AN EVALUATION OF THE EFFECTIVENESS OF A POST DISCHARGE TELEPHONE PROGRAM TO DECREASE HOSPITAL READMISSIONS FOR PATIENTS WITH HEART FAILURE

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Abstract

The goal of this quality improvement pilot project was to evaluate the effectiveness of a post discharge telephone program to decrease 30-day hospital readmissions for patients with heart failure at one acute care hospital in Ohio. The pilot project evaluated data collected on medication reconciliation, confirmed follow up appointment, a patient medication regime, and a patient's understanding of discharge instructions through the intervention of a post discharge phone call. Thirteen patients participated; one patient had a 30-day readmission to the hospital. The pilot demonstrated an impact to reducing readmissions in the high-risk population and identified opportunity to improve the care transition with scheduling outpatient follow up appointments and medication education prior to discharge. Consequently, recommendations were made to continue the program and to implement additional components of evidenced based practice related to improving the discharge process.

Dedication

To those patients and families whose lives have been altered or changed due to chronic illness. To the support system, who without them, I would not have been able to press forward with the project that laid the groundwork for an evidenced based approach to address a healthcare issue affecting so many.

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CHAPTER 1. INTRODUCTION

Nature of the Capstone Project

The federal government reports that one in five elderly patients is back in the hospital within 30 days of being discharged. Medicare patients over 65 years of age are readmitted to the hospital 9 million times a year (Welch, 2014). The federal government calculates the cost of readmissions for Medicare patients annually to be $26 billion, with more than $17 billion for preventable readmissions (Lavizzo-Mourey, 2013). Preventable readmissions are a result of a fragmented health care system, leaving discharged patients unable to understand their discharge plan, their home medication list, and their need for follow up care. Through the Affordable Care Act, the Center for Medicare and Medicaid (CMS) established the Hospital Readmission Reduction Program (HRRP), which requires CMS to reduce payments to hospitals with excess readmissions (Laderman, Loehrer, & McCarthy, 2013). CMS first levied readmission penalties to hospitals in October 2012 against 2,217 hospitals (Engle, 2013). In the second year of the HRRP, CMS estimates 2,225 hospitals will be penalized $227 million dollars because of excess readmissions (Robert Wood Johnson Foundation [RWJ Foundation], 2013). The need to reduce preventable hospital readmissions is front and center in the national conversation about quality of care. To reduce financial penalties and readmission rates, hospitals and senior leadership must focus efforts and resources at implementing evidence based practice strategies. Hospitals must look at whether to invest time, money, and resources in interventions of uncertain effectiveness that have shown positive results only in pilot units or with pilot populations, and require additional resources to achieve success. Promoting a smooth transition of care upon discharge from an acute care hospital requires collaboration between the acute and post-acute care

providers to reduce unnecessary readmission, which ultimately improves outcomes (Laderman et al., 2013).

Collaborating with the patient and family during the hospitalization includes determining discharge needs; reconciliation of medications at discharge; developing a post-acute care plan; coordinating face-to-face home visits; and providing post discharge telephone calls has been proposed as an intervention in reducing hospital readmissions. Development and implementation of reduction strategies is a complex process. Studies indicate that a focus on one strategy; follow up telephone calls to at risk patients of readmission has shown to decrease unnecessary readmissions (Coleman, Parry, Chalmers, & Min, 2006; Harrison, Hara, Pope, Young, & Rula, 2011). In addition, the literature shows that programs designed for at risk patients of acute care hospital readmission to include a focus on post discharge medication review and reconciliation within five days of the hospital discharge can significantly reduce readmissions (Dudas, Bookwalter, Kerr, & Pantilat, 2001).

Description of the Problem, Environment, and Target Population

Problem

Heart failure statistics report slightly over five million people in the United States being diagnosed with heart failure, with a death rate of one in 9 persons with such diagnoses in 2009 (Mozaffarian, Roger, Benjamin, & Berry, 2013; Centers for Disease Control and Prevention, 2013). How many readmissions may be preventable is debatable among the healthcare sector, however, ranges have been reported anywhere from 5% to 79% (RWJ Foundation, 2013). The definition of excess readmissions as defined by Medicare's program are those that exceed the hospitals expected readmission rate, which is calculated using methodology based on the national mean rate and risk adjusted factors (HRRP, 2011). Hospitals that serve a large

vulnerable population with low incomes or chronic conditions such as heart failure are at the most risk of receiving financial penalty. The project hospital's readmission rate, according to Hospital Compare (2014) website was higher than expected national rated, at 27% based on a period from 2006-2009.

Environment

This pilot project was conducted at an acute care hospital in Ohio. The hospital is a 165 for-profit facility, located in a rural area approximately sixty miles from three major metropolitan areas. The facility currently provides acute care and emergency services to approximately 42,000 men and women, including obstetrical services. County age demographics were 22.10% age 45 to 64 and 12.20% were 65 years of age or older (U.S. Census Bureau, 2014). Heart failure is present in 2% of person age 40 to 59, more than 5% of persons age 60-69, and the annual incidence approaches 10 per 1000 population after 65 years of age (Centers for Disease Control and Prevention, 2013).

Target Population

The target population for this project consisted of patients admitted to and discharged from the hospital with a primary or secondary diagnosis of heart failure, any age, all socioeconomic and ethnic groups, and any payer source excluding Medicare for fee. The comparison group for this project was Medicare for fee patients in a care transition program providing a face-to-face intervention.

Purpose of the Capstone Project

Clinical Question

In patients with a diagnosis of heart failure how does a discharge medication review by a nurse via phone compared to patients who receive a post discharge medication review through a

face-to-face home visit affect the hospital readmission within 30 days of discharge three months after implementation of the project.

Significance of the Capstone Project

Once discharge from the hospital medication mishaps can be detrimental to patients, with increased odds of a medication error related to dosing and understanding discharge instructions. In a study focused on medication adverse events post discharge, 20% of the study participants experienced a medication event, this equated to "one in nine medical patients experienced an adverse drug event following hospital discharge" (Forster, Murff, Peterson, Gandhi, & Bates, 2005, p. 321). Geriatric patients identified to have medication descrepancies at discharge had an incidence of a readmission within 30 days two fold than those who did not experience a medication descrepancy (Coleman et al., 2006). Once discharged home, misunderstanding happens when a patient not knowing the purpose of medication prescribed, a dose has been changed, or simply are unaware they should resume or start taking a medication that was prescribed during the hospitalization. Patients need to be engaged in the effort to avoid readmissions and need to take responsibility of their own care when able.

Given the significant volumes of heart failure readmissions in addition to health care reform and policy changes focused on reducing costs and improving quality, this pilot project focus is twofold, medication safety and hospital readmissions. Discharge from an inpatient hospital setting to home and outpatient care is loaded with challenges. Successful strategies to reduce hospital readmissions include coordinating post hospital follow up, swift action in patient medication reconciliation, and engaging the patient and caregivers to play active roles in managing their healthcare needs. A post discharge telephone intervention is a strategy identified

to provide a transformational focus by providing a comprehensive service for the patient through a continuum of care.

Definition of Relevant Terms

Beliefs are defined as" personal perceptions about specific health conditions or health behavior" (Ryan, 2009, p. 6).

A **follow up appointment** is defined as a scheduled date and time when the patient is to see their primary care provider or specialist.

Hospital discharge instructions and education is defined as the forms and paperwork the patient was provided while in the hospital by the nurse or provider.

Interventionist nurse is the licensed practitioner who will be calling the patient using the scripted questions, collecting, documenting the data collected, and completing all aspects of the post discharge telephone intervention as designed

Medication regime is defined as the patient's process in self- management in medication compliance i.e. pill box, caregiver assistance, and calendar.

The need for a patient to have **post discharge medication reconciliation** is defined as a review of a patient understanding the hospital medication(s) list he/she was discharged home from the hospital with. Including the dose and purpose reconciled to their home medication(s) list to ensure the patient is taking the correct medication(s) and to address any concerns or misunderstandings they may have.

A **30-day readmission** is defined as an admission for any reason to an acute care hospital within 30 days of a discharge from an acute care hospital.

Assumptions

Medicare Conditions of Participation (CoP) regulations (42.CFR 482.43) require participating hospitals to have a discharge planning process that includes an evaluation of needs and a discharge plan; both must be under the supervision of a registered professional (Center for Medicare and Medicaid [CMS], 2011;Gerhardt, Yemane, Rollin, & Brennan, 2013). "Despite these requirements, some studies found instances in which discharge planning was incomplete and necessary information failed to be provided by hospitals to primary care providers or post-acute care facilities in a timely manner" (Stone & Hoffman, 2010, p. 12). Policy gaps exist, however, hospital based strategies to reduce readmission through improved transition communication, coordination of care after discharge, and quality of care during the initial admission have shown to decrease unnecessary hospital readmissions. A search for strategies to contain hospital costs and improve quality outcomes continues to grow as healthcare providers keep pace with economic pressures from government payer sources and mandated regulatory requirements to ensure efficient and equitable healthcare.

Limitations

This project is limited in that a patient who met criteria to participate needed to have a telephone. However, according to Pew Research (2014), 74% of age 65 and older reportedly has a cell phone. In addition, the intervention was not reliant on a third party payer. Participants in the project were not Medicare for fee and the hospital was not subject to bill for codes that allowed for reimbursement of the non-face-to-face care provided when patients transitioned from an acute care setting back into the community. This project was limited as it was at one hospital site that provided a resource nurse to make the post discharge phone call. This project may not be generalized to other type of hospital systems.

Project Objectives

The overall goal of this capstone project was to reduce the number of readmissions in a 30-day period among patients discharged from the inpatient acute hospital who received the intervention. The objectives of the project were to assure the patient had a scheduled follow up outpatient appointment; to review and reconcile post discharge medications; to review with the patient if their hospital post discharge instructions were understood; and to review the patient medication regime. The key stakeholders engaged in this project included the Medical Director of Quality, Chief Nursing Officer, Case Management Manager, two case managers, one Performance Improvement/Quality RN, and one Doctor of Nursing Practice (DNP) Candidate. Problems arise in rushing the discharge process, not including the family in the discharge process, and not ensuring the patient has the correct prescriptions. Patients are at risk of readmission if they have not fully understood when to take medications, not equipped to arrange for follow up care without assistance, or may not know what symptoms indicate the need for outpatient medical attention. Upon hospital discharge, patients are suddenly expected to assume a self-management role in recovery with little support or preparation which may lead to a return to the hospital. Patients today are more likely than ever to pass across different settings of care with different providers supervising their care, leading to fragmented uncoordinated care (Osei-Anto, Joshi, Audet, Berman, & Jencks, 2010). Improving efficiency and coordination of care improves quality of care, which improves patient compliance and satisfaction, which ultimately improves outcomes. A vision of providing best care is health equity. Through the intervention to reduce unnecessary readmissions, an organization can increase awareness of health policy through clinical operations and transitions of care as demonstrated through innovative quality improvement projects.

CHAPTER 2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theoretical Framework

The Integrated Theory of Health Behavior Change (ITHBC) is a midrange descriptive theory, which focuses on health promotion and behavior change (Ryan, 2009). ITHBC theory chosen for this project is grounded in behavioral change; the purpose of the intervention is to reinforce patient understanding and management of their chronic condition. With patients have a responsibility in the effort to avoid readmissions engagement is a key component of improving outcomes. The author discovered the theory through a systematic review of the literature of health behavior change, and focused on concepts that had been foundational to interventions that had demonstrated efficacy (Ryan, 2009). The ITHBC suggests that health behavior change can be enhanced by "nurturing knowledge and beliefs, increasing self-management skills and abilities, and enhancing social facilitation" (Ryan, 2009, p.1). The constructs of the framework include the idea that a patient's engagement in self-management behaviors is seen as the proximal outcome influencing the long-term distal outcome of improved health status (Ryan, 2009). A post discharge phone call focused on medication self- management and an understanding of post discharge instructions through application of the ITHBC will improve the likelihood of compliance and understanding of disease management and the likelihood of reducing an unnecessary hospital readmissions. The focused population was heart failure patients.

Construct: Knowledge and Beliefs

Providing patients with information about their medical conditions and the disease process will improve the likelihood they will engage in the recommended health behaviors that

improve outcomes (Ryan, 2009). Education should be provided in a manner that the patient understands, including at the correct comprehension level of the patient. Providing discharge instructions that are readable, explanatory, and descriptive enhances the discharge process. Denial of a health condition does not support compliance. An example of application of ITHBC theory is during the intervention call, the nurse reviewed the patient's understanding of the discharge instructions, and the education material provided to the patient. The nurse answered any questions, and encouraged the patient to write down questions they might have for their primary care provider.

Construct: Self-Management Skill and Ability

Incorporating behavior change into a daily routine requires self- regulation and goal setting. The patient must also do "self- monitoring, reflective thinking, decision-making, planning and plan enactment, self- evaluation, and management of emotions occurring with the change" to reach desired outcomes of reducing unnecessary hospitalizations (Van der Wal, Jaarsma, & Van Velduisen, 2005,). An example of application of ITHBC theory was during the intervention call; the nurse reviewed patient weight management, diet restrictions, and medication regime to assure the patient had the skill and capacity of understanding the self-management of their disease process.

Construct: Social Facilitation

Sources of influence of social interaction include healthcare providers, family, caregivers, neighbors, social support networks, printed or electronic communication, radio or television, and coworkers. These sources can and will influence a health behavior, through emotions, information, or instrumental. An example of application of ITHBC theory during the intervention call, the nurse assessed if the patient had a support system, such as a caregiver, home health

services, access to community resources, and a mode of transportation to appointments. Patient's knowledge was assessed if they knew how to contact emergency services through contacting 911 via the telephone.

Construct: Outcomes Proximal and Distal

The relationship between the three constructs together influence the proximal outcome: engagement in self- management behavior. "It is proposed that knowledge in itself does not lead to a behavioral change; however, knowledge and belief are linked to engagement" (Ryan, 2009, p. 6). Each enhance the other which may have a direct impact on the outcomes, - improving outcomes. The goal achieved for the patient is a better or improved quality of life, with fewer hospitalizations. The convergence of the three constructs through the post discharge telephone call, although brief, transitioned into their daily routine as the patient was compliant with their medications, diet, and outpatient care.

Summary of Relevant Research

A search of the literature regarding decreasing 30-day readmissions to a hospital, with emphasis on evidenced based strategy and quality improvement. The following databases were utilized; Cochrane Database of Systematic Reviews, Pub Med, Ovid MEDLINE, Ovid EMBASE, EBSCO, CINAHL, Google Scholar, and websites accessed were the Institute for Healthcare Improvement (IHI) and the Agency for Healthcare Research and Quality (AHRQ). The initial search terms included telephone discharge follow-up, discharge calls, telephonic, care transition, medication reconciliation, medication adverse events, readmission reduction, congestive heart failure readmission, and post discharge medication review. Fifty articles were retrieved, and then narrowed to 15 articles through a critical review with relevance to the

readmission intervention. Of the possible 15 articles, five were pertinent to post discharge telephone calls and readmission rates.

Greenwald, Denham, and Jack (2007, p. 102) identified through a review of the evidence a "telephone reinforcement of the discharge plan and problem solving two to three days after discharge" a key strategy to reduce readmissions. Greenwald et al. (2007) identified approximately one of five discharges would have an adverse event related to the fragmented discharge process, leading to high healthcare cost and rehospitlizations.

Harrison et al. (2011) conducted a retrospective cohort study of claims data of a commercial health plan to determine whether a telephonic outreach to members affected hospital readmissions. Limitations to this study concluded it was not possible to determine conclusively that the intervention solely reduced readmissions; members may have received other outreach outside the scope of the phone call program (Harrison et al., 2011). The results identified members who did not receive a call within 14 days after a hospital discharge were 1.3 times more likely to be readmitted within 30 days of discharge ($P = 0.043$; Harrison et al., 2011). The odds ratio with a telephone intervention identified 23% less likely of being readmitted with outreach by ensuring a patient understood the discharge instructions (Harrison et al., 2011).

A random control study by Braun et al. (2009) of 400 patients divided into two groups, the study group received a telephone follow-up at one week and one month after discharge. The results of the post discharge call focused on providing medical advice on managing symptoms and identifying complications demonstrated the study group reported improvement in symptoms, and a non significant trend in fewer readmissions ($P = 0.062$; Braun et al., 2009). Consequently, a trend was observed in the readmission rate, which gave rise to further research on post discharge telephone follow up (Braun et al., 2009).

A randomized control study by Dunagan et al. (2005) of 151 patients hospitalized with heart failure received usual care or a nurse administered post discharge disease management program. Patients who received the intervention had lower readmission rates ($P = 0.063$; Dunagan et al., 2005). The failure of patients to understand the importance of compliance to their discharge instructions may exacerbate heart failure symptoms resulting in frequent outpatient visits and hospital admissions (Dunagan et al., 2005). This study provided evidence of the benefits of nurse led self-care education to heart failure patients.

The search also yielded a clinical practice guideline developed by a research group at Boston University Medical Center titled Project Re-Engineered Discharge (Jack, 2013). This clinical practice guideline when fully implemented demonstrated reductions in hospital readmissions. Re-Engineered Hospital Discharge Program, also known as Project RED, created at Boston University Medical Center, through collaboration with Agency for Healthcare Research and Quality (AHRQ), developed a toolkit for hospitals and organizations to implement the project ("Re-engineered Discharge" 2011). In a study involving Project RED, 370 patients participated in the project were one third less likely to be readmitted to the hospital (Jack, 2013). In addition, follow up appointments were scheduled for all patients in the project, improving care transition to the outpatient setting. The project focused on ensuring that all discharged patients who received the RED intervention understood how to care for themselves in the days after discharge. This improved the likelihood that patients would be compliant with their discharge instructions and to self- management of their disease process. Project RED encompasses re-engineering the entire discharge process in the hospital, which may require additional resources not only from clinical areas but also from informatics, to assure the electronic medical record captures and delivers the discharge information in a manner that is usable and understandable to

the patient. One specific strategy of RED was a post discharge phone call within two to three days to assure the patient understood their discharge instructions, review of their home medications and conducts reconciliation, and address any concerns or questions they have regarding their follow up or care.

The literature to support a post discharge telephone program to reduce hospital readmissions for heart failure patients is relatively limited. It is widely recognized that best practice to reduce readmissions requires the discharge process from the hospital to be focused on ensuring the patient be prepared and fully informed of their diagnosis and treatment plan. A post discharge telephone program was only one specific strategy or component that was not as resource intensive as a face-to-face home visit and the evidence supported that post discharge medication reconciliation could reduce readmissions. The entire transition of care process for a patient has been recognized as being fragmented, which can lead to unnecessary readmissions. To avert a patient from having a serious event related to a medication error post discharge, a telephone intervention may not only decrease unnecessary hospital readmission but also improve the quality of patient care and the perception of the hospital.

CHAPTER 3. PROJECT DESIGN

Project Design and Description

A concurrent quality improvement project of an intervention of a post discharge phone call to patients admitted and discharged from hospital beginning May 1, 2013 through July 31, 2013 with a primary or secondary diagnosis of heart was performed. A hospital census reviewed daily identified the patient population, excluding any patient with payer source of Medicare for fee.

Rationale for Design Framework

The design of the project was a quality improvement project. Criteria used in selecting the right design for the model merged both evidenced based practice and quality initiatives to improve care and outcomes. The Evidenced Based Practice Improvement Model (EBPI) integrates the evidence-based paradigm with the performance improvement paradigm, and offers an approach to integrate clinical expertise, patient values, and cost-effective care in implementing evidence based practice in an organization (Levin et al., 2010). The EBPI model provided a framework for performance improvement within a hospital for long-term success and sustainability in the healthcare market. Engaging the key stakeholders through updated information, program timeline, and implementation plan was an important component in planning the design. Patient preferences and values were considered in the project strategy and implementation. Engaging the patient in the intervention, having them understand the purpose and mission ensured success of reaching a reduction in hospital readmissions. Gathering baseline data prior to program implementation, during implementation, and post implementation was necessary to provide an analysis of efficacy and success of the intervention at the end of the pilot.

Capstone Project Intervention

A post discharge intervention was provided to all patients with a primary or secondary diagnosis of heart failure. The intervention was based on the Project RED tool kit, and implementation guideline. Patients excluded from the intervention group included Medicare for fee; patients eligible to enroll in the Care Transitions Program, and patients discharged to a long term care facility or transferred to another acute care facility. A registered nurse conducted the discharge phone call. The call was conducted within 48-72 hours post discharge. The information was documented and analyzed to identify opportunities to intervene. The medication reconciliation process was evaluated to identify descrepancies along with compliance to a post discharge outpatient follow up.

The improvement model applied to this project was the Plan, Do, Study, Act (PDSA) cycle (Deming, 1986). Each month the program was evaluated to identify opportunities to change or improve the program. The PDSA worksheet developed by the Institute of Healthcare Improvement (IHI) and provided as a pubic document found on the IHI website was used to identify opportunities to change processes or procedures to attain goals identified within the capstone project.

Assessment Tools

The interventionist nurse utilized an individualized, scripted questionnaire based on each patient's discharge information. The answers to each question were documented on the data collection sheet. Prior to the phone call, the interventionist nurse reviewed the patient’s discharge instructions and discharge medication list to anticipate any questions or concerns that the patient might have. The hospital uses an electronic EMR, which provided the nurse easy access to the medical record and the information she needed to complete the call in an efficient manner. The

questionnaire was designed using the RED tool kit. Data collected by the nurse interventionist was transferred to an excel spreadsheet to collect specific data for the measurable objectives and program outcome indicators.

Other Evaluative Strategies

Data collected by the interventionist nurse was then transferred into an excel spreadsheet to determine specific and measurable objectives, outcome indicators, and outcome of 30-day readmissions.

CHAPTER 4. ANALYSIS OF IMPACT

Results

An analysis of the results of the post discharge telephone intervention was conducted at the end of the three-month project. The results are therefore presented. Thirteen patients received the intervention during the pilot project.

Readmission

In the project population, there was **one (1)** 30-day hospital readmission.

Medications Reconciliation

In the project population, five patients (38%) or slightly more than one third of the patients required medication reconciliation. The nurse interventionist reconciled and re-educated the patient on their medication list. This revealed the need to reconcile the medication discharge instructions and home medication list, and review the education process with the patient, and if possible, the caregivers prior to discharge.

Follow up Outpatient Appointment

Of the project population, nine patients (70%) or nearly three fourths of the patients had a follow up outpatient appointment scheduled when the nurse interventionist had telephoned the patient. The interventionist nurse reviewed the discharge plan with the patient. Opportunity within the hospital setting to schedule the care transition, or assure the patient has a care transition plan was identified as a quality improvement initiative and was proposed as a recommendation for improvement to the discharge process.

Medication Regime

Of the project population, only one patient did not have a medication regime in place. For the most part, the patients were able to articulate a process of utilizing a pillbox or a reminder system for their medications to assure adherence to schedule.

Discharge Instruction Review

Of the project population, all patients had a review of their hospital discharge instructions, management of their chronic condition heart failure, and reinforcement of self-care behaviors necessary to maintain or improve their quality of life, i.e. weigh self each day, diet instructions, and when to call the doctor or emergency department. All patients were provided the opportunity to ask questions and if additional resources were needed, i.e. home care, resource numbers, or community resources by the interventionist nurse.

Clinical Question

According to information related to the study site, the patients in the project population had a 30-day readmission rate of 7.6% to the patients in the comparison group whose readmission rate for the same period was 12.4 %. Consequently, the capstone project decreased the readmission rate for the project population, therefore, demonstrating a telephone intervention to be an effective strategy.

CHAPTER 5. IMPLICATIONS AND CONCLUSIONS

Implications for Practice

Any reduction in readmissions constitutes success. An opportunity to influence a patient's ability to take charge of their care promotes positive outcomes for the patient, their caregivers, and healthcare in general. Improving the patient's compliance and the transition to home from hospital may affect the outpatient setting as well. Patients will present to their primary care giver with a better understanding of self- management, their disease process, and ultimately, this promotes patient centered care. The Institute of Medicine (2001) identified six aims of healthcare that it be safe, effective, patient centered, timely, efficient, and equitable. The proposed evidence based practice identified to improve readmission is grounded in these aims. With that being said, the case for quality care should be the top priority of any health care organization’s strategic plan for the future. Patients with chronic illnesses require resources that are patient centered and promote patient activation and self- management, promoting compliance and positive outcomes (Coleman et al., 2006).

Summary of Outcomes as Related to Evidence-Based Practice

Bridging the transition to home through a telephone intervention focuses patients on taking an active role in their health promotion and disease management, the premise of the ITHBC model. Those patients who take an active role in their care are more likely to be satisfied with their care, which promotes positive outcomes. Organizations that adopt a "wait and see" approach to reducing readmissions, in hopes that the financial penalties are not significant to the bottom dollar, will be left behind to address reduced revenues based on penalties. Convincing hospital leaders to adopt practices that are effective and cost limiting is important in effectively implementing an evidence-based approach to reduce readmissions. This DNP learner's role in

promoting evidence based practice and improving patient outcomes was well aligned to the organization's strategic plan to improve quality of care and reduce readmissions through implementing this pilot project.

Identifying opportunities to improve the overall discharge process from the time the patient was admitted to discharge. Looking at gaps in the care transition handoff was identified through this pilot project and provided insight to other hospital wide quality improvement projects. In addition, this intervention has the potential to be utilized on other morbidities, possibly reducing the overall all cause 30-day readmission rate. Partnerships with the patient and family during the admission stay to determine discharge needs, reconciliation of medications at discharge, developing a post-acute care plan, face-to-face home visits, and discharge telephone calls improves patient outcomes, and considers the patients preferences and values. Development and implementation of reduction strategies is a complex process and requires a collaborative approach with all patient caregivers, i.e. hospitalist, case managers, nurses, home care, and outpatient care providers. Through analysis of the research and strength of the evidence, this pilot project demonstrated the feasibility of this strategy; a post discharge phone call to have an impact and show positive results in decreasing readmissions. This evidence-based approach to reducing hospital readmissions was mindful of resources and finances and may prove to be a cost effective approach and alternative to the current practice in the organization. This pilot project with a population size of 13 patients with a diagnosis heart failure, although a small sample, demonstrated positive results in reducing a 30-day readmission rate.

Conclusions

In researching and preparing this project, it was evident that there was a growing need in healthcare to address patients transitioning from one care setting to the next and the need for healthcare providers to be directly involved in improving the process. Beyond the hospital doors, nurses can continue to play a role in improving patient's compliance and knowledge in self-management behaviors. Other components of Project RED besides a reinforcement of the discharge plan via a post discharge telephone call included beginning the discharge process upon admission, patient education throughout the hospitalization, timely accurate flow of information among care providers, a complete patient discharge summary prior to discharge, scheduling outpatient appointment, and continuous quality improvement of the discharge process (Jack, 2013). The organizational leaders decided to continue the discharge phone calls focusing on heart failure patients, with intentions to evaluate other vulnerable patient populations who could benefit from this intervention and to evaluate other components of Project RED through establishing a Readmission Team. The project provided for the sharing of information, what worked and what did not, and a great learning experience, for not only this learner, but for the key stakeholders and the organization as well. Patients who participated in the program benefited from the knowledge and resources of the interventionist nurse, who also reported the project to be rewarding to be able to affect a patient's quality of life.

Organizational executives and care providers often have patients relay their stories of fragmented care or harm related to medication error, families who describe having poor care or even poorer outcomes at a hospital, seek to understand why. It is hopeful that positive stories from patients and family members will be shared with hospital leaders, demonstrating better outcomes and positive patient experiences from less readmission to the hospital and better

transition of care. As a result, the post discharge telephone call pilot project demonstrated it could have a positive impact on the 30-day hospital readmission of heart failure patients at one hospital in Ohio.

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APPENDIX A. STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

> Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)
>
> Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

> Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name and date	Amy Donaldson March 11, 2015
Mentor name and school	Joann Manty Capella University

APPENDIX B. SCRIPTED PHONE CALL

Scripted Discharge Phone Call

Hello, this is (Nurse Name) calling you from ____ Hospital. Is this still a good time for us to discuss your discharge from ____ Hospital? As discussed at the hospital this call is to assure that you understand your discharge plan from the hospital so you can better care for yourself.

How are you feeling?
Were you able to get your prescriptions filled? If No why not?

Are you taking your medication(s) as your doctor ordered? If NO why not?

Are you taking any other medications that are not on the list that was provided to you upon discharge?

Let's review your list of medications. (Nurses uses discharged medication list and reviews each medication with the patient- Name, Dose, When to Take)

Do you have any questions about your medications?

Did you make your follow up appointment? If YES, confirm date and time. If NO, ask why and ask if you can schedule follow up for them.

Is there any reason you might not be able to keep your follow up appointments? If YES, identify barriers.

Do you have questions about your go home instructions and plan of care?

Do you know which symptoms to watch for that would mean you would need to call your doctor right away? If yes, review the symptoms. If NO, review discharge instructions.

Have you weighed yourself today? If NO why? If yes, document weight.

Do you have any questions about your follow up process or any instructions we have provided? What else could we have done to better prepare you to take care of yourself at home?

Thank you for speaking with me today. If you have any additional questions, please call me at (phone number).

APPENDIX C. PDSA CYCLE TOOL

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PDSA Worksheet for Testing Change

Aim: (overall goal you wish to achieve)

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do **Describe what actually happened when you ran the test**

Study **Describe the measured results and how they compared to the predictions**

Act **Describe what modifications to the plan will be made for the next cycle from what you learned**

APPENDIX D. DATA COLLECTION TOOL

Data

Patient Id	Date of Admit	Date D/C	Date of Call	Length of Call	Med Rec Req.	F/U appt Sch.	Med Regime	Discharge Review	Weight Today	Readmitted w/I 30 days of DC	Positive Pertinent- Referrals, Extensive education or need to call patients provider (Comments)	Case Discussed w/DNP
					Y N	Y N	Y N	Y N	Y N	Y N		