Reducing Heart Failure Readmissions: An Evidence-Based Approach

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Background

- Heart Failure (HF) is associated with high morbidity, mortality, and healthcare expenditures.
- HF is a leading cause of rehospitalization in the United States.
- HF readmissions lead to poor patient outcomes, decreased patient satisfaction, and increased health care costs.

Problem

There is a considerable need for effective heart failure care that is evidence-based.

Methods

- A review of literature was conducted using EBSCO Host and CINAHL databases using the search period of 2004-2014.
- Literature identified the use of Transitional Care Programs (TCPs) and thorough patient education to be greatly effective in reducing HF readmissions.

Article	Methods	Results
Naylor, M.D., Brooten, D.A., Campbell, R.L., et al. (2004). Transitional care of older adults hospitalized with heart failure: A randomized, controlled trial. *Journal of the American Geriatrics Society,* 52, 675-684.	• Randomized controlled trial (RCT) in six academic and community hospitals in Philadelphia. • Conducted over a four year period. • Subjects enrolled (N=239), control group (n=121), intervention group (n=118). • Control group received the standard of care. • Intervention group received care from Advanced Practice Nurses (APNs).	• Statistically significant difference in the rate of readmissions between the intervention and control groups (p=.01). • 30-50% reduction in readmissions in intervention group.
Russell, D., Rosati, R.J., Sobolewski, S., et al. (2011). Implementing a transitional care program for high-risk heart failure patients: Findings from a community-based partnership between a certified home healthcare agency and regional hospital. *Journal for Healthcare Quality*, 33 (6), 17-24.	• Retrospective observational study • TCP was a collaboration between a home health agency and a regional hospital. • Participants chosen from a medical/surgical hospital in New York City. • Intervention group (n=223) received HF transitional care program. • Control group (n=224) received usual homecare services.	• Patients who received transitional care services were significantly less likely to be readmitted to the hospital than patients who received usual homecare services (p = <.01).
Stauffer, B.D., Fullerton, C., Fleming, N., et al. (2011). Effectiveness and cost of a transitional care program for heart failure: A prospective study with concurrent controls. *Archives Internal Medicine*, 171, 1238-1243.	• Prospective, before-and-after intervention study with concurrent controls. • Pilot study conducted at Baylor Medical Center Garland (BMCG), a 263-bed medical center. • Intervention group (N=56) enrolled in a 3 month long APN-led TCP. • Concurrent control groups: HF patients who received routine care.	• The 30-day readmission rate at BMCG was 48% lower after the intervention. • The reduction in readmissions was greater than reductions seen at other facilities within the Baylor Health Care System where the TCP was not in place.
Warden, B.A., Freels, J.P., Furuno, J.P., & Mackay, J. (2014). Pharmacy-managed program for providing education and discharge instructions for patients with heart failure. *American Society of Health-System Pharmacists*, 71, 134-139. doi:10.2146/ajhp130103	• Quantitative, before-and-after, quasi-experimental study. • Conducted at a 560-bed academic hospital • Intervention group (n=35) received education and discharge instructions from a pharmacist. • Control group (n=115) had medications reconciled by physician and received discharge instructions from RNs.	• Pharmacist involvement was associated with increased adherence to the Joint Commission's core measures related to discharge instructions. • Significant reduction in 30-day all-cause readmissions (p = 0.02). • Reduction of 30-day HF readmissions did not reach statistical significance.
VanSuch, M., Naessens, J.M., Stroebel, R.J., et al. (2006). Effect of discharge instructions on readmission of hospitalized patients with heart failure. *Quality and Safety in Health Care*, 15, 414-417 doi:10.1136/qshc.2005.017640	• Retrospective study conducted at Saint Mary's Hospital from 2002-2003 • To determine whether there was a relationship between compliance with the Joint Commission's six components of discharge instructions and HF readmissions (n=782).	• Patients who received all six components of discharge instructions were significantly less likely to be readmitted for HF (p = 0.035). • Results obtained by gathering data from nursing documentation of discharge instructions.

Implications for Nursing

- TCPs are **nurse-led**, multidisciplinary programs that span from the time of hospital admission through the transition from hospital to home.
- The **bedside RN** has the important role of providing crucial education to HF patients.

Conclusions

- Hospitals that go beyond a basic discharge plan and focus on improving patients' transitions from hospital to home will have a greater impact on reducing readmissions.
- TCPs typically include:
  - A comprehensive patient assessment
  - Mechanisms to gather and share information across disciplines
  - Engagement of patients and family
  - Services during and after hospitalization coordinated by a master's-prepared nurse.
- Multidisciplinary teams and in-person communication in patients' homes are factors that predict program success.