



Heart Failure and Cardiomyopathies

REGIONAL VARIATION IN HOSPITALIZATION OUTCOMES AMONG PATIENTS ADMITTED FOR HEART FAILURE IN THE UNITED STATES

Poster Contributions
Poster Hall, Hall C
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Session Title: Acute Heart Failure: Evaluating Strategies to Prevent Readmissions
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Background: We sought to evaluate regional variation in heart failure (HF) hospitalization outcomes including in-patient mortality, cost of hospitalization, length of stay, and disposition of patients in the U.S.

Methods: This study was conducted using the National Inpatient Sample (NIS) of the Agency for Healthcare Research and Quality (2011-2013). Regional variation was classified based on Census region as defined by the U.S. Census Bureau. Analysis was conducted via multivariate-adjusted mixed effect model

Results: An estimated 3 million adults with mean (SD) age of 73 (14) were hospitalized for HF in the U.S. from 2011-2013. Overall, mortality rate was 3.1%. Mortality rates were highest in the Northeast region (3.4%) and, compared to the Northeast, there was significantly lower mortality in the Midwest (OR: 0.90 [0.86, 0.95]) but only marginally lower in the West (0.96 [0.92, 1.0]) and South (0.96 [0.91, 1.0]) (fig 1). Cost per hospitalization was highest in the South even though median length of stay was lowest in this region (fig 2 & 3). There was also variability in disposition of patients who survived till hospital discharge e.g. the Northeast region have the lowest percentage (41%) of patients with routine home discharge (fig 4)

Conclusions: There was significant regional variation in in-patient mortality, cost of hospitalization, length of stay, and disposition of patients among HF hospitalization in the U.S. Further research is needed to determine contributing factors to these regional variations

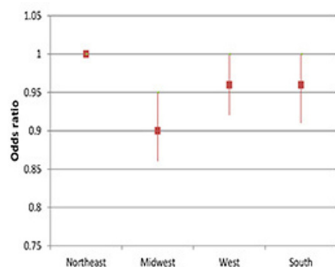


Figure 1: Multivariate-adjusted odds ratio for in-patient mortality across the four regions of the United States (with the Northeast as the reference point)

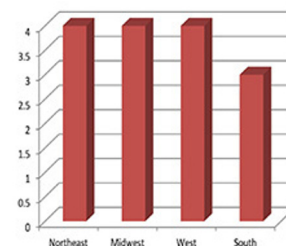


Figure 3: Median length of heart failure hospitalization stay across the four regions of the United States.

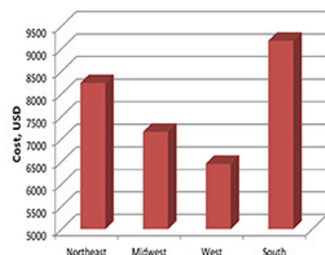


Figure 2: Median cost per hospitalization (USD) across the four regions of the United States

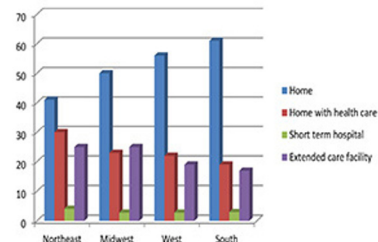


Figure 4: Disposition of patients after admission for heart failure in the United States, stratified by hospital region