Early Follow-Up and Outcome Following a Heart Failure Discharge in the VA Health Care System

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Presenter Disclosure Information

- Paul Heidenreich
- Early Outpatient Follow Up and Outcome in the VA Health Care System

FINANCIAL DISCLOSURE:
VA employee

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None
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Background

- Hospitalized patients with heart failure are at high risk of death
- Readmission is common following a heart failure discharge (20% at 30 days)
- Outcome may be improved with better transition to outpatient care
  - Opportunity to optimize treatments
- Early follow-up likely improves the transition of care
Purpose

- To determine the prevalence of early follow up after discharge from a hospitalization for heart failure in the VA Health Care System
- To determine if outcome is associated with early follow-up
Methods

- National VA Inpatient, Outpatient Data and Death data
  - Linked by scrambled social security number
- Includes some non-VA inpatient care paid for by the VA
Patient Cohort

- Veterans discharged with a Primary diagnosis of heart failure 2001-2008
  - VA Hospitals
  - Non-VA Hospitals (paid by the VA)
- Discharged to the community/home
- Survived 14 days following discharge
- N=113,026
Early Follow-Up

- Face-to-face visit within the VA system
  - Classified as cardiology or other
  - Within 14 days of discharge
Outcome Measures

- Survival within 30 days: (having survived to day 14)
- Readmission for heart failure as the primary or secondary diagnosis within 30 days.
Limitations of Observational Data

- Sicker patients may be more willing to return for care.
- Sicker patients may be less able to return for care.
Limitations of VA Encounter Data

- Non-VA Outpatient visits not available.
- Unknown amount of dual use of care. (VA and non-VA).
- Includes some non-VA admissions (if the VA pays).
Trends in Outpatient Visits

P<0.0001 for both
P<0.0001
Patient Age

Follow Up Visit

Cardiology Other No Visit

Mean Age (SD)

P<0.001
Comorbid Conditions

- Cardiology
- Other
- No Visit

P<0.0001 for both
More Comorbid Conditions

- Cardiology
- Other
- No Visit

P<0.0001 for both
Charlson Score

Follow Up Visit

Charlson Score (SD)

- Cardiology
- Other
- No Visit

P<0.0001
Prior Cardiac Conditions

- Coronary Disease
- Heart Failure
- Afib

% of Patients

- Cardiology
- Other
- No Visit

P<0.0001 for each
Non-VA Discharge

- Cardiology
- Other
- No Visit

P<0.0001
30-Day Mortality

Cardiology  Other  No Visit

% of Patients

Kidney Disease

P<0.0001 for both
30-Day Heart Failure Admission (Primary or Secondary)

Follow Up Visit

% of Patients

Cardiology Other No Visit

P < 0.01
Association of Early Office Visit and Outcome

Mortality 30 day HF Readmission 90 day All Cause Readmission

Adjusted Odds Ratio
Conclusions

- Half of all patients discharged from the VA with heart are seen at VA facilities within 14 days.
- These patients have less comorbidity than those not seen.
- Adjusted survival is better
- Conflicting associations with subsequent heart failure hospitalization