



# Preventing Hospital Readmissions for Congestive Heart Failure Patients and Utilization of Different Education Techniques

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6 Acute Care

## Introduction

Congestive heart failure patients have high rates of readmissions due to several issues with noncompliance. The purpose of this review was to examine what education techniques were used during hospitalization and what other education avenues could be used to prevent readmissions and noncompliance, including outpatient services.

## PICO Question

**Population:** Congestive heart failure patients.

**Intervention:** Multidisciplinary educational approach.

**Comparison:** Educational methods utilized for inpatient and outpatient CHF teaching.

**Outcome:** To identify educational approaches that help in the prevention of readmissions in CHF patients.

**Question:** Which educational techniques or strategies most effectively prevent hospital readmissions?

## Methods

A literature search was conducted using EbscoHost and PubMed databases.

**Keywords:** *congestive heart failure education, telehealth and congestive heart failure, congestive heart failure hospital readmissions*

**Inclusion Criteria:** Articles within 10 years, inpatient hospitals, outpatient services, CHF patients

The initial search yielded 87 articles; 5 were included for this project.

## Results

Article	Methods	Results
Bradley, EH., et al, (2013).	<ul style="list-style-type: none"> <li>• Cross-sectional study of all hospitals that enrolled in either of 2 national QI.</li> <li>• Included 658 hospitals, 599 completed surveys, 532 enrollments in H2H, 55 enrolled STAAR, and 12 enrolled in both.</li> </ul>	<ul style="list-style-type: none"> <li>• 599 hospitals completed survey (91.0% response rate).</li> <li>• 14 hospitals (2.3%) excluded due to missing data.</li> <li>• 6 strategies lowered RA rates.</li> </ul>
White, M., Garbez, R., Carroll, M., Brinker E., Howie-Esquivel, J. (2013)	<ul style="list-style-type: none"> <li>• Prospective cohort study including 276 patients older than 65 years hospitalized with CHF over a 13 month period.</li> <li>• Patients educated using teach-back method.</li> <li>• Data on ability to recall education5al information while hospitalized and during follow-up appointments 7 days after D/C was collected.</li> </ul>	<ul style="list-style-type: none"> <li>• Patients correctly answered 75% of self-care teach back questions 84.4% of the time while hospitalized and 77.1% of the time during the follow-up telephone call.</li> <li>• Greater time spent teaching was significantly associated with correctly answered questions.</li> <li>• When used alone, teach-back method does not significantly reduce readmission rate.</li> </ul>
Anderson, CA., Deepak, JV., Amoteng-Adjepong, Y., Zarich, S, (2005).	<ul style="list-style-type: none"> <li>• Patients over 50 years of age with primary diagnosis of CHF.</li> <li>• Patients in the study group (n=44) received specialized inpatient and outpatient interventions.</li> <li>• The control group (n=77) received traditional inpatient and routine home care follow-up.</li> </ul>	<ul style="list-style-type: none"> <li>• The 6-month readmission rate in control group was more than 4 times that of intervention group for CHF.</li> </ul>

## Discussion

Over 500,000 new patients are diagnosed with CHF each year<sup>1</sup>. With the aging population growing, the number of patients with chronic conditions is also increasing. Hospital readmissions for CHF as well as other chronic diseases creates a huge impact on the healthcare system as well as on the patient. Finding ways to help reduce these readmissions is crucial to increasing a patient's quality of life as well as minimizing costs to hospitals, outpatient clinics, insurance companies, and patients.

## Conclusions

- CHF patients account for one of the largest group of patients with frequent hospital readmissions.
- Education, both inpatient and outpatient, can help minimize these readmissions.
- Combining multiple teaching modalities depending on a patient's learning preference has shown to be more effective in reducing readmissions than stand alone techniques.
- Piloting different techniques and tracking readmissions could be a good follow-up for our unit.

## References

- 1 Anderson, CA., Deepak, JV., Amoteng-Adjepong, Y., Zarich, S. Benefits of comprehensive inpatient education and discharge planning combined with outpatient support in elderly patients with congestive heart failure. *Congestive Heart Failure*. 2005; 11;6:315-321.
- 2 Bradley, EH., et al. Hospital strategies associated with 30-Day readmission rates for patients with congestive heart failure. *Circulation Cardiovascular Quality Outcomes by AHA*. 2013; 444-450.
- 3 Stromberg, A., et al. Nurse-led heart failure clinics improve survival and self-care behaviors in patients in patients with heart failure. *European Heart Journal*. 2003; 24:1014-1023.
- 4 White, M., Garbez, R., Carroll, M., Brinker, E., Howie-Esquivel, J. Is "teach-back" associated with knowledge retention and hospital readmission in hospitalized heart failure patients? *Journal of Cardiovascular Nursing*. 2013; 28;2:137-146.
- 5 Heart Diseases and Conditions; Findings from University of Pennsylvania in the Area of Heart Failure Reported. *Telemedicine Week*. 2013.