Standardizing Heart Failure Patient Education Across the Care Continuum to Improve Patient Self-Efficacy

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Background

- 6.2 million Americans have heart failure (HF) (Virani et al., 2020)
- Costs the United States (US) $30.7 billion annually (Centers for Disease Control and Prevention, 2020)
- Management requires understanding of the disease, lifestyle modifications, and medications (American Heart Association, 2017)
- Prevalence of low health literacy in patients with HF estimated between 10.5% and 39% (Cajita et al., 2016; Cox et al., 2017; Fabbri et al., 2018; Magnani et al., 2018; Wu et al., 2013)
- Impact of poor management: disease progression, rehospitalization, and death
- Individual impact: increased cost, decreased quality of life, and increased risk of morbidity and mortality (Ziaeian & Fonarouf, 2016)
- Hospital impact: decreased reimbursement for HF readmissions within 30 days (Centers for Medicare and Medicaid Services, 2019)
  - National average: **22%**

Purpose

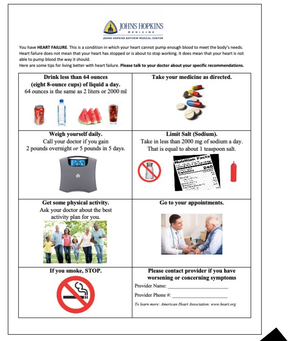
In order to improve patient confidence in self-management and decrease 30-day readmission rates of adults who were hospitalized with HF, a HF Survival Skills Tracking Folder with tailored patient education was implemented in the outpatient HF Transition Clinic, where patients are seen once weekly for four weeks following discharge.

Aims

Aim #1 Are participants using the HF Survival Skills Tracking Folder at Visits #2, 3, and 4?

Aim #2 Is there an increase in HF patients' confidence in their ability to manage their condition from their first follow up appointment to their last follow up appointment?

Aim #3 Is there a decrease in 30-day readmissions for participants who receive the HF Survival Skills Tracking Folder with tailored patient education?



Methods

- **Design:** Pre/post interventional Quality Improvement (QI) project
- **Sample:** Adult patients with a HF diagnosis, discharged from the hospital and following up in the HF Transition clinic
- **Setting:** Outpatient HF Transition Clinic at large academic medical center in the mid-Atlantic region of the US
- **Intervention:**
  - Visit #1 in person: pre-survey completed on paper and HF Survival Skills Tracking Folder provided
  - Visits #2-4 over telehealth: asked about folder use (Yes/No) and education provided based on identified needs
  - After Visit #4: post survey completed over the phone and patient asked to provide verbal report about any readmissions (Yes/No)
- **Survey Tool:** Self Care of Heart Failure Index (SCHFI), version 7.2, section D in English (Riegel et al., 2019)

Results

Demographic characteristics	(N = 6)
Age, mean (SD)	71.17 (15.97)
Sex, n (%)	
Male	3 (50)
Female	3 (50)

Aim #1:
- At visit #2, 1 (16.67%) reported use of the folder
- At visit #3, 0 (0%) reported use of the folder
- At visit #4, 0 (0%) reported use of the folder

Aim #2:
- Mean 5-point improvement in scores for the 3 participants who completed pre- and post-survey

Aim #3:
- Pre-intervention, hospital-wide rate was 20.8%
- 0% readmission rate for the 3 participants who verbally reported during the post-survey
- 16.7% readmission rate for all 6 participants, based on a chart review

Conclusions

- Despite small sample size and low reported utilization of the folder, demonstrated **positive impact on patient self-efficacy** in HF and **lower 30-day readmission rates** than hospital-wide and national averages
- Serves as **groundwork for future** iterations and expansion of this intervention
- Future goals: Expansion of this intervention to other outpatient settings and standardization of documentation for patient education from inpatient to outpatient setting

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