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Nurse Practitioner Navigator Policy and Procedure Protocols in Private Practice

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Walden University
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Abstract

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Project Submitted for the final project

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Abstract

In 2010, the Patient Protection and Affordable Healthcare Act (PPACA) implemented changes to reduce healthcare spending that incorporated Centers for Medicare and Medicaid (CMS) incentive programs to reduce 30-day readmission rates in seniors with heart failure. This project includes a policy and procedure for private practice using a nurse practitioner navigator (NPN) led multidisciplinary team (MDT) for the patient-centered medical home (PCMH) to improve communication between hospitals and PCMH to decrease readmission rates in seniors with heart failure (HF). This practice change will provide an implementation and evaluation plan along with plans for future expansion. Meetings were held twice weekly along with the use of Skype when team members were unavailable. A literature review explored methods to improve communication between hospitals and PCHM to reduce readmission rates. Thirty-two peer-reviewed articles were identified in a search of CINAHL and ProQuest Nursing and Allied Health Source databases that served as the primary pool of evidence used for this project, supplemented by context considerations provided by the project team. Evaluating the evidence based research provided support for this project using a NPN led MDT to reduce readmission rates. Coleman's transition of care (TOC) model was used as a framework for both the policy and procedure to integrate patient, provider, and environmental contexts, support health care policy changes, and reduce health care spending. This scholarly project supports the role of DNPs as leaders in the medical field working to translate existing evidence into policy and practice and lead interdisciplinary health care teams.

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Dedication

I would like to dedicate this project to my husband (Dean) and family (Kirk, Kimberly, and Kevin) who continue to support and encourage me throughout this journey. A special dedication to my son, Kirk, who encouraged me to reach for my dreams but, tragically passed away before he had the chance to see me complete the process.

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Section 1: Nature of the Project

Introduction

Heart failure (HF) in seniors costs insurance companies and governmental agencies, such as Centers for Medicare and Medicaid (CMS), an average of $32 billion each year (CDC, 2013). According to the Centers for Disease Control (CDC), this cost was related to medical services to treat HF patients, the cost of their medications, and missed days of work by the patient. Heart failure and cardiovascular disease are two of the five leading causes of mortality in seniors more than 65 years old (Friis, 2014). In 2013 the CDC estimated that one out of nine deaths was directly related to HF and 50% of those diagnosed with HF died within the first 5 years of confirmed diagnosis. The CMS and the Department of Health and Human Services (DHHS) have implemented protocols designed to reduce HF and strokes by 2017 through an incentive program for hospitals and private practices addressing the current health disparities that promote these costly diseases (CMS, 2013). One of these incentives programs thru CMS rewards hospitals and private practices for reducing readmission rates in seniors with HF within 30 days of hospital discharge. While hospitals have developed disease management teams to help reduce readmission rates in accordance to the recommendations set by CMS and the DHHS, once patients are discharged, these patients are no longer under the management of the hospital teams. Private insurance agencies have developed disease management teams as recommended by CMS and the DHHS but, these teams are dependent of primary care provider (PCP) referrals. Adding to the risk of early readmission rates is the failure of hospitals to communicate to the PCP that their patient

has been discharged from the hospital. This failure to communicate often leads to a gap in the transition of care as patients are discharged home.

The Gross Domestic Product (GDP) indicated that healthcare and governmental agencies in the United States spent more than $2.5 trillion in 2009 in health care on patients with chronic conditions (Nash, 2011). This amount is expected to increase by 20.3% by 2018 unless the health care industry is able to improve outcomes and quality of care for these patients (Nash, 2011). While chronic conditions have placed a major impact on the health care system, the baby boomer population is adding to this burden as they enter their senior years creating additional impacts on an already impacted health care system.

In an effort to reduce health care spending, in 2012 CMS implemented the meaningful use (MU) incentive program targeted at reducing readmission rates in seniors with HF within 30 days of hospital discharge (CMS, 2012). These incentives are a part of the PPACA (PPACA, 2010; Nash, 2011). The incentive programs recommended by CMS and DHHS have created challenges for hospitals and insurance provider agencies as they look for methods to reduce readmission rates in this challenging population.

In the senior population, HF is one of the top three diagnoses leading to readmission within 30 days of discharge that created additional impacts on health care spending (Lagoe, 2012). For hospitals that provided quality of care showing a reduction in readmission rates within 30 days of discharge, the MU incentive program rewards them for better care; while, those that fail to comply are penalized with a reduction in

reimbursements (VanBooven, 2013). The goal of the 30 day rule by CMS, as well as the reimbursement changes was to address and improve the following factors: (a) patients discharged properly with proper information, (b) methods to improve compliance with treatment programs, (c) improved transition of care from hospital to primary care provider, (d) improved outside caregiver instructions, and (e) reduced medication errors (VanBooven, 2013). The ultimate goal of the CMS MU incentive program was to reduce health care spending for all populations especially those at greatest risk.

As part of the CMS new patient care model set by the PPACA beginning in 2012, the DHHS secretary set forth a plan to develop national voluntary pilot programs encouraging the healthcare industry (hospitals, doctor offices, and post-acute care) to reduce readmission rates and healthcare spending through bundled payments (DHHS, 2014). In order to achieve this goal, the healthcare industry was encouraged to develop programs for the chronically ill patients through improved services incorporating physician and nurse-practitioner directed home-based primary care teams (DHHS, 2014). Starting in 2012, the MU incentives were adjusted based on the percentage of potentially preventable Medicare readmission rates such as those seen in seniors with HF (DHHS, 2014). A quality metric MU incentive program was recommended by CMS for the development and implementation by hospitals and private insurance agencies for chronic conditions programs, such as the HF teams, in order to reduce readmission rates thereby avoiding potential penalties and reducing health care spending.

Background

Hospitals and PCMHs in California have made improvements in treating seniors with HF; however, health care spending continued to rise. In August 2012, CMS regulations reduced payments up to 1% for more than 2,200 hospitals, which equates to about two-thirds of the facilities in the United States (Fiegl, 2012). In 2013, hospitals received an estimated $300 million in penalties due to readmission rates, and for those that do not improve; penalties were increased to 2% in 2014, and 3% in 2015. In protest to penalties by CMS, hospital administrators disagreed with penalties they have no control over after patients are discharged (Fiegl, 2012). Hospital administrators further argued that factors such as socioeconomic variables, patient access to follow up care, patient access to health care services in general, ability to afford medications, and availability of their primary care providers should be taken into account when evaluating reasons for readmission rates (Fiegl, 2012). Additionally, these penalties hurt hospitals that service poorer communities that do not have the same access to treatments seen in middle to upper socioeconomic communities.

When evaluating the patients enrolled in the Medicare fee-for-service programs, HF continues to be the number one reason for the readmission and hospitalization rate of 26.9% within 30 days of discharge (Jencks, 2009). According to the CMS Medicare Hospital Quality Chartbook, the median hospital's 1 year risk standardization readmission rate (RSRR) for July 2009 to June 2010 was 11.4%, an increase to 11.9% for July 2010 to June 2011, and a decrease to 11.7% from July 2011 to June 2012. These

numbers have shown little change in 30 day mortality rates for HF patients after readmission.

How does the medical community strive to reduce readmission rates in seniors with HF? Hospitals and insurance provider agencies have been working to develop chronic condition programs, such as HF programs, with the goal of reducing readmission rates and health care spending (CMS, 2103). Some of these programs include transition of care teams, PCMH programs, hospital cardiac team programs, re-engineered discharge program (RED), transforming care at the bedside program, and nurse navigators (AHRQ, 2015). Many of these programs are funded by CMS in an effort to reduce the high cost of readmission rates in patients with HF, pneumonia, and heart attacks (ARHQ, 2015). However, while many of these programs exist in the hospital structure, once the patient is discharged; the hospital was no longer responsible for managing their care. The care of these high risk patients transition to their PCP who was dependent of hospitals communication regarding patient discharge or the patients ability to schedule follow up appointments. This area of the transition of care from hospital to home was considered one of the weak links in the care transition that often resulted in readmission to the hospital within the 30-day rule set by CMS as a result of poor communication between hospital, provider, and patient (Graham, 2013; Worth, 2014).

The CMS have set a goal of a 20% decrease in readmission rates and are imposing stronger penalties on hospitals with higher than average readmissions (Graham, 2013; Rau, 2014; Worth, 2014). According to Worth (2014), CMS penalized 2,610 hospitals who had an 18% or greater increase in readmission rates or two million patients

within the 30 day discharge window. These readmissions cost Medicare approximately $26 billion annually with estimated $17 billion that could have been prevented (Worth, 2014). Patient centered medical homes offer promise as they focus their attention on the transition of care at hospital discharge to home (AHRQ, 2015). These potentially preventable readmissions require further analysis and the consideration of post discharge programs to help reduce readmissions.

Problem Statement

Heart failure continues to be one of the top three readmission diagnosis within 30 days of discharge for seniors (Jencks, 2009). The reason for readmissions related to lack of follow up care within seven days of discharge with their PCP or specialist. Hospitals strive to meet the CMS recommended guidelines through inpatient disease management programs; however, once discharged, the patient was no longer under the care of the hospital team but was referred to their PCP for follow up management of their disease process. Patients faced many challenges as they tried to schedule follow up appointments with their PCP within the seven days of discharge (Hersh, 2013). Many of these challenges were lack of understanding the importance of early follow up care, dietary restrictions, and medication errors (Hersh, 2013). This gap in care often creates further complications when hospitals adjust patient medications; yet, the primary care provider was not aware of medication changes leading to exacerbation of the chronic condition and adverse drug reactions followed by readmission to the hospital. This gap in care from hospital discharge to home was further enhanced by a lack of policies and procedures in the PCMH bridging the care for patients as they are discharged home.

The problem addressed in this project was the readmission rates of seniors with HF due to a failure in the transition of care from hospital discharge to home. According to Jencks (2009), this failure in the transition of care was related to the exacerbation of HF as a result of patients not being seen within the 7 day post discharge window by their PCP as recommended by CMS resulting in early readmission rates. These recommendations set by the CMS MU incentive program encourages method to improve communication between hospitalist and PCMHs to help reduce readmission rates.

Evidence of the Problem

Heart failure is one of the most common causes of readmission rates within 30 days of hospital discharge and costs the United States health care systems millions annually (Jencks, 2009). Efforts to reduce health care spending are a high priority in the United States, as the cost of health care continues to rise along with higher mortality rates and poorer outcomes (Nash, 2011). Methods to reduce health care spending included the development of hospital based diseased management teams designed to begin the educational progress in the hospital with close follow up care by the patient's PCP upon discharge; thereby, bridging the gap in the transition of care from hospital to home. The implementation of disease management teams within the local hospital structure is part of the CMS MU incentive program to reduce readmission rates and avoid penalties for readmissions within 30 days of discharge; however, once the patient was discharge; the hospital no longer had the ability to follow the care these patients guaranteeing the patients are compliant and seen within the 7 day post discharge recommendation (CMS, 2012). The development of a policy and procedure for the PCMH to improve

communication between hospital and PCMH to reduce readmission rates during the transition of care will help reduce readmission rates while continuing the process of self-care management for the patient. The advantage to a policy and procedure in the transition of care allowed for a steady continuation of care from the moment of hospital discharge to home through improved communication with early follow up care thereby reducing the potential risk of worsening symptoms of heart failure and early readmission. Early intervention is an important aspect in reducing readmission rates especially when patients are seen within the first seven days of hospital discharge (Hernandez, 2010).

Hospitals and insurance agencies are developing disease management programs that are focused on improving performance and patient outcomes in high risk populations such as seniors with HF (Dharmarajan, 2013). The local hospital program offers patients education on the disease process, medication management/reconciliation, and dietary counseling; yet, these programs frequently stop upon patient discharged. Insurance agencies, such as health maintenance organization (HMO) or accountable care organization (ACO) plan, have developed disease management teams that attempt to continue the process started within the hospital; yet, these disease management programs require PCP referrals that was complicated by lack of knowledge by the PCP on their patients discharge status (Hernandez, 2010). Regardless of whether the PCP was aware of the admission/discharge of their patient, patient continued to face challenges in scheduling their follow up appointment within the 7 day post discharge recommendations (Hernandez, 2010). Many of the potential reasons for the difficulty in scheduling early follow up appointments included the higher volumes of patients being scheduled since

the implementation of the PPACA which created challenges for the available appointments. Hersh (2013) stated that patients that are seen by their PCP within the first seven days post discharge have less 30 day readmission rates than patients seen after the seven day hospital discharge. Hersh (2013) further states that some of the other reasons for reduced readmission rates in this population are the PCPs ability to monitor fluid overload earlier in the post discharge process, improvements in medication reconciliation, and development of an outpatient care plan when seen within seven days of discharge. However, the delay in follow up care by the PCP post discharge of more than seven to ten days, along with the delay in the referral process for high risk patients into a disease management program, had the potential of increasing readmission rates within 30 days of discharge (Hersh, 2013).

Purpose of the Project

The purpose of this project was to develop a policy and procedure for the PCMH using a NPN led MDT to reduce readmission rates in seniors with heart failure. This policy and procedure, once implemented, would allow for the continuation in the process started by the hospital cardiac care team in educating the patient and/or caregiver about the disease process as recommended by the PPACA and CMS in reducing readmission rates. Additionally, upon adoption by the PCMH, this policy and procedure has the potential of being implemented throughout the insurance agencies PCMH with NPN at each location providing the management of high risk patients within their practice.

I developed this outpatient policy and procedure for the PCMH using Coleman's transition of care model creating a program reducing the gap in care from hospital

discharge to home. Transition of care was defined by Eric Coleman M.D. as the movement of patients between the hospital setting and their PCP (Coleman, 2003). Coleman (2003) further defined the transition of care as a set of actions designed to ensure the coordination and continuity of care as a patient moves from the private practice setting to the hospital and from hospital discharge to private practice setting. This transition of care was based on a structured setting with health care practitioners trained in managing chronic conditions who develop comprehensive care plans based upon the patient's and family structure including their literacy and socio-economic level.

Implementing a policy and procedure in the PCMH will provide a foundation for a NPN in the initial management of the patient. The role of nurse navigators within the hospital structure is a fairly new concept that has been growing recently in the hospital community (Rothwell, 2015). Yet, the role of a NPN in PCMH is a new concept that has not been established within the patient centered medical home. The advantage of using NPNs are their ability to navigate the complex medical system involving the entire interdisciplinary team from pharmacologists, PCP, specialists, nutritionists, and physical therapists while providing a communication link for the patient. Most nurse navigators are located in the hospital setting as a part of the case management team, not in the private practice setting. A practice change within the PCMH allowed for a transition of care from hospital to home for high risk patients through the development of a NPN led MDT in the PCMH who continued the health promotion process upon discharge.

The advantage to this type of navigator is their educational background. Nurses are educated in the holistic, spiritual, emotional, and biological systems surrounding

patients. They have the educational background to develop treatment plans that encompass the patient, provider, and environmental systems and how they interconnect with one another. The NPN incorporates their educational background in the development of care plans to reduce readmission rates.

Program Goals

My goal for this DNP project was the development of a NPN led MDT policy and procedure for PCMH to reduce readmission rates in seniors within 30 days of hospital discharge. I developed a plan for implementation along with an evaluation plan for the practice change. The outcome of this project was a reduction in 30-day readmission rates for seniors with heart failure as recommended by the CMS MU incentive program. Pending the evaluation of this practice change, this policy and procedure has the potential ability of further expansion within the local health care agency's medical practices.

Patients face challenges as they transition from hospital to home as they struggle to follow up within seven days of discharge with their primary care provider. Patients who fail the recommendations set by CMS meaningful use MU incentive program tend to be readmitted within 30 days of discharge. These readmissions create CMS penalties for hospitals who has very little ability to assure patients are seen within 7 days of discharge (Hernandez, 2010). Hernandez et.al (2010) looked at more than 30,000 patients discharged from 225 hospitals and found that those who were seen by their primary care provider within 7 days of discharge had lower 30 day readmission rates. The responsibility of scheduling a follow up appointment fell upon the patient however, patients faced many challenges as they tried to schedule their follow up appointments.

Some of those challenges included: a) difficulty obtaining the seven day follow up appointment due to their PCPs due to an already impacted schedule, b) not recognizing the importance of early follow up appointments when they are discharge because they are feeling better and don't recognize the importance, c) lack of transportation to primary care providers office for the follow up appointment, and d) cognitive impairment, whether due to medications or disease process, lacking the ability to recognize the importance of the follow up appointment. Through implementation of a NPN led MDT policy and procedure in the PCMH, the goal of this practice change will assist patients with early follow up care and medication reconciliation in order to meet the CMS MU incentive criteria of reducing 30 day readmission rates.

Theoretical Foundation

I used the Coleman's transition of care model for the patient, provider, and environment concept in the development of a transition of care program that began prior to discharge from the hospital through the transition of care post discharge to reduce readmission rates (Coleman, 2003; Hersh, 2013). This model views the readmission of heart failure patients as an event that occurred in the environment after discharge Coleman, 2003; Hersh, 2013). My assumption was that the environment acted as a mediator with the patient and the health care systems as the factors that are relevant in the environment. Through the concept of patient, provider, and environment, I utilized my scope of practice and educational training in evaluating the patient's demographics, medical comprehension, literacy, and ability to manage their patient care early in the disease process. The transition of care began during the hospital stay and followed the

patient through the discharge process as I assisted the patient with scheduling early appointments, medication reconciliation, patient education, and evaluation of their support systems. The environmental portion of the concept allowed me to address the patient's support system(s), economic status, cultural diversity, and safety bringing a full transition of care for the patient while striving to reduce readmission rates.

Significance of Project

As previously stated, chronic conditions cost the healthcare industry billions annually (CMS, 2013; DHHS, 2014). Heart failure was one of the top three chronic conditions impacting the healthcare industry (CMS, 2013). Case management teams within the hospital setting and outpatient setting have shown improvements in decreasing readmission rates (Hernandez, 2010). Kolbasovsky, Zeitlin, and Gillespie (2012) noted that point-of-care case management was an effective method in reducing readmission rates. Their study integrated 4 medical offices with eligible patients in a point-of-care case management program. In their study, using a point-of-care case management team to reduce 30 day readmission rates, 93% of the patient's enrolled in the baseline cohort study had a 17.60% readmission rate within 30 days as compared to the interventional group who only had a 12.08% reduction in thirty day readmission rate. The results of this cohort study was an annual saving of $1,040.74 per member and enhanced communication between the medical groups, hospitals, ACOs, and managed care organizations. Thus, improvements in communication among these health care groups' aid in promoting successful transition of care among healthcare organizations and providers along with reduction in health care spending (Boutwell, 2009). Successful

programs must develop effective coordination of care between agencies in order to reduce readmission rates (Boutwell, 2009; Kolbasovsky, 2012).

Methods to improve the coordination of care among health care agencies must include the role of a transition of care navigator. The Robert Wood Johnson Foundation (2013) published the finding from the study done at the University of Utah Health Care Community Clinics in which the transitional care navigator looked at the 30 day readmission rate for seniors with heart failure. Within one month time span, the transitional navigator at the University of Utah Health Care Community Clinic saw a 23% decline (11.5% versus 15%) in readmission rates in those patients who were managed by the transition navigator. Nurse/transition navigator aided in reducing readmission rates by as much as 65% through the coordination of care post discharge (Burroughs, 2012).

Improving the transition of care using a navigator system has shown promise in reducing costs and readmission rates (CDC, 2013; CMS, 2013). Developments in improving communication between hospital, provider, and insurance provider agencies also promoted costs saving along with reduced readmission rates (CMS, 2013). Aiding in this process was the use of a transition/nurse navigator assisting patients/caregivers earlier in the discharge process (Hernandez, 2010). The development a policy and procedure for the PCMH will provide a practice change using a NPN led MDT to bridge the gap in communication between hospital and PCMH during the transition of care process to reduce readmission rates. Currently, policy and procedures within the PCMH

fail to exist, especially ones in the development of the role of a nurse practitioner navigator.

Definition of Terms

Heart failure: The heart's "inability to sufficiently fill with blood or its inability to distribute a sufficient amount of blood throughout the body" (healthfailurecenter. 2014).

Literacy: Health literacy as defined by the PPACA of 2010, Title V, "the degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions." (Center for Disease Control, 2014).

Nurse Practitioner Navigator: Help steer patients through the health care labyrinth (Rothwell, 2005).

Patient centered medical home: A medical home is not simply a "place but as a model of the organization of primary care that delivers the core functions of primary health care" (Agency for Healthcare Research and Quality, 2015).

Transition of Care: A "set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or different levels of care within the same location" (Coleman, 2003).

Assumptions

The assumption of this project related to the transition of care managed through a NPN led MDT policy and procedure developed for patient centered medical home. I used Coleman's transition of care model as the foundation assisting patients as they are

discharged from the hospital to home. Coleman's transition of care model bridges the gap in care as the patient is discharged home with notification to the NPN led MDT improving communications between hospitals, provider, and patients. The assumption states that a NPN led MDT policy and procedure will provide the early interventions for the patients upon discharge from the hospital assisting them with early follow up appointments thereby reducing readmission rates.

Limitations

The limitations of this study required engagement from the local hospital to notify me when a patient with HF was admitted and discharged. In the past, the local hospital notified providers of admission and discharge of their patients; however, recently this process stopped without any notification to providers. Along with that concern, when patients admitted to the hospital often failed to notify hospitalist of their PCPs information. When a patient fails to identify to hospitals of their PCP, this can result in a failure for hospitals to notify PCPs of their patient's recent hospital admission or discharge further complicating their health management.

A second limitation is the potential of a small sample size. Family practices generally have a limited geriatric population adding to the limited small sample size. Expanding the amount of practices would increase the sample size; however, the potential for small sample size exist depending on the patient population at various practices.

Lastly, other limitations that could affect this project are funding and time constraints. This policy and procedure was designed for a PCMH currently owned and

operated by a national insurance agency. Insurance agencies have the ability to change the direction of policies and procedures if they believe they are not in their best interest. While this has not occurred, there is always the potential for adapting changes at the request of the insurance agency.

Delimitations

The delimitations of this policy and procedure currently address seniors; yet, heart failure is not age dependent. The reason for the development of this policy and procedure for seniors was related to the impact this age group has on health care spending along with CMS MU incentive recommendations. A majority of the literature had focused its attention on seniors which also limited the ability for this project at this time in justifying to the stakeholders the importance of including a younger demographic population. The current focus was on seniors with HF yet, we also recognized that this population has a higher potential for co-existing illness thereby, resulting in higher readmission rates. The reason for the high potential of readmission maybe related to other co-morbidities or terminal illness and not HF thereby, swaying the results. Additionally, many of these patient's may enter hospice which had the potential of swaying the results. The focus of the practice change was to develop a policy and procedures using a NPN led MDT for the transition of care of seniors with heart failure reducing readmission rates; yet, seniors with other co-morbidities are often readmitted within the 30 day time frame due to other medical conditions thereby swaying the results. Therefore, the delimitations of this study will not apply the practice change to terminal patients, patients under 65 years old, patient's readmission not related to HF, and those who decline the program.

Summary

Heart failure in seniors is one of the leading causes of readmission rates to the hospital within 30 days of discharge costing an average $35 billion annually (CMS, 2013). According to the CDC, this cost was related to medical services to treat HF, cost of medications, and days missed at work by the patient. Methods to help reduce readmission rates were used by several organizations including an HMO in Orange County, California. Heart failure teams have worked at the development of a NPN led MDT policy and procedures for PCMH to reduce readmission rates by: a) improve discharge instructions for the patient, b) improve patient compliance with post care instructions, c) adequate follow up from a specialist within seven days of discharge, d) increase reliance on family and community caregivers, and e) develop training for patients on early recognition of warning signs of worsening heart failure (VanBooven, 2013). The hypothesis of the program: the development of a NPN led MDT policy and procedure for the transition of care bridging the gap from hospital discharge to home for seniors with heart failure would reduce readmission rates within 30 days of discharge.

In 2010, the PPACA were implemented with the goal of reducing the progressive rise in health care spending. The greatest impact on health care dollars was seniors especially those with chronic conditions. Heart failure was one of the top three chronic conditions costing billions yearly in health care spending especially when these patients are readmitted within 30 days of discharge. To reduce the cost of readmission rates in seniors with heart failure, the CMS implemented MU incentive programs targeting these high cost chronic conditions. Many hospitals have developed programs targeted at

seniors; however, once the patient was discharged home, the responsibility shifted to the patient along with the primary care provider. Managing the care of these patients during the transition of care from hospital to home was challenging for most patients as they cope with their disease process. To reduce readmission rates and improve the transition of care, a NPN led MDT policy and procedure for the PCMH sector was designed as a method to bridge the gap in the transition of care as patients are discharged home. I used Coleman's transition of care model for this practice change as the framework for integrating the patient, provider, and environment to reduce readmission rates, support health care policy changes, and reduce health care spending.

Section 2: Background and Context

Introduction

My quality improvement project is designed to develop a policy and procedure using a NPN led MDT to bridge the gap in the transition of care from hospital to home as seniors with heart failure are discharge to reduce readmission by assisting these high risk patients with early follow up appointments. Protocols such as these often do not exist in the patient centered medical home. My goal was to develop a standard of care through policy development that reduced readmission rates for seniors with heart failure within PCMH assisting patients through the transition of care by scheduling of appointments within seven days of discharge. The early appointment concept helped to reduce readmission rates and allowed the NPN to develop a treatment plan for the patient as they transition from hospital to home with immediate follow up appointment and referral to the disease management team. Incorporating a NPN led MDT in the transition of care provided the missing link in the discharge process thereby reducing readmission rates within the 30 day recommended by MU incentive guidelines set by Centers for Medicare and Medicaid.

This section includes the literature review supporting the practice change as well as the evidence based research surrounding the importance of implementing a NPN led MDT in the patient care medical home. The theoretical framework, Coleman's transition of care, provided the foundation to guide this practice change in the PCMH setting. Coleman's transition of care is currently the framework of my healthcare organizations

disease management team which will provide cohesive transition between the PCMH and the disease management in the referral process.

Literature Search Strategy

I completed the literature search electronically using the following databases: CINAHL (Cumulative Index to Nursing and Allied Health Literature), ProQuest Nursing and Allied Health Source, MEDLINE, Ovid Nursing Journals, and Cochrane Systemic Reviews. The search was limited to evidence based scholarly research that was less than 10 years old, with a few exceptions. The main exception in the literature review was related to Dr. Eric Coleman's transition of care framework; however, this framework was also reviewed in other scholarly articles as the program transitioned. The key words/terms used in the search engines were: *nurse navigator, nurse practitioner navigator, transition of care, reducing readmission rates in heart failure patients, health care reform, the Patient Protection and Affordable Healthcare Act, and, CMS meaningful use incentives*. The phases "and" and "or" were used between words in the Boolean search to increase the volume of articles reviewed for this project.

Concepts, Models, Framework, and Theories

The concept of a nurse navigator in the hospital setting was not a new concept; however, the concept of a NPN in the PCMH is a new concept. The rationale for using a nurse practitioner as an NPN in this practice change was the higher education level. Nurse practitioners have master's degree, greater insight into the overall management of care, prescriptive authority, and a greater understanding on navigating the outpatient setting.

The framework for this practice change is Coleman's transition of care model that provided the necessary framework supporting NPN led MDT to bridge the gap in the transition of care. Dr. Eric Coleman defines the team "care transition" as the patient's transition between health care providers and the home/skilled nursing facility as their health conditions and care change in relationship to their chronic disease process (Coleman, 2003). There are four basic areas that Dr. Eric Coleman identifies in his care transition model. The four areas are: medication self-management, use of a patient-centered health record that helps guide patients through the care process, primary care provider/specialist follow up and patient understanding of "red flag" indicators of worsening condition along with the appropriate next steps (Coleman, 2003). The transition of care model states that the sender (hospital/hospitalist/hospital cardiac care management team) provided the provider (NPN) with hospital tests, consultations, medication reconciliation, and transition/discharge summary in a timely fashion. The receiver (NPN) must verify the information received, compare medication to patient's medication profile, and schedule timely follow up appointment. The transition of care model states that the importance of communication between the hospital and provider (NPN) in the discharge process; however, the responsibility of scheduling the follow up appointment was dependent on the patient's understanding of the importance of the seven day follow up window. Dr. Eric Coleman identified the importance of these four areas including the follow up appointment in reducing readmission rates; yet, the weak link in the transition of care was the brief period right after discharge home. Applying the policy

and procedure protocol using a NPN led MDT will improve the transition of care and bridged the gap during the critical period as the patient was discharged home.

I used Coleman's transition of care model in the development of this practice change to address the patient, provider, and environment as HF patients are discharged from the hospital through the transition of care (Coleman, 2003; Hersh, 2013). Coleman's model addressed the readmission of HF patients as an event that occurred in the environment after discharge (Coleman, 2003; Hersh, 2013). The assumption that the environment acts as a mediator with the patient and the health care system was the factors that are relevant in the environment. Through the concept of patient, provider, and environment, the NPN used their scope of practice and educational training by evaluating the patient's demographics, medical comprehension, literacy, and ability to manage their care early in the disease process. The transition of care began during the hospital stay and followed the patient through the discharge process as the NPN led MDT assisting the patient with early appointments, medication reconciliation, patient education, and evaluating their support systems at discharge. The environmental portion of the concept allowed the NPN to address the patient's support system(s), economic status, cultural diversity, and safety bringing a full transition of care for the patient (Coleman, 2003).

Background and Contexts

This practice change was developed for a PCMH located in Orange County, California. There are eleven practices under the umbrella of a national insurance agency located in the Orange County area with five of these practices in the North Orange County section. The development of a NPN led MDT policy and procedure will be

implemented within one practice by a NPN led MDT with my oversight. The goal of this practice change is to reduce readmission rates in seniors within 30 days of discharge thereby meeting the 20% reduction set by CMS MU incentive criteria.

While there are no governing agencies that regulate PCMHs such as hospitals with Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), private practices must adhere to contractual guidelines through their health care agency. Contracts such as HMO (health maintenance organizations), PPO (paid provider organization), Medicare, and CMS set the standards that providers agree to adhere to for the management of their clients/patient's care through contract negotiations. These negotiations include meeting the CMS MU incentive criteria.

Nurse practitioner scope of practice

The scope of practice for nurse practitioners in California as defined by the Board of Registered Nurses states: nurse practitioner (NP) is a registered nurse who possesses additional preparation and skills in physical diagnosis, psycho-social assessment, and management of health-illness needs in primary health care, who has been prepared in a program that conforms to Board standards as specified in California Code of Regulations, CCR, 1484 Standards of Education (DCA, 2015). The scope of practice further defines the role of an NP in California as a health care practitioner who is capable of assuming the responsibility and accountability for managing the health care in the presence or absence of disease under section CCR 1480 (b) (DCA, 2015). This means that there are times when an NP may be the only health care provider who sees the patient, and if this occurs they may employ a combination of nursing and medical health care functions in

the treatment of the patient. This policy and procedure will follow the same scope of practice allowing the NPN to manage patients within their practice.

Nurse navigator

The role of a nurse navigator is one that: "coordinates services and guide patients through the health care system by assisting with access issues, identifying resources, provides educational materials, and developing relationships with service providers (TTU. 2014).

Nurse Practitioner Navigator Role

I will provide the oversight of the implementation a policy and procedure for a NPN led MDT located in a private practice setting. Currently, the role of the nurse practitioner in the private practice setting was to diagnosis, treat, and manage the care of the patient. I will combine the scope of practice for nurse practitioners and the definition of the nurse navigator to provide a higher level of care in managing HF seniors. This practice change will incorporate a NPN as the medical provider for these patients who has the ability to diagnosis, treats, and manages the care within the seven day post discharge window.

Development of a new role as a nurse practitioner navigator in the transition of care provided an enhanced role for reducing healthcare spending through reduced readmissions. The policy and procedure for a nurse practitioner navigator had advantages over the BSN nurse working at the insurance provider agency. First, nurse practitioners were familiar with most of the patients at their practice. Second, nurse practitioners have a greater understanding of medications and how to manage/educate patients regarding

the rationale for those medications. Third, the NPN is familiar with specialist in their area aiding in the transitional care and referral process.

The process involved the NPN working with the local hospital cardiac care–heart failure team requesting notification of admission and discharge of patient's assigned to their practice. Currently, cardiac care-heart failure teams are a part of the local hospitals standard of care. Upon notification from the hospital that one of the provider's patients was discharged, the NPN requested that the medical assistant (MA) obtain the hospital discharge summary, specialist consultations, and hospital medication list. The MA will forward to the health care organization pharmacist the medication for reconciliation. The NPN will provide the front office staff with information to contact the patient to schedule the appointment within the seven day discharge window. The first couple of appointments focus on medication reconciliation, diet, continuing education of the disease process, and evaluation of the patient's support system. NPN initiated the referral process including assisting with scheduling appointments with specialist and transition to the health care agencies disease management team. This transition of care from hospital to home incorporated the recommendations set by CMS MU incentive program.

Orange County Statistics

The development of the policy and procedure will be implemented in a PCMH located in Orange County California. An epidemiology analysis of the area identified the patient population type and best methods for adapting the policy and procedure. Evaluating the population of Orange County provided insight regarding the health and educational level of the patients being treated within the practice. The estimated

population for Orange County in 2012 was 3,085,355 and in California was 37,999,878 (USCB, 2013). The percentage of those greater than 65 years old in Orange County was 12.3% and in California was 12.1%. The average person in Orange County has a bachelor's degree or higher was 36.6% compared to California 30.9%. The mean income in Orange County was $75,566 versus California $61,400 with an average of 11.7% living below the poverty level compared to California 15.3%. In 2010, the average person per square mile in California was 239.1 per Orange County 3,807.7 (census, 2013). The population for Orange County compared to California had a higher percentage of Caucasians (74.5% versus 73.7%), with African-American (2.0% versus 6.6%), American Indian (1.1% versus 1.7%), Asian (18.3% versus 13.9%), Pacific Islanders (0.4% versus 0.5%), and two or more races (3.2% versus 3.6%) (USCB, 2013).

These demographics typically provide greater resources to middle to upper socioeconomic class versus those in lower socioeconomic areas. That includes better access to health care and prevention programs; whereas, those in lower socioeconomic areas tend to have poorer access to health care and prevention programs (Friis, 2014). When comparing race/culture of the African-American culture in California (25.3%) versus Caucasians (25.6%), it might appear equal, however; when comparing the percentage of African-American population in Orange County (2.0%) versus Caucasians (74.5%) there is a great disparity.

A summary of the population in Orange County in 2010 showed that heart disease was the leading cause of death with 4,354 reported causes with a crude rate per 100,000 of 144.6 (OCHD, 2013). The following top three causes of death following heart disease

were: cancer (malignant neoplasms), cerebrovascular diseases, and Alzheimer's disease. Of those who died from heart failure, 2,238 were male and 2,116 were females and was still the leading cause of death for both sexes. Heart disease continued to lead the chart in the leading cause of death among whites with 3,384 report deaths in 2010 and a crude rate per 100,000 white population of 254.7 (OCHD, 2013). The leading cause of death among Latinos/Hispanics was cancer (malignant neoplasms) with a report number of 540 deaths and a crude rate of 100,000 Hispanic populations of 53.3 (OCHD, 2013). In Asians and Pacific Islanders, the leading cause of death was cancer (563) and in the African American population cancer was also the leading cause of death with 60 reported cases (OCHD, 2013). In evaluating the leading cause of death, HF was the leading cause of deaths in the Caucasian population of Orange County, California with just slightly more males than females dying from heart disease. The age-group statistics for the leading cause of death was heart disease was seniors 65 years old and older with a reported 3,712 deaths in 2010 and a rate per 100,000 population in that age group of 1,061.6 (OCHD, 2013). When reviewing the age group statistics and the leading cause of deaths for Orange County, California, heart disease was the leading cause of death in Caucasian seniors 65 years old and older. The population for Orange County represents 74.5% Caucasian, African American 2.0%, American Indian 1.1%, Asian 18.3%, Pacific Islander 0.4%, and two or more races 3.2% (census, 2013).

There had been improvements in treating HF patients in California versus the United States, however; health care spending continued to rise. In August 2012, CMS regulations reduce payments up to 1% for more than 2,200 hospitals, which equates to

about two-thirds of the United States facilities (Fiegl, 2012). In 2013, it is estimated that hospitals lost $300 million due to readmission rates, and for those who failed to improve; penalties increased to 2% in 2014, and 3% in 2015. In protest to these penalties, hospitals argue that they should only be penalized for aspects that they can control (Fiegl, 2012). Hospitals argue that factors such as socioeconomic variables, patient access to follow up care, patient access to health care services in general, ability to afford medications, and availability of their primary care providers should take into account when evaluating reasons for readmission rates. Additionally, these penalties hurt hospitals that service poorer communities who do not have the same access to treatments seen in middle to upper socioeconomic communities such as Orange County, California.

Healthy People 2020

The CDC, under the Healthy People initiative, implemented objectives to reduce heart disease by 2020. Those objectives include: increase cardiovascular health in the United States, reduce coronary heart disease deaths, reduce stroke deaths, increased blood pressure monitoring with a goal of less than 140/90, reduce hypertension in adults, reduce children and adolescents with hypertension, decrease cholesterol, reduce hospitalizations of seniors with heart failure, and improve awareness of the warning signs of a heart attack (HP, 2014). The recommendations support the implementation of disease management programs in the transition of care for seniors with heart failure as one of the major objectives of Healthy People 2020.

Nurse Practitioner Navigator in Transitional Care

The first literature evaluation analyzed the potential cost of implementing an advanced nurse navigator (APN) led MDT in the management of seniors with heart failure. Since the implementation of the CMS MU incentive program, many hospitals and insurance agencies have worked to improve their HF programs with a goal of reducing readmission rates within 30 days of discharge. A review of the literature to evaluate the effectiveness of these programs provided an abundance of information ranging from the development of an APN led MDT to telephone assistance for scheduling appointments immediately after discharge. The major problem with many of the evidence-based research projects was the lack of data related to the cost of the program prior to implementation versus after implementation. To effectively evaluate cost containment or a reduction in the amount of health care dollars spent on a HF program, it is important that all factors enter the equation including the cost of the program. The reevaluation process addressed the rationale for any high expenditure and provided methods on how to improve the program as well as reduce readmission rates.

The American Heart Association (AHA) developed six procedural things hospitals could implement to reduce readmission rates in 2013. The six recommendations were: a) forming partnerships with community doctors to address readmission rates, b) collaborating with other hospitals to develop consistent strategies for reducing readmission, c) have nurses supervise the coordination of medication plans, d) schedule follow-up appointments before patients are discharged from the hospital, e) develop systems to forward discharge information to the patient's primary care provider, and f)

contact patients on all test results received after they are discharge (AHA, 2013). What the AHA discovered after an evaluation of the six recommendations was that of all the hospitals (600 surveys), only 7% implemented all six recommendations and fewer than 30% followed most of the recommendations. The cost saving was not published; however, it is estimated that a reduction of 2% (nationally) in readmission rates would equate to a cost savings of more than $100,000 per year (AHA, 2013). Implementing a team approach between hospital and insurance provider payers will reduce health care dollars significantly in seniors with heart failure by reducing readmission rates.

A literature review surrounding the transition of care from hospital to home supports a care transition program. The observational analysis of patients who were part of an Organizational Heart Failure program found that a substantial variation in readmission rates with patients within the program versus those who were not in programs (Hernandez, 2010). Furthermore, this study found that early outpatient follow-up within seven days of discharge with a provider resulted in reduced readmission rates compared to those were seen after the seven day period. While there are several factors that can lead to readmission rates, the premise of these programs were to help reduce readmission rates when patients are seen by their provider before problems such as fluid overload develop. Hernandez et. al (2010), found that early implementation of follow up after discharge reduced readmission rates supporting the evidence based research. The AHA published an evidence based research study indicating that early integration with PCPs after discharge resulted in reduced readmission rates (Bradley, 2013). They also

indicated that previous studies noted one of the major reasons a patient was readmitted within 30 days of discharge was related to delays in scheduling follow up appointments.

The concept of a transition navigator has helped hospitals reduce readmission rates. The Robert Woods Johnson Foundation (RWFJ) (2013) identified that a transition navigator reduced readmission rates from July 2012 to September 2012 by 23 % compared to the hospital overall readmission rate of 11.5% to 15% (RWJF, 2013). The University of Utah Health Care system piloted this study by the RWJF as one of the methods of leveraging best practices at their institution. Their transition care navigator helped in the coordination of the outpatient care including scheduling the immediate follow up care. The 23 % reduction in readmission rates with this transition care navigator provided support in the development of a policy and procedure for a NPN located within the patient centered medical home.

Summary

The development of a NPN led MDT policy and procedure in bridging the gap in transition of care from hospital to home with the goal of reducing 30 day readmission rates would create a new position within patient centered medical home. Since all the private practices within this insurance provider agencies organization have nurse practitioners, this policy and procedure would universally work at all the practices further aiding in the transition of care process and reducing readmission rates as recommended by CMS MU incentive program along with promoting health as addressed by Healthy People 2020. While there was limited evidence based research on the role of aNPN, the

research does support the role of nurse navigator in improving outcomes. Advancements in the role to a higher level of education allowed for the prescriptive management with nurse practitioners who have furnishing numbers. The AHA (2013) six recommendations: a) partnerships between hospital and primary care provider, b) improved working relationship between hospital and provider, c) using nurses in the role of medication reconciliation, d) early appointment, e) prompt discharge summaries from hospital sent to providers, and f) early patient contact; provided the foundation for the development of a NPN led MDT policy and procedure within the primary care setting.

Section 3: Collection and Analysis of Evidence

Introduction

I developed this quality improvement project to develop a NPN led MDT policy and procedure in the transition of care for seniors with HF to reduce readmission rates within 30 days of discharge. I will provide the evidence based research for the development of this project along with the framework. This project will use Coleman's transition of care model as the theoretical foundation. Coleman's transition of care is currently part of the local health care agencies disease management team which will continue the health promotion process upon referral from the NPN led multidisciplinary team.

My development of this quality improvement project for the practice change consisted of: a) establish and assemble a multidisciplinary team within the patient-centered medical home, b) identify stakeholders that benefit from the policy and procedure, c) establish and assemble a multidisciplinary team within the patient-centered home consistent of experts within their scope of practice, d) review the relevant evidence and literature with the multidisciplinary team on the importance of this project, e) developed a policy and procedure protocol with the multidisciplinary team, f) developed a plan for the implementation and evaluation of the primary products, g) conduct content validation of the policy and procedure using external scholars, and h) obtain Internal Review Board approval.

Multidisciplinary Project Team

Kelly, 2011, supported the use of a multidisciplinary team approach as the foundation for planning a thoughtful and comprehensive practice change for review with stakeholders. The MDT for the project were chosen based their expertise and knowledge in their respective field. Several of these team members are currently supporting various committees within the local health care organization.

The stakeholders include: a) Orange County based insurance corporation, b) the local insurance agency's clinical leadership committee (CLC) that consisted of clinical leads from each medical practice, c) primary care providers, d) patient centered medical homes, and d) local hospital. The multidisciplinary team members consisted of: a physician, NPN, a medical assistant, a front office manager, and an office manager. Each member worked at the same patient-centered medical home, was employed by the same local insurance corporation, and/or maintained privileges at the local hospital.

I will provide the oversight of each team member and the development of the policy and procedure. The role of the physician will be established at one location and serves on the CLC committee. The physician and I will work with the CLC, insurance agency, and local hospital to implement this practice change. The NPN will works at one location and serves on the advanced practice committee with the health care organization. They will assist the MDT and provide feedback to myself and the physician. The MA works at the same location as the NPN, physician, and me. They will work to obtain the necessary discharge information, obtain the medication list and send to pharmacist, and

schedule patients within the seven day discharge recommendations. The front office manager oversees the front and back office MDT and assist with the referral process.

The multidisciplinary team for the project applied Coleman's transition of care. The Coleman transitional care program was adopted by the local insurance corporation and provided a smooth bridge between the patients centered medical home and the corporation. Coleman's transition of care theory provides the foundation for the MDT by addressing the four basic areas of this model. The four areas are: medication self-management, use of a patient-centered health record that helps guide patients through the care process, primary care provider/specialist follow up and patient understanding of "red flag" indicators of worsening condition and appropriate next steps (Coleman, 2003). Applying the Coleman's Transitional Care model within this quality improvement model provided each team member with a purposeful direction and the patient with a smooth transition into the disease management program within the health care agency.

Relevant evidence and literature review

The development of a MDT required team members to comprehend the rationale for the project along with the strategies. Riddle, 2012, recommends providing team members with the evidence based research early in the development of practice changes to promote greater understanding and successful practice change. Each team member was provided the evidence based research supporting the NPN led MDT approach in the development of a policy and procedure to reduce readmission rates (Riddle, 2012). Along with the evidence based research, the NPN and the MDT were provided with Coleman's

transition of care model and the four areas of focus for this policy and procedure development.

Development of a policy and procedure protocol

The primary focus of my quality improvement project was to develop a NPN led MDT policy and procedure for a PCMH in the transition of care for seniors with HF upon discharge from a hospital. In the PCMH, there were no policies and/or procedures that provided a standardized approach to assisting patients upon discharge from the hospital. The purpose of my quality improvement project was to develop a standardized policy and procedure for the patient centered medical home meeting the mission and vision of the local health care agencies philosophy.

The approach toward this development of a policy and procedure includes four phases.

Phase one: The role of the NPN was established within the patient-centered home. The NPN maintained a led position within the team assisting each team member with their role and responsibilities. I will work with the NPN monitoring the process of the practice change.

Phase two: Recruitment of key members who are experts within their scope of practice. Each member will receive the evidence based research on the importance of this practice change along with Coleman's transition of care. The MDT will work with the led NPN and me to establish protocols for their specific area.

Phase three: The NPN led MDT will develop and establish through my leadership, the policy and procedure for the practice change. During the development

phase, the policy included the development of a procedure for communication between the local hospital and the PCMH in the admission and discharge process. By the end of this phase, the policy and procedure was ready for review with the insurance agency's clinical leadership committee.

Phase four: Upon completion of the development of the policy and procedure, the team developed an implementation plan and evaluation process for the practice change.

The policy and procedure required only a few individuals initial involvement; yet, it does require the assistance of the entire office staff. The oversight from the office manager and me along with the NPN provided the bridge among all staff members in this process.

Implementation and evaluation plan

The *Plan-Do-Study-Act* framework provided by the Institute of Healthcare Improvement (IHI) that guided the development of the policy and procedure for the implementation and evaluation of the project as a useful tool for testing changes (IHI, 2015). This framework provided me with a shorthand method in the development of a practice change within the organizational structure, a method to carry out the practice change, how to observe and learn from the practice change while learning from the consequences, and necessary modifications to the practice change (Appendix C).

During the *Plan phase*, the NPN along with my leadership developed a MDT within the patient-centered medical home. The multidisciplinary team established the goals for the practice change in the development of a transition of care policy and procedure for heart failure patients.

During the *Do phase* of the framework, the NPN and I led the multidisciplinary team in the development of the policy change for the patient-centered home incorporating a nurse practitioner navigator in the transition of care for seniors with heart failure during hospital discharge to home for implementation upon approved of the clinical leadership committee within the healthcare organization. These steps included: presenting policy and procedure to the CLC for implementation approval, and establishing a process for notification of admitted and discharged patients with the local hospital.

Phase one was expected to take approximately 1 week to recruit members and review the transition of care model by Dr. Eric Coleman. Phase two was the development of the policy and procedure with the multidisciplinary team members. I estimated that 2 weeks would be the length of time required for the development of this policy and procedure. Once developed, phase three will begin the development of a plan for the implementation and evaluation process.

Upon completion of the development of the policy and procedure program, the NPN led MDT developed a plan to present to the clinical leadership committee for approval by the health care organization. The implementation process has the support and assistance of the lead physician at the current site who currently is a member of the CLC providing further assistance in the process.

Content validation of the policy and procedure using external scholars

This policy and procedure will be validated by experts in the profession within the local insurance agency who currently oversee the disease management programs and the insurance provider agency upon presentation of practice change. In addition to experts

within the local insurance provider agency, the policy and procedure will be presented to the local hospital's chronic disease and HF management team for the review. Future validation from these key scholars in the health care industry upon presentation of the implementation and evaluation of the practice change will further promote the development of NPN led MDT in the PCMH as a method of reducing readmission rates and meeting the CMS MU incentive recommendations.

The policy and procedure was also be reviewed by expert scholars in the American Association of Heart failure Nurses (AAHF) and the California Association of Nurse Practitioners (CANP). Providing the policy and procedure application for private practice in bridging the gap to DNP scholars in these organizations, AAHF and CANP, allowed for objective opinions in the development of a practice change with potential for further adoption by other private practices statewide. These scholars provided added strength to the development of policies and procedures bridging the gap between hospital discharge and the patient centered home.

Upon evaluation of the practice change, implementation of the practice change throughout the healthcare organizations 11 offices provided a transition of care from hospital discharge to appointments within the 7 days window recommended by the Centers for Medicare and Medicaid. The health care agency's stakeholders will have the opportunity to validate the importance of NPN led MDT in the management of care as recommended by Dr. Eric Coleman's transition of care model that is currently used by the disease management team within the local insurance provider agency. Upon their

review and acceptance, the NPN led MDT and me will provide a power point presentation for all providers within the organizational network at their quarterly meeting

Institutional Review Board Approval/ Ethical Considerations

I developed a policy and procedure for a nurse practitioner navigator in the private practice setting (known as a patient centered home) to reduce readmission rates in seniors with heart failure. While the project will not include data collection or analysis, the project was reviewed by the Walden's Institutional Review Board (IRB), did not proceed until the project was approved by the IRB, and at all times adhered to the policies of the IRB as well as Health Insurance Privacy and Portability Act (HIPPA) guidelines. There will be no patient information and data necessary for the project will be collected after the completion of the DNP quality improvement project by the institution in which the project was implemented. I will adhere this policy and procedure project in a cultural competent manner thereby providing the same opportunity for all participates regardless of race, gender, ability to pay, religion, and sexual orientation.

Summary

The project developed of a policy and procedure using a NPN led MDT to reduce HF readmission rates in the PCMH during the transition of care to bridge the gap in care upon hospital discharge. The program incorporated individuals who are considered experts in their field and have the ability to provide the necessary strength to the success and information in the development of this program. Their ability to provide information in their professional area provided the necessary knowledge to develop a policy and procedure that helped reduce readmission rates in this high risk population through early

scheduling of follow up appointments, medication reconciliation, disease education for the patient/family, and scheduling follow up appointments with specialist.

The development of a policy and procedure using the foundation of the Coleman's transition of care model that aligns with the local healthcare agency will provide a smooth transition of care for patients who entered the insurance provider agencies disease management program after their follow up appointment with their provider. Whether the patient enters a disease management program or chooses to allow the PCP to manage their disease process, the development of a policy and procedure allowed the PCMH to provide rapid and early intervention in the post discharge process thereby decreasing readmission rates through early follow up appointments.

Section 4: Findings, Discussion, and Implications

Introduction

With this DNP project, I addressed a gap in care for seniors with heart failure who were discharged from the hospital to home by developing a policy and procedure for the PCMH under the leadership of a NPN along with the MDT incorporating the Coleman's transition of care model. The NPN, MDT, and me identified a gap in the transition of care in high risk seniors upon discharge from hospitals. The identification of this gap established a need for a practice change in the PCMH through the development of policy and procedure (Appendix B) to assist seniors with scheduling appointments within seven days of hospital discharge, reduce medication errors, and to reduce readmission rates within 30 days of discharge. The NPN, MDT, and I developed the practice change along with a plan for implementation and evaluation. This section includes a summary of the development of this policy and procedure for future implementation and the evaluation plan that was developed (Appendix C) (Appendix D).

Project Products

The initial process for the project required that I along with the NPN to establish a multidisciplinary team within the PCMH setting. After the team was established, the next step was the development of the policy and procedure that would provide the necessary steps in reducing readmission rates. Upon completion of the policy and procedure, the team developed a plan for the future implementation and evaluation of the practice change.

During the team development, the NPN and I met with each potential team member to establish the standard of care for each team member (Appendix A). The following meetings provided a review of their expectation in the development of this tool and the role they would play in the practice change. Subsequent meetings allowed the NPN and me to review with the MDT the theoretical foundation and framework for this policy and procedure. The NPN led MDT agreed to apply Dr. Eric Coleman's transition of care as a method to bridge the gap in care between discharge and home. This theory, the Coleman's transition of care, is an adopted and accepted program by the health care agency's disease management team.

Challenges during the development phase were addressed by the NPN and me occurred when members of the team were at different locations and unable to attend meetings. Since each team member was at a location with Internet access, the decision to use Skype allowed all team members the opportunity to work together on the development of the policy and procedure. Janghorban, 2014, addressed using Skype for online focus groups allowing them to participate face to face while at different locations in real time (Janghorban, 2014). When considering this type of focus group, members must recognize the potential of violating HIPPA if discussing confidential patient information over the Internet and without secured Internet connections or informed consent (Janghorban, 2014). I reviewed with the NPN and the MDT concerns regarding HIPPA violations when using Skype (Janghorban,2014). To avoid any HIPPA violations, the NPN led MDT agreed that all Skype meetings focused on policy development without the discussion of any patient or patient information. In 2014, Janghorban stated

that while Skype provided methods for audio and video meeting at no cost to the user, this does not preclude the ethical concerns surrounding patient confidentially and the need for informed consent. In addition to the Skype not being a recognized tool by the health care organization, the decision was to limit this method to one meeting.

During the final stages of policy development, the NPN met with the MDT for the final review along with any updates or changes. The final stages of development consisted of the policy and procedure, implementation plan, and a method for the evaluation that was used to analyze the practice change (Appendix B; Appendix C; Appendix D). Upon completion of the policy and procedure, the team worked on the next phase of the project which consisted of a plan for future implementation (Appendix C).

Policy and Procedure/Practice Change

The development of a MDT for this practice change incorporated members who were currently employed at one practice setting. Since this policy and procedure has the potential for adoption throughout insurance provider agency PCMH, the development of this practice change will use a structure easily adapted at each PCMH within the health care agency's organization. These PCMHs all provide: a lead physician, staff physicians, nurse practitioners, lead medical assistant, front office manager, and office/practice manager. Therefore, the policy will not require hiring or considering outside team members not familiar with the daily operations of the organization.

Multidisciplinary team

I functioned as the lead team member in the development of the policy and procedure with assistance from the nurse practitioner navigator. Once the policy and

procedure is implemented, I will continue to provide oversight in the process and assist each team member as necessary. The NPN and I will be responsible for the weekly evaluation of the process and communicating to the lead physician.

The lead physician within each PCMH provides feedback to the clinical leadership committee. The lead physicians provide communication among all providers at various PCMHs regarding any practice change within the organization. Each lead physician reports to the CLC regarding any operational changes and outcomes on a monthly basis. For this policy and procedure, the lead physician will provided the communication between the CLC, NPN, office/practice manager, and me.

The lead medical assistant was a new position within each practice. Currently they are responsible for preparing charts for scheduled patients, assisting the medical assistants, and reporting to the office/practice manager. The addition of a policy and procedure will not change their current job description and will provide a tool for gathering the necessary patient information prior to the patient's appointment.

The front office manager was responsible for the management of all front office staff including scheduling appointments. The front office manager also has the ability to contact and schedule appointments during peak hours when the front office staff is unable. This provides additional staff for scheduling high risk patients when necessary.

The office/practice manager position has recently changed within the organization. Each office/practice manager was responsible for the daily running of two separate practices; therefore, the implementation within the organization provided a smoother transition among various practices with the assistant of office/practice

managers. Office/practice managers provide the lead physician with daily updates as needed. For the policy and procedure, they assisted the NPN and me in the development, implementation, and evaluation of the practice change.

Development of policy and procedure

The NPN led the multidisciplinary team in the development of a policy and procedure and checklist for a patient-centered medical home (Appendix B). The approach for development, implementation, and evaluation of the policy and procedure included four phases using the *Plan-Do-Study-Act* model (Appendix C; IHI, 2014). The advantage of using the *Plan-Do-Study-Act* worksheet was the use of a shorthand method to test change through the development of a plan, method to carry out the change, observe and learn from the implementation of the change, and evaluate what modifications the practice change required (IHI, 2014). The four phases listed below provided a foundation for the *plan and do phase* for the practice change.

Phase one: The role of the NPN was established within one patient centered medical home. This individual maintained a led position within the team assisting each team member with their role and responsibilities. Additionally, this individual worked with the lead physician, local hospital, and health care agency providing a bridge in the communication among the groups in the process of the practice change.

Phase two: Recruitment of key members who are experts within their scope of practice. Evidence based research for the need of a practice change was reviewed with all team members. This provided a strong evidenced based foundation for these team members as they developed the policy and procedure. These experts, established within

one medical practice, worked with the led NPN and me to establish protocols for their field of expertise.

Phase three: The MDT led by the NPN and me. developed and establish the policy and procedure for the practice change. During the development phase, the policy addressed the importance to develop a procedure for communication between the local hospital and the patient centered medical home in the admission and discharge process. By the end of this phase, the policy and procedure was ready for review with the clinical leadership committee.

Phase four: Upon completion of the development of the policy and procedure, the team developed a plan for implementation and evaluation process for the practice change. The team reviewed methods for further consideration of expanding the program depending on the evaluation of the initial programs outcome.

Implementation

As part of the implementation process for the practice change, the team used the *Plan-Do-Study-Act* tool (Appendix C). As discussed in the previous section, the NPN led MDT and I have developed the policy and procedure for this DNP project. The implementation process was a three step process that was part of the *do phase*. In the first step of this phase, the NPN led MDT and I will provide the CLC with a power point presentation of the project along with the policy and procedure for their approval for implementation. Upon approval, at the second step of this phase, the NPN led MDT and I will meet with the local healthcare organization leadership providing them a power point presentation of the policy and procedure along with the recommendations from the

clinical leadership committee. Once the healthcare organization agreed to the implementation of the practice change, the third step of this phase began and, the lead physician, NPN, and I will schedule a meeting with the local hospital to review the policy and procedure along with evidence based research for improving communication on hospital admission and discharges. The local hospital had a policy of notifying providers in the past. The healthcare organization requested the hospital to reinstate this program with the common goal of reducing readmission rates and the potential for reducing penalties set by Centers for Medicaid and Medicare when seniors are readmitted within 30 days of discharge.

The *study phase* was the evaluation plan. This phase evaluated the effectiveness of the policy and procedure in meeting the goals of: a) telephone contact within 48 hours of discharge, b) medication reconciliation within 72 hours of discharge, c) patient seen within 7 days of discharge, and d) reducing readmission rates by 20% per CMS meaningful criteria (Appendix C; Appendix D). The last part of the implementation and evaluation was the *act phase*. During this phase the DNP, NPN, and the MDT monitored the practice change and implemented changes after monthly evaluation.

Evaluation

The method that will be used for the evaluation process will be part of the *study phase* (Appendix C; Appendix D). The evaluation plan has three areas for this practice change. These areas are: a) telephone contact made within 48 hours of discharge, b) medication reconciliation made within 72 hours of discharge, and c) seniors are seen within 7 days of discharge by provider. If these three areas are supported by the practice

change, the goal of a 20% reduction in readmission rates should exist thereby supporting the hypothesis that the development of a policy and procedure will reduced readmission rates. The evaluation process will use the chi square test of independence to evaluate the hypothesis to evaluate whether a reduction in readmission rates occurred as a result of a practice change rather than by chance (Appendix D).

Challenges and Insights

Through the development of the project, the greatest challenge facing the team was the ability to schedule meetings that would not interfere with their daily work. In addition to this, not all members were at the same location for scheduled meetings. This challenge was quickly resolved with Skype meetings. However; as previously discussed, there were concerns regarding HIPPA violations, since Skype is not a secure Internet program, is not adopted by the healthcare organization, and if discussing any patient(s) required informed consent. To resolve these concerns, Skype was limited to two meetings and no patient(s) were discussed during the meetings.

The greatest insight was team building by allowing each team member an active role in the development of their role in the practice chanage. Providers manage patient care daily and see the rewards of their hard efforts. Staff members rarely receive the same rewards since their roles are supportive to the organization and providers. Developing a policy and procedure that they are a part of that has the ability to make a difference stimulated the morale of the team members along with other staff members. Along with this practice change, there is now a method to measure staff/team performance during evaluations.

This project has not been implemented throughout the organization at this time but, team members are looking forward to moving ahead with this project. Taking an active role in the development of a practice change has encouraged them to consider how further implementation within the health care organization. Along with this practice change, the team is evaluating other potential protocols within the organization with the goal of improving work flow and promoting staff involvement.

Implications

Heart failure in seniors is one of the top three diagnoses leading to readmission rates within 30 days of hospital discharge resulting in an average of $32 billion each year spending in health care dollars (CDC, 2013). To help reduce this high cost of healthcare spending, CMS along with DHHS developed the MU incentives as part of the PPACA promoting hospitals and insurance provider agencies to establish disease management teams to reduce readmissions within 30 days of discharge (Nash, 2011). The implementation of the MU incentive program by CMS set a goal of the 20% reduction in readmission rates within 30 days of discharge; however, for those who fail to meet this criteria, CMS will impose stronger penalties (Graham, 2013; Rau, 2014; Worth, 2014). The greatest challenge for private practices and hospitals in meeting the MU incentive criteria was improving communication between agencies of admitted and discharged seniors thereby, improving the communication in the transition of care (Nash, 2011).

This quality improvement project developed a practice change for the PCMH through the development of a policy and procedure for NPNs by improving the communication in the transition of care from hospital to home for seniors upon discharge.

Protocols such as these often fail to exist in the patient centered medical home. The implications for this policy and practice change in the development of the policy and procedure in the PCMH provided a standard of care through policy development that reduced readmission rates of seniors with heart failure within private practices assisting patients as they are discharged home through the transition of care and early scheduling of appointments within 7 days of discharge. Hersh (2013) stated that patients seen within the 7 days post discharge window by their PCP tend to do better than those seen after the first 7 to 10 days post discharge. While there are several factors that can lead to readmission rates, the premise that patients seen within the first 7 days of discharge have reduce readmission rates as compared to patients seen after the 7 day window (Hersh, 2013). According to Hersh (2013) this was attributed to monitoring fluid overload earlier in the post discharge process, assisting patients with scheduling follow up appointments, medication reconciliation, and develops an outpatient care plan.

The research supporting the practice change looked at more than 30,000 patients discharged from 225 hospitals (Hernandez, 2010). They found that when communication between hospital, PCP, and patients improved, seniors had fewer readmissions due to being seen by their PCP within 7 days of discharge. Methods to improve the coordination of care among health care agencies must include the role of a transition of care navigator or nurse practitioner navigator. The RWJF (2013) published the finding from the University of Utah Health Care where they looked at the 30 day readmission rate for patients who had a transition of care navigator. Within a month time span, they saw a 23% decline (11.5% versus 15%) in readmission rates in those who were managed by a

transition navigator. The role of the nurse/transition navigator aided in reducing readmission rates by as much as 65% through the coordination of care post discharge (Burroughs, 2012).

Case management teams within the hospital and outpatient setting have shown improvements in decreasing readmission rates. Kolbasovsky, Zeitlin, and Gillespie (2012) noted that point-of-care case management was an effective method in reducing readmission rates. Their study integrated 4 medical offices with eligible patients in a point-of-care case management program. In their study, using a point-of-care case management team to reduce 30 day readmission rates, 93% of the patient's enrolled in the baseline cohort study had a 17.60% readmission rate within 30 days as compared to the interventional group who only had a 12.08% reduction in thirty day readmission rate. The results of this cohort study was an annual saving of $1,040.74 per member and enhanced communication between the medical groups, hospitals, ACOs, and managed care organizations. Thus, improvements in communication among these health care groups' aid in promoting successful transition of care among healthcare organizations and providers along with reduction in health care spending (Boutwell, 2009). Successful programs must develop effective coordination of care between agencies in order to reduce readmission rates (Boutwell, 2009) (Kolbasovsky, 2012).

As previously stated, health care agencies must look for methods to improve communication between inpatient and outpatient organizations with the goal of reducing health care spending. The implication for a practice change through the development of a policy and procedure establishes a standard of care for the PCMH incorporating a change

in the role of a nurse practitioner to nurse practitioner navigator. Through this practice change, communication between organizations will assist seniors with being seen within the 7 day window, thereby; reducing readmission rates and promoting the role of nurse practitioners practicing to the full extent of the license and education.

Strengths

This practice change had many advantages including promoting a smooth transition from hospital discharge to home, improving the communication between hospital and provider in the transition of care, scheduling early appointments within 7 days of discharge, medication reconciliation, and reducing readmission rates within 30 days of discharge. However, where this practice change offers it greatest strength in designing a policy and procedure in a health care setting where there currently are no standard policies for this type of procedure. A policy and procedure that has the potential of setting the standard for future practice changes while promoting the role of the nurse practitioner – navigator.

Limitation

The greatest challenge for any practice change is acceptance and compliance. Providers must accept the new role of the nurse practitioner as a navigator. Recognizing that any change, including changing the role of how the nurse practitioner currently functions within the private practice, intimates others. Currently, nurse practitioners are collaborators with providers in promoting quality health care, yet; as with all changes, acceptance will be major limiting factor.

Another limitation is developing and promoting better communication between hospital and primary care providers. The proprietary issues surrounding the electronic health records between hospitals and providers create challenges obtaining discharge information on patients in a timely manner. Due to this issue, primary care providers are still hindered by delays in receiving medical records as they wait on faxes.

Budget

This project does not require any additional expense. Those involved in the project are currently a part of the organizational staff. Besides their current employment status, this policy and procedure became a part of their job description as an evaluation tool for their job performance. Therefore, no additional cost for employee's staff time is required. This project was developed during their regular meeting times, therefore; no additional time is required. Presentation to the clinical leadership committee by the nurse practitioner and lead physician was also included in their scope of practice and job description, therefore; no additional cost was required for outside activities related to their work. There was no additional cost to develop, implement, or evaluate the practice change. This policy and procedure was part of the organizational job requirements on promoting patient improvement standards of care.

Analysis of Self

As with any journey, reflecting on the process provides us with the ability to analyze our own transition. An analysis of self-re-examines how this project and the Eight Essential of the AACN in DNP process relate to changes within the role of a nurse practitioner to the role of a doctor of nursing practice. Through this journey, the

importance of evidence based research has been hallmark in the supporting a practice change. It has been through review of the literature, that I have come to understand the importance of recognizing health care issues/problems, understanding the importance of analyzing and developing methods to improve the health care problem, and the importance of supporting the practice of a DNP nurse through advocacy, whether advocating for patients, families, or the nursing profession. The role of a DNP in private practice is essential in supporting the profession in a rapidly changing health care system. The role of a DNP in private practice is one that applies the Eight Essential of the AACN for the DNP practice as the hallmark method of supporting our profession. Here, the development of a policy and procedure is important for the DNP prepared nurse as it promotes leadership within the private practice organization and demonstrates the development of evidence based programs to bridge the gap in care between hospitals and home thereby, promoting healthy outcomes for patients (American Association of Colleges of Nursing, 2006).

Summary

The development of a NPN led MDT in the development of a policy and procedure for the PCMH will provide a standard of care that has the potential ability of being implemented throughout all the practices within the county. This policy and procedure, upon adoption from the CLC and local health care agency, will began a practice change with the goal of reducing readmission rates in high risk patients. Transitional care programs have shown great promise in decreasing healthcare spending especially with the implementation of the MU incentive program set by the CMS as part

of the Affordable Healthcare Act. This practice change continued the incentive programs through the meaningful use criteria set by CMS as one of the methods in reducing readmission rates in seniors with heart failure. Along with meeting the recommended CMS MU incentive requirements, the practice change promoted early follow up care within 7 days of discharge, medication reconciliation, reduce readmission rates within 30 days of discharge, and promote a practice change for nurse practitioners to the role of a navigator in the private practice organization.

Section 5: Scholarly Project

Introduction

In 2010, the PPACA were implemented with the goal of reducing the progressive rise in healthcare spending. One of the greatest impacts on health care spending are seniors especially those with chronic conditions. Heart failure costs billions yearly in health care spending, especially when seniors are readmitted within 30 days of discharge (CDC, 2013). To help reduce health care spending in this population, as recommended by the PPACA, CMS has implemented MU incentive programs targeting chronic conditions (CMS, 2013; PPACA, 2010)). As part of the CMS MU incentive program, many hospitals have developed disease management teams targeting chronic conditions in seniors with the goal of reducing readmission rates within 30 days of discharge; however, once the patient was discharged home, the responsibility shifts from the hospital to the patient under the care of their primary care provider. Managing the care of these patients during the transition of care from hospital to home was challenging for PCPs who were often unaware of their patient's admissions and/or discharges. The health care industry recognized the need to develop methods to improve communication between the hospital and PCP during the transition of care upon hospital discharge. One method to bridging the gap in the transition of care was the development and implementation of a NPN led MDT policy and procedure for the patient centered medical home. This provides a tool for accountability within the PCMH with the goal of reducing readmission rates within 30 days of discharge by 20% as recommended in the CMS MU incentive program by scheduling appointments within 7 days of discharge.

The Problem

The problem facing the health care system, hospitals, and private practices, was a gap in the communication process from hospital discharge to home. Patients were admitted and discharged without any notification to their PCP that they have experienced a medical condition requiring hospitalization. Once discharged, patients faced many challenges as they try to navigate a complex medical system. Some of the challenges patients face include: a) difficulty obtaining the 7 day follow up appointment due to their PCPs already impacted schedule, b) not recognizing the importance of early follow up appointments when they are discharge because they are feeling better and/or don't recognize the importance of the follow up appointment, c) lack of transportation to primary care providers office for the follow up appointment, and d) cognitive impairment, whether due to medications, and/or disease process, often lack the ability to comprehend how to manage their disease process (Hernandez, 2010; Hersh, 2013). Patients who are not seen within 7 to 10 days post hospital discharge are frequently readmitted within 30 days of discharged (Hersh, 2013; Jencks, 2009). Further complicating the situation was the lack of communication between hospitals and providers on patient admission and discharge process. Methods to improve the communication between hospitals and provider along with assisting patients in the scheduling of early appointments was key to reducing readmission rates within 30 days of discharge thereby reducing health care spending.

Purpose

One of the major challenges providers face is not knowing when their patients have been admitted and/or discharged from a hospital. Hospitals have worked to develop disease management teams supporting CMS MU incentive recommendations, but once the patient was discharged, they no longer fall under the responsibility of the hospital's disease management team. This gap in care from hospital discharge to home was further enhanced by a lack of policies and procedures in the private medical community bridging the care for patients as they are discharged home. As part of the transitional care in managing these high risk patients, a NPN led MDIT policy and procedure for the PCMH was developed along with cooperation from the local hospital in reinstating a policy for notification of admitted and discharged patients to help improve communication between hospital and PCMH to reduce readmission rates.

The purpose of this project was to develop for future implementation a policy and procedure for the PCMH using a NPN led MDT to reduce readmission rates in seniors with heart failure by 20% per CMS MU criteria. The policy and procedure allowed for the continuation of care in the process started by the hospital cardiac care team. It also provided a standard of care for the PCMH promoting the importance of a practice change in the role of a family nurse practitioner to one of a nurse practitioner navigator.

Goals/Outcomes

The goal of this project was to develop a practice change for the PCMH using a NPN led MDT in the development of a policy and procedure for seniors with HF with the outcome of reducing readmission rates within 30 days of hospital discharge. This practice

change will use Coleman's transition of care model with the intent to integrate patient, provider, and environment to reduce readmission rates, support health care policy changes, and reduce health care spending. The outcome of the proposed project will reduce 30 day readmission rates for seniors with heart failure by 20% as recommended by the CMS MU incentive program (CMS, 2013). Along with these goals, this policy and procedure promotes the role of the nurse practitioner allowing them to practice at the level of education and expertise.

The goals for this project include a short term and long term evaluation of the effectiveness of the practice change. The short term goal evaluated the effectiveness of creating a practice change within the PCMH; and, the long term goal will be to evaluate the effectiveness of health care agency's disease management teams in reducing readmission rates as compared to the NPN led MDT in the patient-centered medical home. The current disease management team was dependent on provider referral while the NPN who practices at the PCMH does not require a referral to see the patient in the management of their care. This provided greater access to high risk patients earlier in the discharge process.

Significance for future practice/research/social change

Currently the role of the nurse practitioner in the private practice setting varies depending on the type of practice. The family practice nurse practitioner often functions as a provider that diagnoses and manages patients. Developing a policy and procedure for the role of a nurse practitioner navigator had the potential of providing a new role model

for family nurse practitioner in the private office sector demonstrating their continual value in the health care arena. Nurse practitioner navigators have the ability to assist patients, manage medication reconciliation, provider education, communicate with specialist, and design health promotion plans for patients, including seniors. This role as a NPN supported the role of nurse practitioners practicing to the full extent of their education and license.

Literature and evidence based research

I conducted the literature search electronically using the following databases: CINAHL (Cumulative Index to Nursing and Allied Health Literature), ProQuest Nursing and Allied Health Source, MEDLINE, Ovid Nursing Journals, and Cochrane Systemic Reviews. This search was limited to evidence based scholarly research articles that were less than 10 years old with a few exceptions. The main exception in the literature review was Dr. Eric Coleman's transition of care framework; however, this framework was also reviewed in other scholarly articles as the program transitioned. The key words/terms used in the search engines were: *nurse navigator, nurse practitioner navigator, transition of care, reducing readmission rates in heart failure patients, health care reform, the Patient Protection and Affordable Healthcare Act, and CMS MU incentives*. The phases "and" and "or" was used between words in the Boolean search to increase the volume of articles reviewed for this project.

Frameworks and Models

The NPN used Coleman's transition of care model involving the patient, provider, and environment in developing a transition of care program that began prior to discharge

from the hospital through the transition of care post discharge to reduce readmission rates (Coleman, 2003; Hersh, 2013). Coleman's transition of care model addressed the readmission of HF patients as an event that occurred in the environment (home) after discharge (Coleman, 2003; Hersh, 2013). To reduce readmission rates, Coleman's transition of care model provides a theoretical framework improving communication between hospitals and patient centered medical homes.

The NPN uses their scope of practice and educational training in evaluating the patient's demographics, medical comprehension, literacy, and ability to manage their care early in the disease process. The transition of care begins during the hospital stay and follows the patient through the discharge process as the NPN led MDT assist the patient with early appointments, medication reconciliation, patient education, and evaluating their support systems. In addition to the scope of practice for the NPN, nurse practitioners use their knowledge to address the patient's support system(s), economic status, cultural diversity, and safety bringing a full transition of care for the patient while striving to reduce readmission rates (Coleman, 2003; Hersh, 2013).

Concepts, Models, Framework, and Theories

The concept of a nurse navigator in the hospital setting was not a new concept; however, the concept of a NPN in private practice was fairly new. Most practices within my health care organization use a BSN nurse rather than a MSN nurse in the disease management team. The rationale for using an NPN in this practice change was the higher education level, such as a nurse practitioner with a master's degree, a greater insight into the management of care, prescriptive authority, greater understanding on navigating the

outpatient setting, and the ability to follow up with patients upon discharge. The framework for this practice change were: the patient, provider, and environment concept and Coleman's transition of care framework. These models provided the necessary framework to support NPNs to bridge the gap in the transition of care.

Dr. Eric Coleman defines the term "care transition" as the movement patient's transition between health care providers and the home/skilled nursing facility as their health conditions and care change in relationship to their chronic disease process (Coleman, 2003). There are four basic areas that Dr. Eric Coleman identifies in his care transition model: medication self-management, use of a patient-centered health record that helps guide patients through the care process, primary care provider/specialist follow up, and patient understanding of "red flag" indicators of worsening condition and appropriate next steps (Coleman, 2003). The transition of care model states that the hospital/hospitalist/hospital cardiac care management team provide the accountable provider with the hospital tests, consultations, medication reconciliation, and transition/discharge summary in a timely fashion. The receiver must verify the information received, compare medication to patient's medication profile at their provider's office, and schedule timely follow up appointment(s). The Coleman's transition of care model identified the importance of communication between the hospital and provider in the discharge processes; however, the responsibility of scheduling the follow up appointment was dependent on the patient's understanding of the importance for the 7 day follow up window. Dr. Eric Coleman identified the importance of these four areas including the follow up appointment in reducing readmission rates. The Coleman

(2003) stated that the weak link in the transition of care was the brief period right after discharge to home when patients fail to be seen within 7 days of discharge.

Major approaches/steps

The initial approach was to interview the hospital disease management team and the insurance provider agency's disease management team. After the interview process, a discovery in the lack of communication between the hospital and the PCMH created a gap in the transition of care resulted in scheduling delays for these high risk patients. To reduce this gap in the transition of care, a NPN led MDT located within a PCMH developed a policy and procedure aiding in the transitional care of seniors with heart failure.

Multidisciplinary team

The members of the team were considered experts in their scope of practice and located within a PCMH within the local health care agency. The team members include: NPN, lead physician, lead MA, front office manager, and office/practice manager. I was the project manager for this project providing the leadership for the NPN and the evidence based research for this practice change. The NPN and I developed the MDT working with these team members and lead physician in the development of a policy and procedure for reducing 30 day readmission rates in HF patients. The team meet over the period of a few weeks to develop a policy and procedure along with the development of an implementation and evaluation plan (Appendix A; Appendix B; Appendix C). Due to minor scheduling conflicts with team members, the team opted to use Skype to hold two meeting with offsite team members, (Janghorban, 2014). Concerns over HIPPA

violations was also recognized and since Skype was not a secure Internet program and the discussion of any patient(s) required informed consent, Skype was limited to two meetings and no patient(s) would be discussed during the meetings.

Stakeholders

The health care agency provided oversight of all programs. As part of the organizational process, a CLC meets monthly with team leaders from each patient-centered medical home. These team leaders include the lead physician from each office, the lead nurse practitioner, and office managers from the health care agency. A power point presentation will be developed for presentation to the CLC providing evidence based research on the importance of this practice change along with the policy and procedure (Appendix A; Appendix E). Upon approval from the CLC, the NPN led MDT will provide the health care agency with the power point presentation along with the policy and procedure for their approval. Once the CLC and the health care agency approved the implementation phase, the NPN, lead physician, and I will met with the local hospital administration to review the admission and discharge process. Previously, the hospital implemented an admission and discharge notification process for PCMHs; however, this was stopped a few years ago during an administration change and will be requested to be reinstated to aid with the practice change.

Implementation plan

As part of the implementation process for the practice change, the NPN led MDT and I used the *Plan-Do-Study-Act* process (Appendix C). The implementation process

was a three step process that was part of the *do phase*. In the first step of the *do phase*, the NPN led MDT and I will provide the CLC with a power point presentation of the project along with the policy and procedure for their approval for implementation. Upon approval, the second step of this phase, the NPN led MDT and I will met with the local healthcare organization leadership providing them a power point presentation of the policy and procedure along with the recommendations from the clinical leadership committee. Once the healthcare organization agreed to the implementation of the practice change, the third step of this phase, the lead physician, NPN, and I will scheduled a meeting with the local hospital reviewing the policy and procedure along with evidence based research for improving communication on hospital admission and discharges. The local hospital had a policy of notifying providers in the past. The healthcare organization requested the hospital to reinstate this program with common goal of reducing readmission rates and the potential for reducing penalties set by CMS when seniors are readmitted within 30 days of discharge. The *study phase* is the evaluation plan. This phase evaluated the effectiveness of the policy and procedure in meeting the goals of: a) telephone contact within 48 hours of discharge, b) medication reconciliation within 72 hours of discharge, c) patient seen within 7 days of discharge, and d) reducing readmission rates by 20% per CMS MU incentive criteria (Appendix C; Appendix D). The last part of the implementation and evaluation was the *act phase*. During this phase the NPN led MDT and I will monitored the practice change and implement changes after each monthly evaluation.

Evaluation plan

The method for the evaluation was a part of the *study phase* (Appendix C; Appendix D). The evaluation plan evaluated three areas of the practice change. These areas are: a) telephone contact made within 48 hours of discharge, c) medication reconciliation made within 72 hours of discharge, and c) seniors are seen within 7 days of discharge by provider. If these three areas have been supported by the practice change, the goal of a 20% reduction in readmission rates should exist thereby supporting the hypothesis that the development of a policy and procedure reduced readmission rates. The evaluation process will use the chi square test of independence to support the hypothesis that a reduction in readmission rates was the result of a practice change not by an occurrence by chance (Appendix D).

Summary

The goal of the project was to reduce readmission rates in seniors with HF through the development of a practice change using a policy and procedure, incorporating a NPN and me as the oversight of a MDT in the patient centered medical home. The importance of developing this type of tool allowed for a standardized procedure with oversight, accountability, and methods for future implementation/evaluation throughout the organization. Without using a standardized procedure, there was no accountability, the ability to evaluate effectiveness was lost, and the potential for readmission rates continued to exist. However, using the team approach helped in the development of a tool supported by evidence based research and the Coleman's transition of care model will

allow for a smooth transition toward adoption by the health care organization that currently uses Coleman's transition of care model with the disease management team.

References

A guide to Medicare's readmission penalties and data. (2014). Retrieved 2/4/14 from http://kaiserhealthnews.org/news/a-guide-to-medicare-read

About the Law – United States Department of Health & Human Services. (2014). Retrieved August 3, 2014 from http://www.hhs.gov/healthcare/rights/index.html.

American Association of Colleges of Nursing, *the Essentials of Doctoral Education for Advanced Nursing Practice*. (2006). Retrieved August 17, 2014 from http://www.aacn.nche.edu/publications/DNP/Essentials.pdh

Burns, N. & Grove, S. (2011). *Understanding nursing research. Building an evidence-based practice.* Philadelphia, PA: Saunders

Cahill, S. (2014). Improve your career with the Plan-Do-Study-Act cycle. *American Nurse Today*. 9(3), p. 42-43.

California Department of Public Health – *Heart disease mortality data trends, California 2000 – 2008.* (2014). Retrieved July 22, 2014, from: http://www.cdph.ca.gov/programs/ohir/Pages/Heart2008printer

Centers for Disease Control – Learn about health literacy. (2014). Retrieved February 27, 2015 from http://www.cdc.gov/healthliteracy/learn/index.html

Centers for Disease Control – *Heart fact face sheet*. (2013). Retrieved March 1, 2014 from http://www.cdc.gov/dhdsp/data_statistic/fact_sheets/fs_heart

Centers for Medicare and Medicaid Services – *Medicare hospital quality chartbook: Performance report on outcome measures*. (2013). Retrieved August 5, 2014

from http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-OutcomesMeasures.html

Coleman, EA. & Boult, CE. (2003). Improving the quality of transitional care for persons with complex care needs. *Journal of the American Geriatrics Society*. 51(4). P. 556-557.

Defining the PCHM. (2015). Retrieved February 27, 2015 from http://www.ahrq.gov/page/defining-pcmh

Dharmarajan, K., Hsich, A., Lin, A., Bueno, H., Ross, J., Horwitz, L., Bareto-Filho, J., Kim, N., Bernheim, S., Suter, L., Drye, E., Krumholz, H. (2013). Diagnoses and timing of 30-day readmissions after hospitalization for heart failure, acute myocardial infarction, or pneumonia. *Journal of the American Medical Association*. 309(4) p.355-363.

Fiegl, C. 2,200 hospitals face Medicare pay penalty for readmissions. (2012). Retrieved from: http://www.amednews.com/article/20120827/government/308279952/6

Friis, R. & Sellers, T. (2014). Epidemiology for public health practice (5th ed.) Sudbury, MA: Jones & Bartlett.

General information: Nurse practitioner practice. (2015). Retrieved March 22, 2015 from http://www.rn.ca.gov/pdfs/regulations/npr-b-23.pdf

George, J. (2010). Nursing Theories. *The base for professional nursing practice. (6th ed*). Boston: MA. Pearson.

Graham, J. (2013). More on preventing hospital readmissions. The New Old Age, Caring and Coping. Retrieved 2/28/15 from http://www.caretransitions.org

Hernandez, A.F., Greiner, M.A., Fonarrow, C.G., Hamill, B.G., Heidenreich, P.A., Yancy, C.W., Peterson, E.D., Curis, L.H. (2010). Relationship between early physicians follow up and 30-day readmission among Medicare beneficiaries hospitalized for heart failure. Journal of American Medical Association. 5(303). P.1716-1722.

Hersh, A., Massoudi, F., Allen, L. (2013). Post discharge environment following heart failure hospitalization: Expanding the view of hospital readmission. *Journal of the American Heart Association*. 2e00016 doi:10.1161/JAHA.113.000116

Institute of Healthcare Improvement. *Effective Intervention to reduce re-hospitalization: A survey of the published evidence*. (2009). Retrieved March 1. 2015 from http://www.ihi.org/resource/Pages/Changes/EffectiveInterventionstoreducerehospitalizationsCompendium15PromisingInterventions.pdf.

Janghorban, R., Roudsari, R.L., Taghipour, A. (2014). Skype interviewing: The new generation of online synchronous interview in qualitative research. *Qualitative Studies on Health and well-being*. 9, p. 241-252.

Jessup, M., Abraham, W.T., Casey, D.E., Feldman, A.M., Francis, G.S., Ganiats, T.G., Yancy, C.W. (2009). ACCR/AHA guidelines for the diagnosis and management of heart failure in adults: A report of the American College of Cardiology/American Heart Association task force on practice guidelines. *Circulation Journal of the American Heart Association*. 53, p.134-1382.

Kelly, D.L. (2011). *Applying quality management in healthcare: A system approach* (3rd ed). Chicago, IL: Health Administration Press

Kociol, R., Peterson, E., Hammill, B., Flynn, K., Heidenreich, P., Pina, I., Lytle, B., Albert, N., Curtis, L., Fonarow, G., Hernandez, A. (2012). National survey of hospital strategies to reduce heart failure readmission: Findings from the get with the guidelines-heart failure registry. *Circulation of Heart Failure*. 5 p. 680-687.

Lagoe, R., Nanno, D., Luziani, M. (2012). *Quantitative tools for addressing hospital readmissions*. BMC Research notes. Retrieved from: http://www.biomedcentral.com/1756-0500/5/620

Nash, D., Reifsynder, J., Fabius, R., Pracilio, V. (2011). *Population health. Creating a culture of wellness*. Sudbury, MA: Jones & Bartlett.

Naylor, MD., Broten, D., Jacobsen, BS., Mexez, MD., Pauly, MV., Schwatz, JS. (1999). Comprehensive discharge planning and home follow-up of hospitalization elders: a randomized clinical trial. *Journal of American Medical Association*. 281(7) p. 613-620.

Naylor, D. (2009). *Transitional care. American Journal of Nursing*. 109(10), p. 29-30.

Nurse navigator. (2014). Retrieved March 22, 2015 from http://ww.ttubsc.edu/bce/nurse.aspx.

Nurse navigators steer patients through the health care labyrinth. (2005). Retrieved February 27, 2015 from http://ww.nursezone.com/nursing-news-events/more-features/nurse-navigator-steer-patients-through-the-health-care-labryinth_21186.aspx

Nurse navigators steer patients through the health care labyrinth (2015). Kristin Rothwell. http://ww.nursezone.com/Nursing-News-Event/more-feature/nurse-navigator-steer-patients-through- the-health-care-labyrinth_21186.aspx

Medicare levies readmission fines against record number of hospital. (2014). Retrieved February 4, 2015 from http://www.healthcaredive.com/news/medicare-levies-readmission

Orange County Health Profile – *A look at trends and disparities in key health indicators for Orange County.* (2013). Retrieved from http://www.ochealthinfo.com/about/admin/pubs/hp

Parker, M. & Smith, M. (2010). *Nursing theories and nursing practice. (3rd Ed).* Philadelphia: PA. F.A. Davis

Plan-Do-Study-Act (PDSA) worksheet. (2015). Retrieved March 20, 2015 from http://www.ihi.org/resource/pages/tools/plandostudyactworksheet.aspx.

Riddle, S. *What works for preventing hospital readmissions? A review of the current evidence and best practices*. (2012). Retrieved April 29, 2015 from http://www.wapatientdsafety.org/downloads

Press Ganey research finds strong link between patient experience of care measures and readmissions (2012). Retrieved from: http://www.pressganey.com/pressroom/12-12-12/press_Ganey_Research_Find_Strong.

Search results: advantages and disadvantages of paired comparison method. (2011). Retrieved March 29, 2015 from

http://www.yourhroworld.com/formats/search/advantages-and-disadvantages-of-paired-comparison-method/

State Action on Avoidable Rehospitalizations. (2015). Retrieved February 18, 2015 from http://www.ihi.org/engage/initiatives/completed/STAAR/pages/default.aspx.

Taking the failure out of heart failure. (2011). Retrieved August 1, 2015 from http://wwwheart.org/HEARTORG/healthcareProfessional/target HF_ucm_307433_subhomePage.jsp

The Care Transition program – Health care services for improving quality and safety during care hand-offs. (2003). Retrieved March 1, 2015 from www.caretransitions.org/definitions.asp.

The heart failure center, definition of heart failure. (2014). Retrieved February 27, 2015 from http://www.heartfailurecenter.com/htcheartfailure.shtm

Transitional navigator and hospital readmissions. (2013). Retrieved March 10, 2015 from http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-context/2013/02/transition-navigator-and-hospital-readmission.html.

United States Census Bureau- Orange County quick facts from the U.S. Census Bureau. (2013). Retrieved from: http://www.census.gov/quickfacts.census/qfdstates/06/06059

VanBooven, V. (2013). Readmission rates and statistics for the three major diagnoses falling under the current Medicare 30-day rule, and how home care can help. Congestive heart failure, acute MI, and pneumonia. Retrieved from: http:www.reducehospitalreadmissionrates.com.

Welcome to the PCHH resource center. (2015). Retrieved February 20, 2015 from http://pcmh.ahrq/gov.

Appendix A: Nurse practitioner navigator policy and procedure

<table>
<tr><td rowspan="3">Corporate Logo</td><td rowspan="3">Private Practice-
Patient-centered Medical Home
POLICY AND PROCEDURES</td><td>P&P No.</td><td>01</td></tr>
<tr><td>Page No.:</td><td>1 - 3</td></tr>
<tr><td>Date Originated:
Effective Date:</td><td>TBA
TBA</td></tr>
<tr><td rowspan="3">Policy and Procedure
Nurse Practitioner Navigator led multidisciplinary team

Standard of Care – hospital discharge process</td><td>Department: IPA</td><td>Date Reviewed:</td><td>TBA</td></tr>
<tr><td>Prepared By: Nurse practitioner navigator and multidisciplinary team</td><td>Date Revised:</td><td>TBA</td></tr>
<tr><td>Approved By: Clinical Leadership Committee / Insurance Provider Agency

Date: TBA</td><td>Revision No:</td><td>TBA</td></tr>
<tr><td colspan="2">Operational Areas: Private Practice</td><td>Supersedes No:</td><td>N/A</td></tr>
</table>

I. **PURPOSE**: To establish a nurse practitioner navigator led multidisciplinary policy and procedure team to bridge the gap in the transition of care for patients at discharge from hospital to home.

II. **SCOPE:** Corporate name (Insurance provider agency)

III. **PROCEDURE / ACTION**: Follow the established policy and procedure as set forth to bridge the gap in the transition of care from hospital discharge to home with appropriate follow up care. This procedure will provide the insurance provider agency – clinical leadership committee – with monthly reports supporting a practice change to reduce readmission rates especially in high risk patients.

IV. PROTOCOL/POLICY:

- **Insurance Provider Agency – Clinical Leadership Committee:**
    1. Meets monthly at the Insurance Provider Agency
    2. Provides oversight of all policies and procedures
    3. Provides evaluation of all programs to corporate (local and national offices)

- **Lead Physician:**
    1. Provides monthly evaluation reports to the corporation's clinical leadership committee physician chair.

2. Communicates with local hospital to establish link for notification of all contacted patients upon admission and discharge.
3. Communicates (if necessary) with hospitalist obtaining a detailed summary regarding patient's admission and discharge diagnosis and date.
4. Provides nurse practitioner navigator with discharge information from hospitalist upon discharge when a written consult if not available.
5. Provides nurse practitioner navigator with patient admission/discharge status upon hospital notification.
6. Reviews weekly evaluation forms from nurse practitioner navigator.

- **Nurse Practitioner Navigator:**

1. Maintains daily oversight of policy and procedure
2. Provides lead physician weekly evaluation reports
3. Receives daily reports on admission and discharged patients from hospital(s)
4. Provides assistance with lead medical assistant in obtaining discharge summaries and medication lists on all discharged patients.
5. Provides lead medical assistant with check list on all discharged patients (see attached checklist handout)

- **Lead Medical Assistant:**

1. Provides assistance to nurse practitioner navigator with all discharged patients
2. Receives checklist from nurse practitioner navigator for all discharged patients
3. Obtains necessary patient information as directed on checklist is properly received from hospital
4. If necessary, will obtain a patient release for all non-contracted hospitals to obtain medical records on patient hospitalization
5. Provides checklist to nurse practitioner navigator by the end of the day (if incomplete – provides rationale)
6. Provides information to front office staff to schedule patient's appointment within 7 days of discharge

- **Front Office Manager:**

    1. Receives information from lead medical assistant on patient's discharge date and discharge diagnosis for the front office staff to schedule appointment within 7 days of discharge
    2. Notifies lead medical assistant of date, time, and provider patient is scheduled with before the end of the day
    3. Provides lead medical assistant with form (complete or incomplete) before the end of the work day. If patient is not scheduled by the end of the day, provides lead medical assistant with rationale
    4. For all patient's not scheduled, will follow through with the scheduling process the following work day

- **Office/Practice Manager:**

    1. Provides additional oversight for the staff assisting them with completing the transition of care process
    2. Communicates with the nurse practitioner navigator regarding any challenges the staff has in completing the transition of care process
    3. Assists the nurse practitioner navigator with the weekly evaluation process

- **Documentation**

    1. Checklist: see attached form

Appendix B

Nurse practitioner navigator policy and procedure checklist

Corporate Logo	**Private Practice- Patient-centered Medical Home POLICY AND PROCEDURES**	P&P No.	01
		Page No.:	4-5
		Date Originated:	TBA
		Effective Date:	TBA
Policy and Procedure Nurse Practitioner Navigator led multidisciplinary team	Department: IPA	Date Reviewed:	TBA
	Prepared By: Nurse practitioner navigator and multidisciplinary team	Date Revised:	TBA
Standard of Care – hospital discharge process: Checklist	Approved By: Clinical Leadership Committee / Insurance Provider Agency Date: TBA	Revision No:	TBA

Patient name:	**Date of Birth:**
Address:	**Phone Number:**
City:	**Cell Phone:**
Admission date:	**Discharge date:**
Admission diagnosis:	**Discharge diagnosis:**
Hospital:	**Admitting provider/Hospitalist:**

Multidisciplinary team	**Date:**	**Signature**
Lead physician		
Nurse practitioner navigator		
Lead medical assistant		
Front office manager		
Office/Practice manager		

Nurse practitioner navigator	Yes	No	N/A	Comments
Reviewed check list – (end of workday)				
Checklist completed				

Lead medical assistant	Yes	No	N/A	Comments
Contact hospital - obtain discharge summary				
Contact hospital – obtained discharged medication list				
Contact IPA pharmD - obtain medication list from national database (Sure Scripts)				

Front office	Yes	No	N/A	Comments
Contact patient –schedule appointment				
Requested patient to bring all medications with them to their appointment				
Requested patient to include all over the counter medications including herbals products				

Interventions/checklist	Yes	No	N/A	Comments
Patient contacted within 48 hours of discharge				
Medication reconciliation list from IPA pharm D within 72 hours of patient discharge				
Patient seen within 7 days of hospital discharge				
Was readmitted to the hospital within 30 days of discharge				

Reviewed by NPN and lead physician: _____Date:_____

Appendix C

Development of a policy and procedure to reduce readmission rates in seniors with heart failure

Implementation plan

The implementation of this policy and procedure will not occur during this DNPc project development, however; the initial development of the practice change will be a part of the DNPc project. The DNPc developed the following plan using the Plan-Do-Study-Act model for the development of a policy and procedure using a nurse practitioner navigator led multidisciplinary team to reduce readmission rates in seniors with heart failure. The policy and procedure will be established within a patient centered medical home of one practice for implementation at a later date.

Plan-Do-Study-Act

Implementation plan

Team member	Plan development	Who needs to know
Nurse practitioner navigator	Establish member protocols, Team development, Policy and procedure development, Implementation plan, Timeline, Evaluation plan, Expected outcomes	Lead physician Office/project manager Clinical leadership committee Health care agency Local hospital
Lead medical assistant	Role development Implementation plan, Evaluation plan	Nurse practitioner navigator
Front office	Role development Implementation plan, Evaluation plan,	Nurse practitioner navigator

Lead physician	Implementation plan, Evaluation plan, Expected outcomes	Nurse practitioner navigator Clinical leadership committee Health care agency Local hospital
Pharm D	Implementation plan, Evaluation plan	Nurse practitioner navigator

Aim: Reducing readmission rates in seniors with heart failure through the implementation of a nurse practitioner navigator policy and procedure in the transition of care.

Study the problem	**Team leader**	**When to be done**	**Location**
1) Heart failure is one of the top three leading causes of readmission rates in seniors within 30 day discharge	NPN	Initial design process	Patient-centered medical home
2) CMS has applied meaningful use criteria to reduce readmission rates by 20% within the first 30 days of discharge	NPN	Initial design process	Patient-centered medical home
3) Review the CMS penalties as applied to hospitals and insurance payers who fail to meet this meaningful criteria	NPN	Initial design process	Patient-centered medical home
4) Reason for readmission rates in seniors is a gap in the transition of care from hospital discharge to home.	NPN	Initial design process	Patient-centered medical home
5) Need: new policy and procedure implemented in the patient-centered medical home to improve the transition of care using a nurse practitioner navigator	NPN	Initial design process	Patient-centered medical home

Implementation steps: Task	**Project team member**	**Stakeholder**	**Completion date**
1) Establish lead position for team: nurse practitioner navigator	Nurse practitioner navigator (NPN)	Patient-centered medical home NPN	Week 1
2) Development of multidisciplinary team for policy and procedure	NPN/ Team	Patient-centered medical home/ NPN/Team	Week 1

3) Clarify objectives of policy and procedure with team members through evidence based research.	NPN	Patient-centered medical home/NPN/Team	Week 1
4) Development of policy and procedure in accordance with CMS meaningful criteria	NPN/Team	Patient-centered medical home/NPN/Team	Week 2 – 4
5) Develop power point presentation of policy and procedure and reason for practice change for clinical leadership committee approval.	NPN/Team	Patient-centered medical home/NPN./Team/Health care agency	Week 4 - 5
6) NPN and team to meet with clinical leadership committee for approval of practice change.	NPN/ team	NPN/Team/CLC/Health care agency	Week 6
7) NPN and team to meet with healthcare agency for approval of practice change.	NPN/team	NPN/Team/health care agency	Week 7
8) NPN and lead physician to meet with hospital to present practice change and reinstate discharge notification process.	NPN/lead physician	NPN/lead physician/Health care agency/Local hospital	Week 8
9) Implement policy and procedure	NPN/team	Patient-centered medical home/Patient./NPN/Team/Health care agency/Local hospital	Week 9
10) Monthly evaluation of practice change of discharged seniors	NPN/lead physician	Local hospital/ Patient-centered medical home/health care agency	Week 10 with completion 3 months after implementation
11) 90 day evaluation	NPN/team	NPN/team/patient centered home/health care agency/local hospital	After 3 mos

Do:

1) The development for future implementation of a policy and procedure for the patient-centered medical home incorporating a nurse practitioner navigator led multidisciplinary

2) team in the transition of care for seniors with heart failure at hospital discharge to home.

3) The nurse practitioner and multidisciplinary team will develop for presentation a power point presentation supporting the evidence based research and provide the practice change of a policy and procedure to the clinical leadership committee (CLC) for approval to implement within one patient centered medical home pending the health care agency's approval.

4) Upon approval from the clinical leadership committee, the nurse practitioner navigator and multidisciplinary team will present a power presentation and the policy and procedure to the healthcare organization for their approval to implement within one patient centered medical home.

5) The nurse practitioner navigator and lead physician will work with the local hospital to reinstate the notification of admission/discharged seniors with heart failure. The local hospital will be provided with the power point presentation along with the policy and procedure supporting the importance of bridging the gap in the transition of care discharge process.

6) Plan implementation date upon approval from CLC, healthcare agency, and agreement with local hospital providing admission and discharge patient information sheet.

Study;

1) Monthly evaluation done by the nurse practitioner navigator reviewing the total number of seniors discharged and the following: 1) number of seniors with telephone contact within 48 hours of discharge, 2) medication reconciliation within 72 hours of discharge, 3) number of seniors seen within 7 days of discharge, and 4) number of seniors readmitted within 30 days of discharge.

2) The NPN and the multidisciplinary team will evaluate check list and monthly evaluations for potential weak areas and review potential changes to the policy and procedure.

Act:

1) Monthly analysis of the practice change by the nurse practitioner navigator with the lead physician. Review for potential changes to policy and procedure.

2) Nurse practitioner navigator and lead physician will provide monthly evaluations to the CLC, health care agency, and local hospital.

3) Based on evaluation, future plans for implementation within the patient centered medical home within the local health care agencies.

(www.ihi.org)

Appendix D

Evaluation of a policy and procedure to reduce readmission rates in seniors with heart failure using a nurse practitioner navigator led multidisciplinary team

The evaluation process will not occur during this DNPc project. The evaluation will ask the following question: Will readmission rates decline with the implementation of a nurse practitioner navigator led multidisciplinary team? The evaluation process will look at the following variables: 1) telephone contact within 48 hours of discharge, 2) medication reconciliation within 72 hours of discharge, 3) patient seen by provider within 7 days of discharge, and 4) was patient readmitted within 30 days of discharge. Upon completion, the NPN will include a retrospective cohort study of one centered medical home within the same medical group for comparison using the Chi-square test of independence. The following variables from the cohort group will include: 1) length of time from discharge to patient contact, 2) length of time for medication reconciliation, 3) days from discharge to first provider appointment, and 4) number of days to readmission. The Chi-square test of independence will use the nominal, non-parametric data comparing the corresponding group's data to know whether the variable from the interventional group is different from variables in the cohort group. For instance: the number of days for telephone contact in the test group is improved with the practice change as compared to the cohort group, therefore; using the chi-square test of independence the team will be able to determine whether the difference occurred by

chance or as a result of a practice change. Data obtained from these four variables using the two columns, interventional expected group (NPN led team) and cohort observed group, will test the hypothesis:

(H_0): Readmission rates over three months did not decrease by 20% using an NPN led multidisciplinary team as compared to the cohort group.

(H_1): Readmission rates over three months will decrease by 20% using a NPN led multidisciplinary team as compared to the cohort group.

The chi square test of independence hypothesizes that the decreased readmission rates occurred as a result of a practice change rather than by chance. The evaluation will use the following formula after 90 days of the DNPc project implementation.

To calculate the chi square formula, the following steps will be taken:

1) State the hypothesis
2) Calculate the expected value for each cell on the chi square table

$$\frac{\text{Row total} \times \text{Column total}}{\text{Total } \eta \text{ for table}}$$

3) Calculate the chi square

$$\text{Chi} - \text{square} = \text{Sum of } \frac{(observed \times frequency - expected \times frequency)^2}{(expected \times frequency)}$$

4) Determine the significance level (degrees of freedom):

DF = (rows - 1) x* (columns- 1)

5) Calculate whether to accept or reject the null hypothesis