries aged 65 or older [1].

CMS began publicly reporting 30-day risk-standardized EDAC measure results for heart failure in 2017 [2]. Publicly reported measure results are updated annually on the [Hospital Compare](#) website.

**FIGURE I.** Distributions of heart failure EDAC per 100 discharges for hospitals with low and high proportions of Medicaid admissions, July 2013–June 2016.



Variation in EDAC reflects differences in performance among hospitals; fewer excess days in acute care after discharge (negative EDAC numbers) suggest better quality and more days (positive numbers) suggest worse quality. To understand how caring for Medicaid patients might impact a hospital's EDAC, we examined EDAC among hospitals with high and low proportions of Medicaid patients. We compared the heart failure EDAC for the hospitals with the lowest and highest deciles of proportions of African American patients among all hospitals with 25 or more qualifying discharges (N= 3,665). For heart failure, this meant we compared EDAC results for the 367 hospitals with ≤7.3% Medicaid admissions to the 367 hospitals with ≥31.7% Medicaid admissions for the July 2013 – June 2016 reporting period. The proportion of Medicaid admissions for each hospital was determined using the American Hospital Association (AHA) Annual Survey Database Fiscal Year 2015 [3].

Prepared for CMS by Yale New Haven Health Services Corporation – Center for Outcomes Research and Evaluation (YNHHSC/CORE) September 2017

To ensure accurate assessment of each hospital, the heart failure EDAC measure uses a statistical model to adjust for key differences in patient risk factors that are clinically relevant and have a strong relationship with the EDAC outcome [1]. After risk adjustment:

- A negative EDAC indicates that a hospital's patients spent fewer days in acute care than expected;
- An EDAC of zero indicates that a hospital's patients spent the expected number of days in acute care; and
- A positive EDAC indicates that a hospital's patients spent more days in acute care than expected.

**TABLE I.** Distributions of heart failure EDAC per 100 discharges for hospitals with low and high proportions of Medicaid admissions, July 2013-June 2016.

	Heart failure EDAC per 100 discharges (days)	
	Hospitals with low proportions ( $\leq 7.3\%$ ) of Medicaid admissions n = 367	Hospitals with high proportions ( $\geq 31.7\%$ ) of Medicaid admissions n = 367
Maximum	87.8	145.6
90%	25.9	55.3
75%	11.4	30.7
Median (50%)	-4.5	11.5
25%	-19.3	-9.0
10%	-29.8	-26.3
Minimum	-58.9	-53.3

The median heart failure EDAC per 100 discharges for hospitals with low proportions of Medicaid admissions was -4.5 days (interquartile range [IQR]: -19.3 – 11.4; Figure 1 and Table 1). The median heart failure EDAC per 100 discharges for hospitals with high proportions of Medicaid admissions was 11.5 days (IQR: -9.0 – 30.7; Figure 1 and Table 1). This disparity in EDAC between hospitals with high and low proportions of Medicaid patients served could be due to Medicaid patients having more or longer readmissions, more ED visits, more observational stays, or a combination of these.

Hospitals with low proportions of Medicaid admissions had a median heart failure EDAC that was 16.0 days per 100 discharges lower than hospitals with high proportions.

1. Jaymie Simoes, Jacqueline N. Grady, Jo DeBuhr, et al. 2017 Condition-Specific Measures Updates and Specification Report Hospital-Level 30-Day Risk-Standardized Excess Days in Acute Care Measures: Acute Myocardial Infarction – Version 2.0 Heart Failure – Version 2.0. <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=Qnet-Public%2FPage%2FQnetTier3&cid=1228775310037>. 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. AHA Annual Survey Database Fiscal Year 2015; <http://www.ahadataviewer.com/book-cd-products/AHA-Survey/>. Accessed March 2, 2017.