

COMMENTARY

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# Improving chronic disease self-management in high-risk patient populations

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## Abstract

Chronic diseases can be prevented, controlled, or modified through healthy behaviors, and these changes have the potential to produce major transformations in the current health care system. Innovative approaches to execute effective transitional care to reduce health care costs, decrease re-hospitalization, and improve quality care. Studies have indicated the use of health coaching as a potential method for improving self-management, with the aim of improving compliance with health behaviors and sustainable lifestyle changes. Post-discharge follow-up using appropriate transitional models can influence the likelihood of patient's management of care at home and can help determine what re-admission prevention programs can be effective. Gathering information from patient-centered, evidence-based efforts conducted for better self-management of chronic disease and effective transition from hospital to home. Hospitals should consider using a quality improvement infrastructure that incorporates patient perceptions, mental and physical status, transition coordination, and self-management sessions that are patient-centered for implementation to ultimately reduce the risk of re-hospitalization in patients who suffer from chronic conditions.

**Keywords:** Health coaching, Transitions of care, Re-hospitalization, Re-admission, Self-management

## Background

Chronic illnesses stem from poor health behaviors over extended periods and are prevalent among various populations throughout the United States [1]. Patients with chronic medical conditions often have significant difficulty with chronic disease management [1]. The burden of chronic disease is estimated to cause over three-quarters of all deaths by 2030, and will continue to negatively impact the healthcare system, reduce expected life span, and quality of life [1].

Hospital readmission rate reduction is part of a potential solution proposed by hospital CEOs responding to an annual survey conducted by the American College of Healthcare Executives [2]. The Centers for Medicare and Medicaid Services have provided 500 million dollars to fund community-based care transition programs,

which can help reduce readmission rates [3]. There are multiple conditions that result in hospitalization and many patients are at high risk for re-hospitalization post discharge, particularly within 30 days. Several factors are responsible for increased risk of re-admission, such as lack of social support, multiple co-morbidities, poly-pharmacy, low socioeconomic status, and lack of appropriate post hospitalization follow-up [4]. Transitional models have the ability to influence proper management of care at home and ultimately assist in preventing re-admission [4].

## Transitions of care

Transitional care consists of a plan for patients designed to ensure coordination and continuity of care as people transfer between locations or different levels of care [5]. Rennke et al. have shown the use of transition coaches successful in reducing 30-day readmission rates in managed care systems, capitated delivery systems, and Medicare fee-for-service individuals [4]. Wee et al. found a reduction in hospitalization and emergency room visits

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post discharge, while at the same time improving quality of life and self-rated health [5]. Few studies have been conducted to test the effectiveness of transitional care on individuals who are at high-risk for re-hospitalization, particularly socioeconomically disadvantaged patients, who face communication barriers due to low literacy levels, mental health and substance abuse disorders, limited social support, and when to seek timely outpatient care [6]. Of note, those poor mental health, however, with ample social support and appropriate literacy levels may also benefit from transitional care and prevent re-hospitalizations.

### Health coaching

Health coaching is tailored to the patient and consists of medical consultations, education, motivation, goal setting, health care provider interactions, and shared decision-making [1]. Goldman et al. were able to see reduced readmission rates when implementing an intervention in conjunction with patient education, care planning, and telephone calls for post discharge in-hospital patients [7]. Moreover, telephone-based health coaching models have been shown to produce decreased diabetes symptoms, lower depressive symptoms, and improve cholesterol levels [1]. The telephone-based health coaching method has also found changes in health behaviors, higher patient health ratings, social functioning, self-efficacy, perceived health, reduced health provider contacts, hospitalization rates and overall health care costs [1]. Changing illness perceptions for chronic disease patients can improve recovery and patient outcomes [8, 9]. There are multiple risk factors associated with readmission and the use of health coaching to target poor quality of life and illness perception has the potential to assist with self-management behaviors [1].

Assistance from every team member employing strategies for patients to receive quality care on time, understand how to make the most out of a physician visit, medication adherence, and most importantly, reduce avoidable readmission, have the potential to provide effective transition from hospital to home. Having dedicated time with transition coordinator can allow patients to access resources not attainable in inpatient setting, where the primary care physician or specialist is pre-occupied with regular appointments. Furthermore, in a team setting, approached to maintain continuity in the transitional care could include scheduling regular primary care visits or providing phone calls at structured intervals. These plans would help efficiently manage the issues associated with transitional care, such as poor continuity and gaps that occur between patients and the health care system.

Uninsured hospitalized patients have a difficult time obtaining primary care post-discharge and are caught in a vicious cycle of frequent emergency room visits, acute preventable hospitalizations, and poorly managed chronic conditions due to no insurance or accepting providers. It is important to determine what modifications each patient needs to consider when implementing a self-management program because transition coordination and other clinic or hospital assistance cannot correct the problem to readmission rates and poor health outcomes alone. Health coaching allows disease management programs to be customized to the patient and similar programs have been successful in the past [4].

### Conclusions

Preventive measures, such as self-management, awareness of proper health behaviors, medication adherence, and regular doctor's visits, can potentially help vulnerable individuals successfully control their health conditions. Various other factors including, socioeconomic status, literacy levels, hereditary influences, affect many of these patients' quality of life, past medical history, and social history. Implementation of quality improvement models that incorporate patient perceptions, transition coordinators, and patient-centered chronic disease self-management sessions have the ability to reduce the risk of re-hospitalization for illnesses that have the potential to be managed in an outpatient setting. Future studies should collect demographic data on income and education to see if tailoring health coaching and transition care planning need to incorporate this information during sessions.

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### Author's contributions

AP drafted, reviewed, and approved the final manuscript.

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