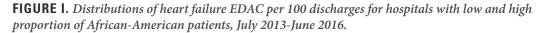
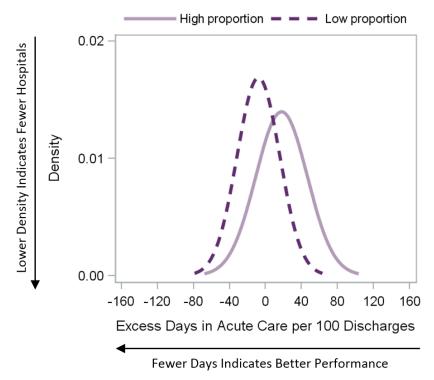
Performance on the heart failure excess days in acute care measure: Hospitals that serve high and low proportions of African-American patients.

The Centers for Medicare & Medicaid Services (CMS) evaluates hospital performance in relation to the proportion of African-American 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.

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





Variation in EDAC reflects differences in performance among hospitals; fewer excess days in acute care after discharge (negative EDAC numbers) suggests better quality and more days (positive numbers) suggests worse quality. To understand how caring for African-American patients might impact a hospital's EDAC, we examined EDAC among hospitals with high and low proportions of African-American patients. We defined hospitals with low and high proportions of African-American patients as those that fall within the lowest and highest deciles of all hospitals with 25 or more qualifying discharges (N=3,710). For heart failure, this meant we compared EDAC results for the 500 hospitals with 0% African-American Medicare FFS patients to the 371 hospitals with ≥22.3% African-American Medicare FFS patients for the July 2013 – June 2016 reporting period. The proportion of African-American Medicare FFS patients for each hospital was determined using the Medicare Part A Inpatient Claims from 2015.

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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 African-American patients, July 2013-June 2016.

| | Hospitals with low proportions (0%) of African-American patients n = 500 | Hospitals with high proportions (\geq 22.3%) of African-American patients n = 371 |
|--------------|---|---|
| Maximum | 87.8 | 145.6 |
| 90% | 23.6 | 51.8 |
| 75% | 6.0 | 35.1 |
| Median (50%) | -10.4 | 17.4 |
| 25% | -25.1 | -0.5 |
| 10% | -34.6 | -16.8 |
| Minimum | -63.5 | -46.2 |

Heart failure EDAC per 100 discharges (days)

The median heart failure EDAC per 100 discharges for hospitals with low proportions of African-American patients was -10.4 days (interquartile range [IQR]: -25.1 – 6.0; Figure 1 and Table 1). The median heart failure EDAC per 100 discharges for hospitals with the high proportions of African-American patients was 17.4 days (IQR: -0.5 - 35.1; Figure 1 and Table 1). This disparity in EDAC between hospitals with high and low proportions of African-American patients served could be due to African-American patients having more or longer readmissions, more ED visits, more observational stays, or a combination of these.

Hospitals with low proportions of African-American patients had a median heart failure EDAC that was 27.8 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%2F-Page%2FQnetTier2&cid=1138115987129. Accessed March 1, 2017.

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