RESOURCE USE ONE YEAR FOLLOWING HOSPITALIZATION FOR ACUTE HEART FAILURE: A COMPARISON OF PATIENTS WITH PRESERVED VERSUS REDUCED EJECTION FRACTION

Poster Contributions
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Background: Patients who survive an acute heart failure (AHF) hospitalization subsequently use considerable medical care resources for ongoing chronic care. Whether resource use differs between patients with preserved (HFpEF) vs. reduced (HFrEF) ejection fraction is not known.

Methods: We identified members of Kaiser Permanente in the Northwest and Southern California regions who had an ejection fraction (EF) measured during an index AHF hospitalization and were discharged alive in 2008-2011 (n=6,511). After excluding 675 patients with borderline EF values (41-49%), we assessed the subsequent medical resource use (readmissions, inpatient days, emergency visits, outpatient visits, and pharmacy dispenses) over one year, annualized to account for differential follow-up due to mortality, comparing patients with preserved (EF >50%) vs. reduced (EF <40%) EF after adjusting for age, sex, black race, smoking status, and pre-existing heart failure, coronary artery disease, diabetes, chronic kidney disease, hypertension and depression.

Results: HFpEF patients (62% of the sample) were older (76 vs. 71 years, p<0.001), more likely to be women (55% vs. 36% p<0.001), less likely to have pre-existing heart failure (45% vs. 52%, p<0.001) but more likely to have diabetes (49% vs. 40%, p<0.001) compared with HFrEF patients. Unadjusted ambulatory resource use (emergency and output visits and dispenses) was slightly higher among HFpEF patients. After adjusting demographic and clinical characteristics, HFpEF patients incurred significantly more ambulatory visits (21.7 vs. 20.2, p=0.001) and ER visits (2.9 vs. 2.7, p=0.014) compared with HFrEF patients during the year following discharge for AHF. However, subsequent re-admissions, inpatient days and pharmacy dispenses did not differ between groups. Further adjustment to account for differential mortality did not change the results.

Conclusion: Resource use in the year following an AHF hospitalization did not differ substantially between HFpEF and HFrEF patients, although HFpEF patients had significantly more ambulatory visits. Patients with heart failure require a high level of ongoing care regardless of ejection fraction.