



## A systematic review of transitional-care strategies to reduce rehospitalization in patients with heart failure



Nancy M. Albert, PhD, CCNS, CHFN, CCRN, NE-BC, FAHA, FCCM, FAAN\*

Cleveland Clinic, 9500 Euclid Avenue, Mail code J3-4, Cleveland, OH 44195, USA

### ARTICLE INFO

#### Article history:

Received 15 February 2015

Received in revised form

16 November 2015

Accepted 2 December 2015

Available online 30 January 2016

#### Keywords:

Heart failure

Nursing care

Self-management

Advanced-care planning

Patient education

Transitional care

### ABSTRACT

The objective of this review was to evaluate existing transition-of-care models and identify common themes that may minimize exacerbation and rehospitalization, and improve quality of life for patients with heart failure (HF). HF is a significant burden in the United States and a common reason for recurrent hospitalizations. When multidisciplinary health care providers function as liaisons and educators during transition from hospital to home, they help prepare patients for life with chronic HF and mitigate the need for readmission. Systematic literature searches were performed to identify research papers relevant to transition-of-care themes in HF. Eight common themes were identified that can be applied to patients with HF to improve long-term outcomes. This paper emphasizes ways in which health care providers can implement theme-based transitional care, including providing patients and caregivers with practical skills and services that promote knowledge and engagement in self-care and stimulate active communication with health care providers.

© 2016 Elsevier Inc. All rights reserved.

### Heart failure overview, societal impact, and roles of the health care team

Heart failure (HF) is a complex clinical syndrome of signs and symptoms that are caused by defects in cardiac structure, function, or both, and ultimately leads to impaired peripheral circulation and organ oxygenation.<sup>1</sup> Approximately 6 million people  $\geq 20$  years of age in the United States have detectable HF and over 800,000 new cases are diagnosed annually. Prevalence is increasing and may exceed 8 million by 2030.<sup>2</sup>

Both HF-reduced ejection fraction (HF-rEF;  $\leq 40\%$  ejection of left ventricular blood volume) and HF-preserved ejection fraction (HF-pEF;  $\geq 50\%$  ejection)<sup>3</sup> represent a significant source of morbidity and health burden. Although 30-day unplanned rehospitalization rates for HF exhibited a downward trend from 2009 to 2012, postdischarge emergency department and observation-unit visits trended upward.<sup>4</sup> In an analysis of clinical-registry data, adults 65 years of age or older who were discharged following hospitalization for acute decompensated HF (ADHF) had 36.0%–38.3% 1-year mortality rates and 65.8%–67.9% 1-year rehospitalization rates.<sup>5</sup>

Nurses and other clinically based health care providers, as a part of a multidisciplinary team, can play a critical role in HF care by optimizing the assessment, management, and evaluation of a patient's current status and care during transitions from one setting to another, especially from hospital to home. For example, patients with HF may present with atypical symptoms (severe cough, gastrointestinal discomfort, and neurological effects<sup>1,6</sup>) and/or may not recognize traditional HF signs and symptoms (dyspnea and fatigue) that mimic other conditions. Thus, patients may not be aware of worsening status or understand the rationale and importance of self-care, ongoing monitoring, and care coordination. As a result, patients require ongoing education, especially in the self-assessment of new or worsening HF signs and symptoms, and adherence to self-care maintenance recommendations.<sup>7</sup> Nurses and other health care providers have pivotal roles in bridging these potential gaps, when transitioning patients from one setting of care to another.<sup>8,9</sup>

In this paper, common themes from existing transitional-care models were adapted and applied to patients with HF. The aim is to provide guidance to health care providers in developing and implementing appropriate systems and processes that may promote a reduction in ADHF and both all-cause and HF-specific rehospitalization.

### Methods

Systematic literature searches were conducted to identify articles relevant to HF transition of care. Databases searched included

Conflict of interest: None.

\* Tel.: +1 216 444 7028; fax: +1 216 445 1776.

E-mail address: [albertn@ccf.org](mailto:albertn@ccf.org).

PubMed, Google Scholar, MEDLINE, CINAHL, EMBASE, and the Cochrane Library. Keywords used as search terms included transition of care, care transition, transition after hospitalization, transition for HF patients, care continuum transition, transition interventions, and outcomes of transition of care. Searches were limited to English-language articles published from 1990 through September 2015. Articles were only included in this review if they had at least some patients with HF, had at least 1 transition component from one setting to another, and evaluated interventions in North America. In addition to the articles identified through systematic searches, other references were included that were identified through manual searches of selected articles for pertinent references.

## Results

Articles identified as part of the systematic literature searches are summarized in Table 1. Based on a thorough review of this literature, several transitional care models/programs were developed to manage the discharge processes for patients with chronic diseases, including HF.<sup>8</sup> Although each transitional care model is unique and not all programs were associated with positive patient outcomes, many that used a bundled approach led to reduced rehospitalization<sup>10–14</sup> and emergency care,<sup>15</sup> increased post-discharge follow-up,<sup>15</sup> improved quality of life,<sup>16</sup> and cost savings.<sup>14–16</sup> Of the potential transitional care benefits, reducing rehospitalization is an important goal because multiple HF-related readmissions within 6–24 months of hospitalization were associated with increased morbidity and mortality.<sup>17</sup>

Based on these findings, 8 common themes of transition of care were derived from many models, including the Bridge model,<sup>18</sup> the Care Transitions model,<sup>11,19</sup> the Enhanced Discharge Planning Program (EDPP),<sup>20</sup> Partners in Care for Congestive HF (PCCHF),<sup>21,22</sup> Postdischarge Care Transition (PDCT),<sup>23</sup> Project Better Outcomes for Older Adults Through Safe Transitions (BOOST),<sup>24</sup> Project Reengineering Design (RED),<sup>15</sup> State of Action on Avoidable Rehospitalization (STAAR),<sup>25</sup> and the Transitional Care model.<sup>16</sup> The reported features of each transitional care model (see Table 1) did not include all 8 themes. Outpatient follow-up and delivery of patient education to monitor and manage symptoms were prominent features, and advanced care planning was the least often discussed in intervention descriptions; however, most features were generally supported, even if not discussed in detail. Further, all 8 themes can be applied to patients with HF to help minimize exacerbation of symptoms, reduce rates of rehospitalization, and improve overall quality of life. These 8 themes are discussed in the sections that follow, as well as in Table 2.<sup>6,26–40</sup> Themes are not presented in a specific priority or order, and currently, there is insufficient evidence to recommend one practice over another. Rather, all themes should be considered during individualized transitions of care in patients with HF.

### Theme 1: planning for discharge

Discharge planning should begin on the day of hospitalization because HF management is rarely optimized during the hospital period. Guideline-directed medications are generally initiated (or maintained, if previously prescribed) but not always titrated to target doses during the ADHF period, and often doses are reduced and require up-titration postdischarge.<sup>41</sup>

Presence of jugular venous distension, pulmonary rales, and paroxysmal nocturnal dyspnea on admission were markers of worse rehospitalization rates in a single-center, registry-based analysis.<sup>42</sup> Although no statistical models are available that risk-stratify patients as being at low or high risk of HF

rehospitalization,<sup>43</sup> health care providers can assess for the above trio of HF signs of congestion (Table 2) and, if present at admission, understand that patients may be at higher risk for clinical deterioration after discharge. In one report of over 1 million Medicare beneficiaries with ADHF, when 30-day rehospitalization rates were studied based on time from discharge to readmission, 31.7% of patients who were rehospitalized did so within 7 days of discharge, and 61.0% who were rehospitalized did so within 15 days of discharge.<sup>44</sup> Thus, discharge planning should include health care team discussions with patients about the rationale for early (within 7–14 days) follow-up. During hospitalization, communication of signs and symptoms of worsening HF may help patients recognize clues that they previously did not connect to clinical HF deterioration.

### Theme 2: multiprofessional teamwork, communication, and collaboration

Team communication includes health care provider communication with multidisciplinary team members (handoff), patients, and family members (or other informal supporters or caregivers). Communication failures among outpatient providers of care and patients (particularly in follow-up and tracking of patients) were associated with delays in diagnosis and treatment,<sup>36</sup> and uncoordinated care among providers was associated with patient perceptions of conflicts among providers.<sup>45</sup> When health care provider handoff communication was assessed in a qualitative study, researchers found it to be complex and variable, and social interactions were sensitive to context and cultural norms.<sup>46</sup> To ensure complete and standardized information transmission during handoffs, especially at hospital discharge, checklists may be a useful tool for ensuring a minimum standard of transitional care to facilitate patient safety and clinical outcomes.<sup>28,41</sup> A checklist summarizes events to be completed and may include a comment section or blank area for individualization of care. Hospital settings are ideal for the use of checklists as the team may be large, multidisciplinary, and have incongruent schedules, limiting in-person communication of the sequence of assessment and management expectations developed in the plan of care. Different team members may have specific communication roles and may serve as coordinators or gatekeepers, ensuring that all checklist items are completed prior to hospital discharge. Electronic handoff, discussed in Theme 3, may be an efficient method of implementing a checklist.

Effective communication between health care providers and patients/families is critical during the transition from hospital to home because patients often have conflicting feelings of relief, anxiety, and wariness, as attention from the health care team is suddenly removed.<sup>47</sup> A structured needs assessment may help tailor communication to individual patient needs, facilitate transitional care, and augment clinical outcomes. Coordinated communication techniques that health care providers can use to determine the most effective approaches for each patient are included in Table 2.<sup>28–31,48,49</sup> In hospital settings, coordination of care is often achieved using multidisciplinary rounds or huddles. Multidisciplinary rounds involve brief, focused presentations about patients' current status followed by a review of electronic medical records (EMRs) and/or team member discussion of priorities, issues, and care plans.<sup>50</sup> When time was taken to facilitate concurrent feedback and promote individualized, global, systematic plans of care that matched evidence-based guidelines, rapid and sustained process improvement was fostered and was associated with decreased HF mortality.<sup>50</sup>

Coordinated- and collaborative-care delivery is further complicated by individual patient issues and preferences, changes in patient

# دانلود مقاله



<http://daneshyari.com/article/2651137>



- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات