

#### Reducing Heart Failure Readmission: A Seven-Day Post Discharge Transition Protocol

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This Project is in partial fulfilment of the degree requirements for the Doctor of Nursing Practice at Touro University Nevada

#### **DZ1** Please add Dr. tarrant as AM

Denise Zabriskie, 2/10/2021

### Introduction

- Heart failure affects five million Americans annually and accounts for one million admissions.
- The project aimed to evaluate patient's compliance of seven-day post discharge appointment by implementing a post-discharge transitional protocol by cardiology providers at a South Florida cardiology clinic
- Integrated care provisions were mainly coordinated by advance practice nurses from the impatient phase through their discharge to home
- This DNP project proved to improve the adherence of a seven-day post-discharge follow-up appointment through the implementation of a heart failure transition care protocol.
- The present quality improvement DNP project contributes significantly to reducing heart failure-related hospital readmissions.
- The interventions implemented in this project exceeded the typical type of care provided in our current health care system. The approaches prove that individualized care while considering patient literacy, language, and anticipating barriers improved compliance of the protocol and should be considered in practice.

Per the rubric: Presentation includes a brief overview of the main points of the project including project aim, what was achieved, and practice pearls.

Denise Zabriskie, 2/10/2021

## Background

- HF affects an approximately five million Americans and accounts for at least one million hospital admissions every year (Chamberlain, Sond, Lau, & Mahendraraj)
- With the rising prevalence of HF, we can expect an associated rise in HF healthcare expenditures (Zohrabian, Kapp, & Simoes, 2018).
- Many of these re-admissions are preventable by 84%, which could save stakeholders finances to a tune of \$600 million (Medicare Payment Advisory Commission, 2017).
- The Affordable Care Act, 2010 requires CMS to employ financial penalties for facilities with an excess number of re-admissions (Joynt, & Jha, 2017)



#### Please provide references Denise Zabriskie, 2/10/2021 DZ3

## Problem/Purpose Statement Project Question

#### **Problem Statement**

• Heart failure is among the topmost poorly managed chronic diseases in America and the world in general This poor management results in post-discharge complications among patients and may be the result of the application of single interventions or non-specific strategies that do not yield many results in terms of reducing re-admissions (Kripalani, Theobald, Anctil, & Vasilevskis, 2014).

#### Purpose Statement

• The purpose of this project is to show that the reduction of hospital re-admissions for heart failure patients is achievable through the proper and efficient transition of care approach that involves procuring a follow-up appointment as part of the discharge plan.

#### **Project Question**

• Will the implementation of a post discharge HF transition protocol for cardiology providers improve compliance with the post-discharge seven-day follow up appointment?

## **Project Objectives**

- 1. Develop a post-hospital discharge protocol for patients diagnosed with HF that will be implemented by all providers and front desk personnel in the cardiology clinic.
- 2. Develop written educational tools for patient education, tailored to both English and Spanish language.
- 3. Educate the cardiology providers and office staff to the new protocol and their perspective roles through inoffice training.
- 4. Improve the patient compliance in keeping the seven-day follow up appointment.
- 5. Evaluate compliance of providers in protocol utilization through a retrospective chart review.



### **Review of Literature**

- The aim of the literature review is to evaluate the efficacy of different transitional care interventions that attempts to reduce HF readmissions in inpatient and outpatient settings.
- The essence of the search strategy used in the review of literature were various online databases that yielded multiple studies in support of the PICOT question.
- The online databases of interest included: Cumulative Index of Nursing and Allied Health Library (CINAHL), Cochrane Library, PubMed, Agency for Healthcare Research and Quality (AHRQ), and American Heart Association (AHA).
- The major theme of the literature review



Can you elaborate on the common themes? Per the rubric Denise Zabriskie, 2/10/2021 DZ4

## Review of Literature (con't)

Subthemes were focal to individual as well as multi-interventional approaches with emphasis on the impact of self care education, post discharge follow up call and seven-day post hospital follow up.

- Heart failure selfcare education
- Post discharge phone call follow up
- Seven-day post hospital follow up



### **Theoretical Model**

• The Care Transition Model was the theoretical framework used to inform this QI project. This model refers to the transfer of a patient with a chronic or acute illness from one care setting to another or between practitioners due to changes in care and condition needs. The goal of the model is to enhance care outcomes while curtailing the costs of health care systems (Smith, Ashok, Sydney, Wines, & Texeira, 2014). The care transition framework focuses on the recognition of patient health goals and the measures that should be taken to ensure the best health outcome (Hung, Truong, Yakir, & Nicosia, 2018). The framework is an essential element to guide the seven-day post-discharge transition period protocol in reducing heart failure admissions

## **Project Design**

- The principles of the framework could be applied when developing a post-hospital discharge protocol for patients diagnosed with HF.
- The project site is a cardiology clinic located in South Florida. The practice raised interest in the implementation of a HF protocol as a result of the increase in readmission.
- The population of interest includes all the medical providers and ancillary staff, the indirect population of interest in this project pertains to patients with heart failure
- Stakeholders with the highest interest are the owner and administrative team
- The Heart Failure protocol to be implemented is a is a 20-item checklist tool



Please change the heading to Project Design. Here is where you discuss the setting, population of interest, Denise Zabriskie, 2/10/2021

## Plan & Implementation

- The care transition theory can be applied in the project implementing the seven-day post-discharge transition period protocol in reducing heart failure re-admissions
- Implementation involved all providers and front desk personnel at the cardiology clinic.
- The goal was to enhance patient participation and assessing the consent of providers in protocol utilization through a retrospective chart review
- The process implementation tenets involved using the care transition framework when discharging chronically ill patients from the hospital.
- The project lead conducted data collection of the three sections of the protocol with front office staff assistance.

The outcome would be an increase in keeping the follow-up appointment at the cardiology clinic.

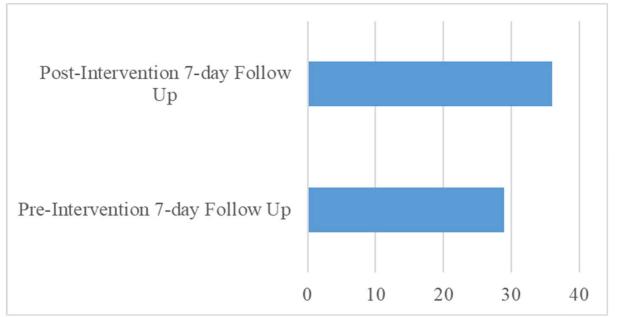
## **Findings**

- The sample comprised 44 HF patients with a mean age of 73.61 (SD = 13.37), of whom 14 were identified as female (30 male).
- Fisher's Exact Test was used and showed there was a statistically significant association between existing practice of seven-day post-discharge appointment with the post-intervention of a seven-day post-discharge appointment for all HF patients,  $\chi^2$  (1; N = 44) = 27.01, p < .001.
- Figure 1 presents the frequencies of the pre-intervention seven-day post-discharge and post-intervention seven-day post-discharge.
- Providers complied with the protocol approximately 68.72% of time (95% confidence interval = 64.40, 73.04).
- Figure 2 displays the distribution of protocol compliance by providers.



## Findings (con't)

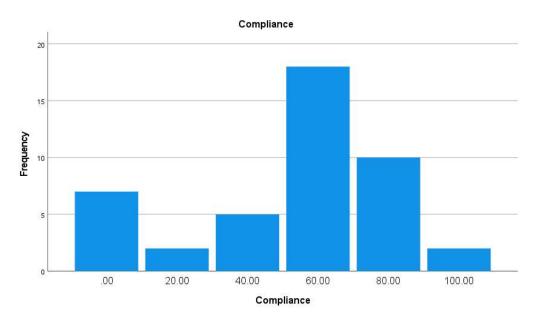
• **Figure 1** Frequencies of Pre-Intervention and Post-Intervention Seven-Day Post-Discharge Follow Up Appointment





## Findings (con't)

• **Figure 2** Frequencies of Percentile Protocol Compliance of Providers. The x-axis along the left is the frequency of provider compliance with the protocol while the y-axis contains the percentile values of protocol compliance.





### Dissemination

- Disseminating of the Doctor of Nursing Practice project's outcomes is essential for enhancing its value to the target audience and it's sustainability
- The project's findings will be disseminated to the Touro University Nevada's faculty and student peer as well as through DNP repository submission
- Introduced in the form of a poster presentation to The Heart Failure Society of America (HFSA) Scientific Meeting 2021 September 1—13, 2021, Denver.
- Foster cardiology providers, and administrative staff continued professional development to equip them with essential skills for implementing the project.



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# Questions??

