

Title:

Advanced Practice Registered Nurse-Led Transitional Care Program to Prevent Hospital Readmissions

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Session Title:

Rising Stars of Research and Scholarship Invited Student Posters

Keywords:

Heart failure, Hospital readmissions and Transitional care

References:

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Abstract Summary:

Advanced practice registered nurse led home-based transitional care project embedded in local community through partnership with accountable care organization reduced re-admissions among heart failure patients within 30 days of hospital admission and increased quality of life, self-care behaviors and satisfaction.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to analyze the significance and outcomes of a home-based transitional care program led by an advanced practice registered nurse	Report project outcomes specific to readmission rates, health care costs, quality of life metrics and patient satisfaction.
Describe community embeddedness of DNP projects at Arizona State University College of Nursing & Health Innovation through collaboration with a local accountable care organization (ACO).	Describe collaboratives between the ACO, the college, and local primary care practices and discuss steps taken to develop relationship with ACO and primary care practice

Abstract Text:

Purpose: The purpose is to reduce or prevent readmissions among heart failure patients and increase quality of life (QOL), self-care behavior (SCB) and satisfaction through an advanced practice registered nurse (APRN) led transitional care program (TCP) in collaboration with an Accountable Care Organization (ACO).

Background: Hospital readmissions place a heavy financial burden on patients, families, and health care system. One of the most frequent reasons for hospital readmissions is heart failure (HF). Heart failure patients often do not receive the level of care required for a safe transition from hospital to home, which increases the incidence of readmission, escalates healthcare costs, and reduces quality of life. Repeated admissions have a negative impact on the patient’s life, self-management, and functional status. It also aggravates the disease process, relinquishes hope, and causes suffering to the patients and their families. Approximately, one in five Medicare beneficiaries is readmitted within 30 days of hospitalization. These are unplanned hospitalizations and 75% of these admissions could be prevented saving approximately \$17 billion dollars. In an analysis of Medicare fee-for-service claims data from 2007-2009, the 30-day readmission rate for HF patients was 24.8%. As part of discovering innovative ways to reduce total cost per patient, the *Medicare Shared Savings Programs* (Section 3022) was established. In this program, Accountable Care Organizations (ACO) are required to submit performance data related to care transitions and reimbursement is based on quality of care and patient outcomes. As part of the data collection and analysis under the Medicare Shared Savings Program (MSSP), an ACO in the

southwestern United States (U.S.) has identified a need to improve the hospitalizations and readmission rates. A target practice site was identified as having increased hospital readmissions above the ACO benchmarks. In this site, the total number of Medicare patients is 2077; there were 36 and 40 all-cause readmissions in 2014 and 2015 respectively. Currently the office has same day appointments available for sick patients, 24-hour triage line; pre-discharge interviews and post discharge home visit by a case manager to assess needs of the patient within the home setting. With these available resources, there is a communication gap between the provider and the patients. Providers find they are unable to provide continuity of care that the patients need for a safe transition out of the hospital and prevent the incidence of readmission. The incidence of readmissions can be reduced or prevented by providing a safe transition through care coordination and enhanced communication. Research demonstrates that the implementation of APN-led home visits along with the telephonic follow-up are cost effective and can be utilized for reducing readmissions among HF patients.

Methods: After the approval from Arizona State University institutional review board, a program was designed with an ACO and carried out in a family practice clinic with a group of seven HF patients older than 50 years who were at risk of readmission. Interventions included weekly home visit with supplemental telephonic calls by the APN student along with a physician assistant for 12 weeks. Readmission data was collected. QOL and SCB were measured using “*Minnesota Living with Heart Failure Questionnaire*” (MLHFQ) and “*European Heart Failure Self-Care Behavior Scale*” respectively. Data was analyzed using descriptive statistics and the Friedman Test.

Outcomes: There were no hospital readmissions at 30 days post discharge (SD = .00) and the interventions demonstrated a positive effect on QOL, self care management and satisfaction ($\chi^2 = 30.35$, $p=.000$). The intervention had a large effect on the outcome variables resulting in an increase in QOL and SCB scores post-intervention (ES= -1.4 and -2 respectively).

Limitations and Implications: Small participant numbers was one of the limitations of this project and it was due to limitations of the selection criteria and lack of patient-interest. The project mainly focused on HF patients and was designed for only Medicare beneficiaries due to limited data availability at the ACO regarding the hospitalizations and ER visits. The pool of patients could have been larger if more types of chronic conditions and insurance coverage were included as eligible for the project. Reimbursement was another challenge encountered throughout the program. Medicare will pay the provider for transitional care services once in 30 days per patient following a discharge. Home visit billing codes cannot be used for a family practice clinic since the practice is not credentialed to do home care. Although, research indicates the benefit of weekly home visits for the first few weeks, it is not in practice due to billing limitations. Some patients did not require 12 home visits; therefore the project could have been designed for a minimum of 1-2 home visits and as needed for 12 weeks.

Conclusions: Doctoral projects can be embedded in local communities through partnerships with growing ACOs to improve the quality of care in the community as well as to promote sustainable changes in the organization and population. TCP designed with an ACO, carried out in a primary care setting has a positive effect on reducing hospital readmissions and improving QOL, SCBs, and patient satisfaction among HF patients. TCPs are not revenue generating at outset due to reimbursement issues, however future considerations of a multidisciplinary team approach with convenient workflow may be explored for long-term feasibility and sustainability.

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