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Discharge from Hospital to Home: Implementation and Use of the AHRQ IDEAL CHF Discharge Planning and AHA CHF Discharge Checklist

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Discharge from Hospital to Home: Implementation and Use of the AHRQ IDEAL CHF

Discharge Planning and AHA CHF Discharge Checklist

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NURS 670: Internship

Professor Liesel Buchner

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Table of Contents

Section I: Title and Abstract

Title	1
Abstract	4

Section II: Introduction 6

Problem Description	7
Available Knowledge	8
PICOT Question	8
Literature Review.....	9
Rationale	10
Specific Project Aim	11

Section III: Methods

Context	12
Microsystem Assessment	13
Institute for Healthcare Improvement Assessment	14
SWOT Analysis	15
Return on Investment	15
Communication Plan	16
Intervention	16
Study of the Intervention	18
Measures	20
Ethical Considerations	21

Section IV: Results

Outcome Measure Results	22
-------------------------------	----

Section V: Discussion

Summary	24
---------------	----

Conclusion	26
Section VI: References	28
Section VII: Appendices	
Appendix A. Evaluation Table	32
Appendix B. SWOT Analysis	34
Appendix C. Fishbone Diagram	35
Appendix D. TeamSTEPPS Pre-Training Knowledge Assessment	36
Appendix E. ROI Graph	37
Appendix F. AHRQ IDEAL Discharge Planning Resources	38
Appendix G. AHA CHF Checklist	39
Appendix H. Post-Discharge Nurse Survey.....	40
Appendix I. Statement of Determination	41
Appendix J. Bar Graph	45
Appendix K. Team Charter	46

Section I: Abstract

Problem: Hospital readmission rates in the congestive heart failure (CHF) population is a quality concern. As excessive readmissions tend to indicate low quality of care, government and private healthcare payers are increasing their focus on 30-day readmission rates as a new quality measure for hospitals.

Context: This was a quality improvement project for a telemetry unit at a medical center in the Central Valley of California. There are 56,551 members in the Central Valley enrolled in the healthcare provider system and 2,567 patients with a primary or secondary diagnosis of CHF. Within the healthcare system, CHF was identified as the third most-admitted diagnosis to the telemetry unit, with an average stay of 5.4 days.

Interventions: A multifaceted, evidence-based model was implemented using several interventions: (1) TeamSTEPPS Pre-Training Knowledge Assessment survey to gauge nurse CHF knowledge, (2) Agency for Healthcare Research and Quality IDEAL discharge planning resource, and (3) American Heart Association CHF discharge checklist.

Measures: The goal of the project was to reduce the 30-day readmission rates for recently discharged patients from a baseline of 14% to 10% by July 2021, with a focus on the discharge education given to the patients and their family members.

Results: Initially, there was a high level of interest and engagement among the nurses in educating the CHF patients and gauging their readiness for discharge. As the project progressed, nurse engagement faltered, with nursing staff reporting burn-out and increased stress from multiple improvement projects being implemented simultaneously. Patient feedback concluded that the discharge education provided by the nursing staff was beneficial and increased their comfort being discharged home to self-care. Due to time constraints with the project deadlines,

the patient readmission rates could not be accurately assessed; although, results are expected to improve with the continuation of the education introduced during the project.

Conclusion: Staff education on the available resources to assist them with CHF discharge education may increase the readiness of CHF patients to discharge home and reduce the 30-day readmission rates in the CHF patients on the telemetry unit in the Central Valley of California.

Keywords: *congestive heart failure, readmission, education, best practices, discharge planning, self-management*

Section II: Introduction

Hospital readmission rates in the congestive heart failure (CHF) population is a quality concern. Data from the Centers for Medicare and Medicaid (CMS) suggest that about 25% of patients are readmitted within 30 days of initial hospitalization, and 35% of these readmissions are because of CHF (Park et al. 2019). CHF currently affects approximately 6.5 million people in the United States and has an approximate 5-year mortality rate of 42% (Park et al., 2019). Due to Medicare's readmission reduction program, hospitals are implementing programs to reduce the readmission rates in all-cause diagnoses. Avoidable readmissions are used as indicators of a fragmented healthcare system that frequently leaves discharged patients confused about their self-care at home, unable to follow discharge instructions, or unable to get the necessary follow-up care to decrease the risk of readmission. The healthcare industry, with its limited resources, cannot spare the costly price of readmissions within our CHF population. In 2012, the CHF cost burden was estimated to be \$30 billion, and projections show that by 2030, total CHF costs will increase 125% from 2012 to nearly \$70 billion, which averages \$244 for each U.S. adult (Benjamin et al., 2019). Quality of care and patient safety should always be at the forefront of the healthcare delivery system, but resources must be directed towards innovations and strategies to improve care transition from hospital to home.

As excessive readmissions tend to indicate low quality of care, government and private healthcare payers are increasing their focus on 30-day readmission rates as a new quality measure for hospitals. The intent behind the measure is for the hospitals to provide better care by following evidence-based practice (EBP) guidelines, which, in turn, will reduce heart failure readmission rates. Park et al. (2019) noted this cultural shift in healthcare tells a compelling story that underlies the adage, "what gets measured gets attention" (p. 2). It is clear that by linking

financial incentives to quality measures, EBP will continue to drive for significant improvements in patient outcomes and reduce unnecessary costs to the healthcare system. These improvements translate into fewer readmissions in the CHF population and decreased length of stays in the hospital. While this trend appears promising, and admission rates for CHF have decreased over the past decade, readmission rates for CHF have increased.

Problem Description

The project microsystem is a 24-bed inpatient telemetry unit at a local healthcare facility that cares for general medicine and subspecialty patients. The telemetry unit is a complex microsystem involving several medical specialties and multidisciplinary teams. The unit's mission is to provide high-quality, affordable healthcare services and to improve the health of our members and the communities we serve. The unit's philosophy is based on seven foundational values, which include quality, integrity, excellence, teamwork, accountability, trust, and continuous improvement. The purpose of the unit is to offer high-quality care using the current advancements in technology and equipment and provide a care environment that is safe and family friendly. The majority of admitted patients on the telemetry unit have the main diagnoses of sepsis, CHF exacerbation, hypoxic respiratory failure, pneumonia, and pancreatitis. The average age of the patients ranges from 51 to 75 years. The telemetry unit's average daily census varies from 22 to 24 patients. Based on patient satisfaction scores and data, 90.8% of the patients are satisfied with the care they received while admitted to the telemetry unit.

As related to metrics that matter, hospital readmission rates were identified as an area for improvement, especially within our CHF patient populations. Current data show that 14% of the CHF population, within 30-days of discharge from the telemetry unit, present to the emergency department with exacerbation of CHF symptoms and are readmitted to the telemetry unit. The

two main areas identified to decrease readmission rates among our CHF populations were to improve patient education at discharge and to schedule post-discharge appointments. These two areas present an area of concern for the telemetry unit because CHF is so costly, and many patients are readmitted within just 30 days of discharge for the same problem. Nationwide, approximately 25% of CHF patients are readmitted within 30 days of discharge, and these numbers suggest that there is room for improvement (Chava et al., 2019).

Available Knowledge

PICOT Question

The PICOT question used for the literature review and synthesis of evidence for this CHF project states: For all admitted CHF patients (P), how effective is the use of a comprehensive discharge plan and medication education (I), as compared to current practice (C), in reducing readmissions for exacerbation of symptoms (O) within 30 days of discharge (T)?

A comprehensive data search was conducted in February 2021 reviewing evidence that compared CHF education and current practices using the following databases: Cochrane Database of Systematic Reviews, CINAHL, PubMed, DynaMed, Guidelines Clearinghouse, and Joanna Briggs. The databases were searched using combinations of the following search terms: *congestive heart failure, readmission, education, best practices, discharge planning and self-management*. Limitations were set to include English-only and peer-reviewed articles, with publication dates no earlier than 2016. An original search delivered 25 articles, and five articles were selected based on the evidence and relevance to the PICOT question and the CHF population group in the studies. The articles were rated utilizing the Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool (Dang & Dearholt, 2018).

Literature Review

The use of Cochrane produced a systematic review that was appraised at a Level III B. Almkuist (2017) noted that the use of teach-back education sessions is low cost, requires minimal staff time, and can have a positive impact on a patient's life when management of heart failure is understood.

The use of PubMed produced two studies, one retrospective cohort study and one qualitative study, both appraised at a Level III B. Hsuan et al. (2020) discussed that the implementation of Medicare's Hospital Readmissions Reduction Program decreased the probability of readmissions for the CHF population. Okrinec et al. (2019) found that higher levels of patient engagement at the time of discharge were associated with higher rates of medication adherence and decreased readmission rates.

One Joanna Briggs review of a randomized control study was appraised at a Level 1 B. In the study, Cui et al. (2019) concluded that the implementation of a nurse-led education program improves self-management and clinical outcomes of rural CHF patients who may not have access to cardiac services in larger metropolitan areas, with the readmission rates for CHF in the intervention and control group being 10.4% and 27.1%, respectively.

Lastly, CINAHL was utilized and produced a case series (non-experimental) that was appraised at a Level V B. Wood et al. (2019) revealed that further advocacy is needed for interdisciplinary, evidence-based heart failure teams and the use of the American Heart Association's Get with the Guidelines would increase the potential for success, with knowledge sharing bolstering transparency and increasing return on investment, thus reducing 30-day readmission rates for CHF patients (Wood et al., 2019).

The literature review answered the PICOT question. The body of evidence showed that CHF patients receiving adequate instructions at discharge improves patient compliance with medical treatments and increases patient satisfaction, thus reducing 30-day readmission rates. The interventions used in this project were developed from the EBPs identified in this review of literature. See Appendix A for the evaluation table of evidence-based research.

Rationale

Lewin's (1951) change theory, combined with elements from Institute for Healthcare Improvement (IHI, 2021) model for improvement, formed the conceptual framework for this project. Change is an essential component of nursing practice. Leading change is a challenge for nurse leaders amid the complexities and challenges of evolving healthcare environments in providing quality patient care. Nurse leaders are often called upon to be change agents and are often responsible for the success and viability of their microsystem.

The major elements and key concepts of Lewin's (1951) change for nursing are unfreezing, change, and refreezing. Unfreezing is the process that involves finding a process of making it possible for individuals to eliminate old patterns of behavior that are counterproductive to their quality of work. Nurses must overcome the strains of individual resistance and group conformity during this stage. There are three methods that can lead to the achievement of unfreezing. The first is to increase the driving forces that direct behavior away from the existing behaviors or the conformity to the status quo. Second, decrease the resisting forces that negatively affect the movement from the existing conventions or standards. Third, find a balance of the first two methods that are conducive to a compatible work environment. The change stage involves moving to a new commitment and involves a process of change in thoughts, feelings, and behaviors that is more productive and eliminates redundancy or variances in workflows. The

refreezing stage involves implementing the change as the new norm, so that it becomes standard operation. Without implementation of this final stage, the nursing staff can easily stray towards old habits.

The IHI (2021) model is a simple, yet powerful, tool for accelerating improvement. The IHI model is structured to accelerate improvement and not to replace existing models of change within a healthcare organization. The fundamentals of the IHI model consist of the implementation of small changes using the plan-do-study-act (PDSA) cycle. The PDSA cycle is shorthand for testing change by developing a plan to test the change (plan), carrying out the test (do), observing and learning from the consequences (study), and determining what modifications should be made to the test (act). This four-stage problem-solving model is simplistic in its design, is useful for improving upon an existing process, and can be implemented for simple or complex quality improvement projects throughout a healthcare organization.

Specific Project Aim

The specific aim for the CHF discharge education project at this medical center is to decrease the number of 30-day readmission rates of recently discharged CHF patients from a baseline of 14% to 10% by July 2021.

Section III: Methods

Context

Using the 5Ps microsystem assessment provided valuable information regarding the current state and function of a 24-bed inpatient telemetry unit at a local healthcare facility. The telemetry unit staff fosters an environment of teamwork and strives to provide high-quality care for their patients. However, due to the recent Covid-19 pandemic and high levels of stress on the unit, increased levels of staff dissatisfaction and discordance have been identified as a significant problem. Some barriers identified were poor communication, poor leadership, and lack of respect from leadership towards various members of the care team. Some other barriers identified during the assessment were lack of time for patient education and the stress to discharge patients in a timely manner.

A strengths, weakness, opportunities, and threats analysis (SWOT; see Appendix B) and a fishbone diagram (see Appendix C) were utilized at the beginning of the project and identified various barriers, risks, and underlying causes that influence several problems within the microsystem. The SWOT analysis will be explained in a later section. The fishbone diagram analysis showed that shorter length of hospital stays, unorganized CHF educational resources and processes, high-acuity patients, excessive workload, and lack of support have led to missed opportunities to provide our hospitalized CHF population with the necessary and effective patient-centered discharge education to assist with their transition to self-care at home.

The healthcare industry must emphasize the importance of a team approach in reducing the readmission rates and length of stay for hospitalized CHF patients. This must include a multidisciplinary team that includes a cardiologist, case manager, pharmacist, social worker,

nutritionist, and nursing team. Furthermore, with CHF readmission rates steadily rising nationwide and being the focus of CMS, newer research will be published that will further support the healthcare industry's implementation of EBPs. A multidisciplinary team will assist hospitalized heart failure patients to overcome many of the educational and socioeconomic barriers that contribute to the readmission of CHF patients.

Education is the key to successful patient outcomes. Frontline nursing staff, as key members of the healthcare team, should have an appropriate understanding of CHF educational resources at their disposal. This will assist them in playing a pivotal role in the development of strategies for follow-up and continuity of care to prevent CHF readmissions. Oftentimes, frontline staff assume the role of CHF educator without proper training or an adequate knowledge base to perform the role. Decreasing the readmission rates and the financial burdens associated with the CHF population are significant. Improvements in quality of life and care should be the focus within the CHF population. This can be accomplished by the implementation of a CHF education discharge program led by the clinical nurse leader and frontline nursing staff, grounded in EBP. Effective patient education not only enhances patients' knowledge for improved self-care but is also associated with high-quality healthcare services, with patients more likely to adhere to treatment (Livne et al., 2017).

Microsystem Assessment

The microsystem for this project is a 24-bed telemetry unit at a local healthcare facility in the Central Valley of California. The population considered is CHF patients in the local population who are members of the local healthcare provider. There are 56,551 members in the Central Valley enrolled in the healthcare provider system and 2,567 patients with a primary or secondary diagnosis of CHF. The CHF population within the healthcare provider system has

varied ethnic backgrounds. Patients with the primary or secondary diagnosis of CHF list their ethnicity as Caucasian (26%), Hispanic (21%), African American (13%), and Asian (11%). The age for the CHF patients is between 32 years and 96 years. Two-thirds of the CHF patients are over the age of 65 years. The patients are distributed equally between male and female among the older patients, while the younger portion tends to be more male than female.

During patient rounding, 65% of the CHF patients stated they lived at a residence within the local community and have family members available to assist them with their care at home. However, 75% of the patients stated they lack the educational resources and knowledge base to fully understand the disease process of CHF, and they could not explain or teach back the basic CHF discharge instructions when hospitalized.

Institute for Healthcare Improvement Assessment

The CHF discharge education project was supported by the local healthcare facility. Supportive staff included the patient care services director, clinical nurse specialist for the intensive care and telemetry unit, data analyst, and assistant nurse managers who were the unit champions for this project.

At the beginning of the project, a TeamSTEPPS Pre-Training Knowledge Assessment Survey was given to 56 nurses who work on the telemetry unit (Agency for Healthcare Research and Quality [AHRQ], 2015; see Appendix D). The results of the survey were consistent and showed that the registered nurse (RN) staff needed additional instructions regarding CHF discharge education. The RN staff were unaware of discharge education resources that were available to them and did not utilize CHF discharge teaching materials that were already created by the healthcare facility and accessible for use.

Patient rounding was performed on patients with the primary admission diagnosis of CHF or CHF exacerbation to evaluate if the patients felt they had the necessary tools and resources to manage their CHF at home, once discharged. Most patients stated they did not have the resources or education they needed to manage their CHF at home, and felt that on previous admissions to the hospital, the discharge education process was rushed and did not allow for adequate questions or feedback. The patients also stated that the lack of family or caregiver involvement during the discharge process was a major factor that led to their readmission.

SWOT Analysis

A SWOT analysis was performed for this project (see Appendix B). The SWOT analysis showed the opportunities and threats (external factors) and the strengths and weakness (internal factors) that could deter the nursing staff from performing high-quality discharge education.

For this CHF project, the strengths that would most affect the outcome of the project were the staff openness to change and new ideas, a CHF transition team and program available to CHF patients, and the patients and family members wanting to be actively involved in the discharge planning process. The opportunities were reduced CHF readmission rates, improved patient outcomes and safety, and increased patient and family satisfaction. Primary weaknesses and threats identified included confusing and unorganized CHF discharge instructions, patient workload and lack of time, staff unwillingness to implement change, and patient and family members being noncompliant with discharge instructions.

Return on Investment

The CHF discharge education project is expected to result in higher patient satisfaction, as reflected by improved HCAPS scores for the telemetry unit. The overall goal is to reduce readmission rates for CHF patients from 14% to 10% by July 2021. A cost-benefit analysis was

utilized to evaluate the program's relative benefit to the actual cost of the project. The benefits of the project are difficult to quantify, but financial penalties and lower reimbursement rates from Medicare will be avoided, the care burden put upon family members will be lessened, quality and satisfaction scores for the healthcare facility will be improved, and the quality of life among our CHF population will be improved. The annual mean total medical costs of CHF readmissions are estimated at \$24,383 per patient, concluding that the cost savings per one readmission would outweigh the cost of the CHF discharge education project. See Appendix E for ROI graph.

Communication Plan

Patient and family engagement is imperative for successful discharge outcomes. Proper discharge planning with a multidisciplinary team approach ensures that the patient and family members gain understanding and ascertain the essential educational resources needed for self-care in the home setting. Elements for the CHF discharge process will include patient education materials that are simple to comprehend and at a low literacy level. The telemetry nursing staff will utilize the AHRQ (2017) IDEAL discharge planning resource and the American Heart Association (AHA, 2021) CHF discharge checklist. Educational reinforcement will be accomplished by using a teach-back approach between the nurse and patient. The nursing staff is an essential part of the CHF discharge project and its success. The goal of the project is to equip the telemetry nursing staff with the resources and an expanded knowledge base to teach our CHF population about the CHF disease process, home care strategies, medication regimens, and follow-up care, which will result in improved health outcomes and quality of life for the patient.

Intervention

The initial phase of this project started May 2021 and will conclude at the end of June 2021. Initial project data were collected through chart reviews from February 2021 through March

2021. Twenty-five CHF patient charts were reviewed, and data were collected from previous emergency room visits or hospitalizations to help understand the factors, barriers, and causes for readmissions. TeamSTEPPS Pre-Training Knowledge Assessment (AHRQ, 2015) was developed to gauge the telemetry nursing staff's basic knowledge of CHF symptoms and discharge points to teach the patients before discharge (see Appendix D). Patient data, staff surveys, SWOT analysis, and root cause analysis were integrated into a posterboard presentation to introduce the project to the telemetry nursing staff at shift huddles. Unit champions met with staff for 5 minutes before the start of the shift at the beginning of April 2021 during staff huddles to orient the staff on the use of the AHRQ (2017) IDEAL discharge planning resource and the AHA (2021) CHF discharge checklist. The unit champions continued orientation and education of the nursing staff and validated competency from IDEAL discharge and the use of the AHA CHF checklist by the end of April 2021. The project was fully implemented by May 1, 2021. Copies of the AHRQ IDEAL discharge planning resource (see Appendix F) and the AHA CHF checklist (see Appendix G) are included in a CHF discharge packet and completed by the primary RN upon discharge of all hospitalized CHF patients on the telemetry floor. A post-discharge survey (see Appendix H) is also completed by the primary nurse to gauge staff knowledge acquisition and patient engagement during the discharge process.

Thirty days after the implementation of the CHF discharge project and again at 60 days, a chart review is performed to monitor the target patients for outcomes and measurements, with focus on readmission rates at the 30-day and 60-day mark. Using descriptive statistics, a comparison of the telemetry unit's CHF readmission rates pre- and post-discharge education will aid in disseminating the results and determine whether implementation of the process change

using best practices actually improved CHF discharge education and reduced 30-day readmission in the telemetry unit's CHF population.

Study of the Intervention

A daily report was developed using an Excel program, which included the daily admission information for all admitted patients with the primary diagnosis of CHF. Chart review was an essential component of the project and determined what improvements should be made to assist the patients in managing their CHF at home and avoid readmission to the hospital within 30-days of discharge. This report guided the project team to ensure patients were receiving high-quality education upon discharge.

A monthly report was developed using a trend graph and plotted the percentage of CHF readmissions since January 2021. These data were collected from the electronic medical records of admitted CHF patients and from daily reports generated from the My Quality of Life (MyQOL) program. These data guided the project team in determining if the selected interventions were having any impact on the 30-day readmission rates of our CHF population. The data were collected at 30 and 60 days from the start of the project.

Edward Deming's PDSA cycle method model was utilized in the implementation of this quality improvement project. The PDSA cycle was utilized to improve quality of care and make the CHF discharge education process more patient-centered, timely, effective, and equitable. The primary PDSA cycle was implemented as follows:

Plan: Initial meeting with key stakeholders to discuss the problems of 30-day readmission of patients with CHF. Stakeholders included the multidisciplinary team from the selected microsystem. The education session implemented to instruct the multidisciplinary team on

the start date of the project, expected timeline, and the return on investment showed the importance of the project and why implementation mattered.

Do: Each nurse was trained on the use of the IDEAL discharge format and AHA CHF discharge checklist. Once trained, the nursing staff used the CHF discharge education resources for all patients admitted with the primary and secondary diagnoses of CHF.

Study: The nursing staff completed a CHF nurse knowledge survey to assess their knowledge base before the project was implemented. The facility's data analysis department provided the 30-day readmission rates of our CHF population within the selected timeframe for this project. The goal was to reduce the CHF 30-day readmission rate from 14% to 10%.

Act: There was an ongoing needs assessment and evaluation of the CHF discharge education project to determine effectiveness. This was achieved by gathering feedback from the nursing staff and the 30-day readmission rate data from the data analysis department.

A secondary PDSA cycle was implemented as follows:

Plan: Telemetry nursing staff completed a TeamSTEPPS Pre-Training Knowledge Assessment survey at the beginning of the project. The survey format was a 20-question true or false questionnaire in paper format. Unit champions handed out the surveys at shift change huddles and collected them once completed by the RN staff. The purpose of the survey was to gauge the telemetry nursing staff's basic knowledge of CHF symptoms and discharge points to teach the patients before discharge (see Appendix D).

Do: Each nurse completed the survey and returned it to the unit champions upon completion. The expected completion rate was 100%.

Study: The nursing staff completion rate was 12% at the beginning of the project.

Feedback from the nursing staff included that the paper format was time-consuming, and they preferred a more efficient way to complete the CHF knowledge survey.

Act: The CHF knowledge survey was restructured into a digital format and a QR code was developed for the nursing staff to download the survey to their personal cell phone devices. The QR code and digital format allowed the nursing staff to complete the CHF knowledge survey at their convenience. After the implementation of the new digital format, completion rates increased to 75%.

Measures

The aim of this project was to reduce the percentage of CHF patients readmitted within 30 days of discharge by 4% by July 2021, from a baseline of 14% to 10% by July 2021. The outcome measures will include:

- Reduce CHF readmission rates from baseline of 14% to 10% by July 2021.
- 4% CHF patients without readmission <30-days of discharge.

The process measures for the nursing staff will include:

- RN staff education for CHF IDEAL and discharge instruction and teach-back technique at a target of 80%.
- CHF patients receiving IDEAL discharge instructions upon discharge at a target of 100%.
- CHF patients with documented IDEAL discharge instructions at a target of 100%.
- RN staff utilizing the AHA CHF discharge checklist at a target of 100%.

The balancing measures will include:

- An increase in readmission rates for recently discharged CHF patients.

- Decreased patient satisfaction.
- Decreased nurse satisfaction.
- Patient literacy and comprehension of CHF discharge education material.

Ethical Considerations

The main ethical consideration for the project is the protection of patient health information, which is essential with any performance improvement project. During this project, CHF patients' charts were reviewed, and all data and any reference to the individual patient were kept confidential. The AHA (2021) CHF discharge checklist and post-discharge education surveys performed by the nursing staff are not part of the patient's electronic medical record, will be collected in a secure fashion, and will not compromise patient's healthcare information. The project aligns with the ANA (2015) Code of Ethics and the University of San Francisco's Jesuit values. Ethical provisions have been established to guide and provide boundaries of nursing duty and loyalty to the patients (ANA, 2015). Provision 4 of the ANA Code of Ethics is relevant to this project, "The nurse has authority, accountability, and responsibility for nursing practice; makes decisions; and takes actions consistent with the obligation to promote health and to provide optimal care" (ANA, 2015, p. 15). The Jesuit value of *Magis*, Latin for *more*, has been applied throughout this project. During this project, the nursing staff and unit champions have strived to do better through CHF discharge education and teaching. The team's culture of excellence guided the project through difficult phases and maintains a dedication to promoting human dignity and care for the body, mind, and spirit of the patient.

The project was examined and approved as a quality improvement project by the University of San Francisco faculty using quality improvement review guidelines and does not require Institutional Review Board approval. See Appendix I for Statement of Determination.

Section IV: Results

Outcome Measure Results

The CHF discharge education tools, using the AHRQ IDEAL discharge planning resource and the AHA CHF discharge checklist, was well received by the nursing staff, especially at the beginning of the project. RN staff utilized the AHA CHF discharge checklist at a target of 100%. RN staff education for CHF IDEAL and discharge instructions with teach-back techniques achieved the target goal of 80%. The education tools were useful for the teach-back sessions between the nurse and patient. In addition, the patient and family members provided feedback during rounding and stated that the discharge process was engaging and provided adequate education regarding the CHF disease process and self-care strategies. At a rate of 100%, CHF patients received IDEAL discharge instruction upon discharge, with documentation in the electronic health record, meeting the desired process measure.

Currently, there is no conclusive data to show a reduction in CHF readmissions at the medical center. The medical center's data analysis department only has data that reflect those CHF readmissions occurring before March 2021. No current data can be obtained to support the successes of this quality improvement project, at this time. The official data from the medical center's data analysis department could not be populated, due to the recent Covid-19 pandemic and competing quality improvement projects. Through manual data collection and analysis, it can be determined that there has been a reduction in CHF readmission rates within a selected patient population since the implementation of the project. At the 30-day manual data collect point, nine patients were admitted to the telemetry unit with CHF. Upon discharge, four patients had been readmitted within 30-days of discharge, representing a 2.25% decline in readmissions. At the 60-day manual data collect point, eight patients were admitted to the telemetry unit with

CHF. Upon discharge, three patients had been readmitted within 30-days of discharge, representing a 2.66% decline in readmissions. See Appendix J for bar graph with readmission data.

Section V: Discussion

Summary

During the course of the project, the use of a transformational leadership style was implemented and assisted with team engagement and development. The selection of unit champions and RN staff co-leads assisted in the development of a project vision and team charter that guided the project during its duration. In the beginning, the nursing staff were committed to the use of educational resources available to them and working with CHF patients to improve discharge planning and quality of life post-discharge. As the project moved forward, the team worked to solve issues that arose and gave individual feedback on the needs and challenges they faced during the CHF discharge process.

As the project evolved, daily check-ins with the nursing staff by the unit champions were imperative to keep the nursing staff engaged and essential to help the team understand the importance for both the primary RN and the patient involvement in the CHF discharge teaching process. The teach-back educational model was time-consuming for the nursing staff at first, but with the commitment from the unit champions and feedback from the nursing staff, the discharge educational resources proved to be valuable tools to properly educate our CHF patients and gauge their readiness for self-care post-discharge.

During the project, it was determined that once the CHF patient was admitted to the hospital, it was essential to start CHF discharge teaching on Day One. This determination was validated by nursing staff feedback and time constraints placed on the nursing staff during discharge teaching. The AHRQ IDEAL discharge planning resource and the AHA CHF discharge checklist proved to be valuable resources for the nursing staff. These tools assisted the nursing

staff in providing a consistent and sustainable model that could potentially be utilized on all medical units within the healthcare facility.

As the project approached its conclusion, it was found that the nursing staff was becoming less engaged, with reports of burn-out and increased stress from multiple improvement projects being implemented simultaneously. Also, the nursing staff's mental and physical well-being had to be taken into consideration. Prior to the implementation of this quality improvement project, the medical facility was recovering from the Covid-19 pandemic, which had increased patient census and acuity over the previous 16 months. This will become an important factor for future quality improvement projects within the medical facility, as nurse engagement and involvement are key to successful patient outcomes and improvements in quality of life for our CHF population.

The success and sustainability of this project can be measured through feedback from the nursing staff and patients. Responses from the patient and family members were relatively positive, and patients were pleased with the discharge education process. This was not the case with the nursing staff. Time constraints and nurse workload are the two major barriers identified by the nurses to provide adequate and high-quality discharge education.

Overall, the nursing staff have stated the CHF discharge educational resources have increased their engagement with patient and family members and have increased their CHF knowledge base. Ongoing assessment to identify opportunities for improvement can further assist the nursing care team in providing safe, high-quality care to our CHF population. The continuation of this project will strive to improve hospital performance on the 30-day CHF readmission process measures and outcomes.

Maintaining and sustaining the work of this project will assist the nursing staff in continuing to improve the CHF discharge education process. Quality improvement projects, over time, will continue to change and evolve, with their sustainability and value being assessed at a later date. With the commitment of the unit champions and nursing staff and the addition of a multidisciplinary team approach, this quality improvement project will reach its full potential and prove valuable to reduce the 30-day readmission rates of our CHF patients.

Conclusion

Implementing processes and interventions that improve the quality of life for our CHF patients is imperative. Providing the patients with educational resources and tools can assist the patient in making better healthcare decisions and improve their outcomes once discharged from the hospital. Caregiver and family involvement improves when they are provided with supportive guidance and knowledge, which is key to a successful discharge process. The nursing staff are more confident in the discharge teaching process when provided with concise and accessible discharge education materials. Time constraints, daily workload, high patient acuities, and lack of support are factors to be considered with any quality improvement project that relies on the nursing staff to be the key stakeholders and change agents of the project. Open, honest dialogue between the nursing staff and team leaders regarding barriers and the sharing of ideas for improvement further provides the foundation for excellence and high-quality outcomes that is necessary for any quality improvement project.

This quality improvement project has not seen the expected outcomes for the reduction of 30-day readmission rates for our CHF patients. This was attributed to several factors, which included lack of nurse engagement, the mental and physical fatigue of the nursing staff post-

Covid-19 pandemic, competing quality improvement projects, and time constraints placed on the nursing staff during the discharge process.

The plan for the project is to continue to encourage and promote the use of the AHRQ IDEAL discharge planning resource and the AHA CHF discharge checklist. With continued nursing staff education and engagement, the successes that the team has accomplished during the project's duration can act as a building block for future success. Current success includes improved patient engagement and satisfaction with CHF discharge education, increased nurse satisfaction with the CHF education resources provided to them, and the accessibility to CHF discharge education tools via web-based sites that can be accessed through smart phone technology.

CHF is a debilitating disease, and every patient hospitalization provides the healthcare team with unique opportunities to engage the patient and family members to improve quality of life and prevent unnecessary readmissions to the hospital. Improving the quality of life for our CHF population can seem overwhelming but instituting a care model that focuses on nursing education and engagement, patient and family involvement, and the use of CHF education tools and resources can prove valuable to the discharge process. The goal of reducing CHF readmission rates presents many challenges and barriers to the healthcare team. Upon evaluation of this project, the implementation of an evidence-based project model has shown improvements and successes, while improving CHF patient outcomes, improving quality of life, increasing nursing staff satisfaction, and reducing CHF readmissions.

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Section VII: Appendices

Appendix A. Evaluation Table

PICOT Question: For all admitted CHF patients (P), how effective is the use of a comprehensive discharge plan and medication education (I), as compared to current practice (C), in reducing readmissions for exacerbation of symptoms (O) within 30 days of discharge (T).

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Almkvist, K.D. (2017). Using teach-back method to prevent 30-day readmissions in patients with heart failure: A systematic review. <i>MEDSURG Nursing</i> , 26(5), 309-313.	Systematic review	Six articles identified for review.	Teach-back education sessions are low cost, require minimal staff time, and can have a positive impact on a patient's life when management of HF is understood. Useful to use in designing communication and teamwork improvements for patient discharge education.	L III B
Cui, X., Zhou, X., Sun, T., Bishop, L., Gardiner, F. & Wang, L. (2019). A nurse-led structured reduction program improves self-management skills and reduces hospital readmissions in patients with chronic heart failure: A randomized and controlled trial in China. <i>Rural and Remote Health</i> , 19(2), 1-9. https://doi.org/10.22605/RRH5270	RCT	Ninety-six patients with CHF.	This study concluded that the implementation of a nurse-led education program improves self-management and clinical outcomes of rural CHF patients who may not have access to cardiac services in larger metropolitan areas. Useful in providing a framework when implementing CNL practice as part of a care delivery redesign to improve care outcomes.	L I B

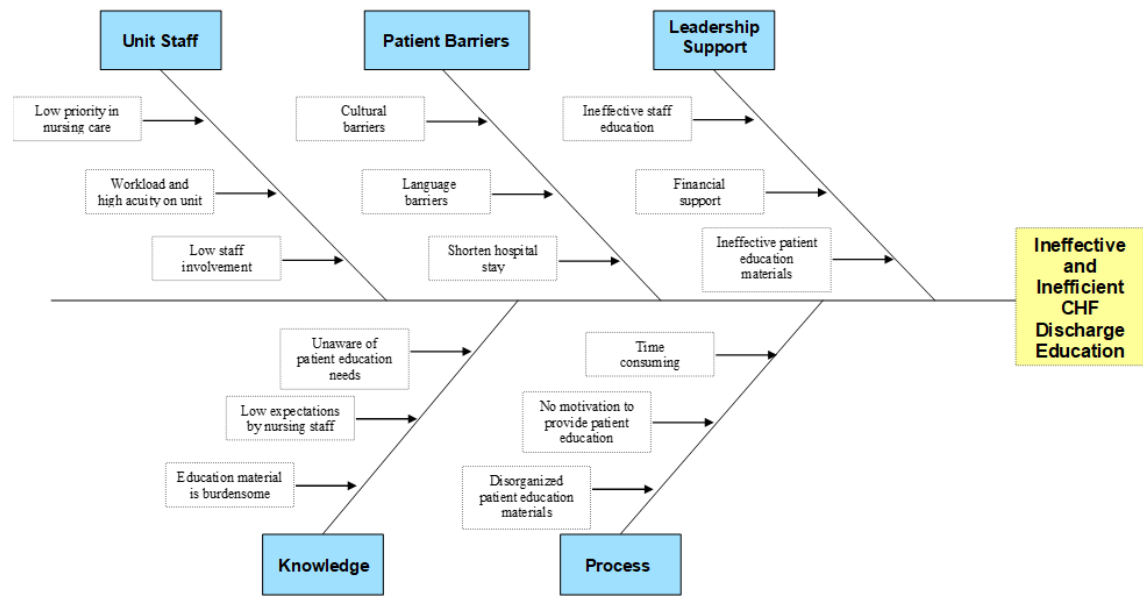
Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Hsuan, C., Carr, B., Hsia, R. & Hoffman, G. (2020). Assessment of hospital readmissions from the emergency department after the implementation of Medicare's readmissions reduction program. <i>JAMA Network Open</i> , 3(5), 1-12. http://doi.org/10.1001/jamanetworkopen.2020.3857	Retrospective cohort study	Merged data from hospitals and emergency rooms from California, Florida, and New York.	Findings suggest that the implementation of Medicare's Hospital Readmissions Reduction Program decreases the probability of readmissions for the CHF patient population. Useful for guidance in a redesign of patient care.	L III B
Okrinec, K., Hahn-Goldberg, S., Abrams, H., Bell, C., Soong, C., Hart, M., Shea, B., Schmidt, S., Troup, A. & Jeffs, L. (2019). Patients' and caregivers' perspectives on factors that influence understanding of and adherence to hospital discharge instructions: A qualitative study. <i>CMAJ Open</i> , 7(3), E478-E483. http://doi:10.9778/cmajo.20180208	Qualitative study	Twenty-seven participants (16 patients and 11 family members).	Higher levels of patient engagement at the time of discharge are associated with higher rates of medication adherence and decreased readmission rates. Useful to use in designing communication and teamwork improvements for patient discharge education.	L III B

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
<p>Wood, R.L., Migliore, L.A., Nasshan, S.J., Mirghani, S.R. & Contasi, A.C. (2019). Confronting challenges in reducing heart failure 30-day readmissions: Lessons learned with implications for evidence-based practice. <i>Worldviews on Evidence-Based Nursing</i>, 16(1), 43-50. https://doi.org/10.1111/wvn.12336</p>	<p>Case series (Non-experimental)</p>	<p>Military facility: All CHF patients admitted to a 19-bed telemetry unit.</p> <p>Civilian facility: All CHF patients admitted to a 32-bed progressive care unit.</p>	<p>Further advocacy needed for interdisciplinary evidence-based HF teams and the use of the American Heart Association's Get with the Guidelines (AHA GWTG) to increase the potential for success. Knowledge sharing would bolster transparency and increase return on investment, thus reducing 30-day readmission rates for CHF patients.</p> <p>Useful in providing a framework when implementing CNL practice as part of a care delivery redesign to improve care outcomes.</p>	<p>L V B</p>

Appendix B. SWOT Analysis



Appendix C. Fishbone Diagram



Appendix D. TeamSTEPPS Pre-Training Knowledge Assessment

CHF Nurse Knowledge

1. Patients with HF should drink plenty of fluids each day. True or False
2. As long as no salt is added to foods, there are no dietary restrictions for patients with HF. True or False
3. Coughing and nausea/poor appetite are common symptoms of advanced HF. True or False
4. Patients with HF should decrease activity and most forms of active exercise should be avoided. True or False
5. If the patient gains more than 3 pounds in 48 hours without other HF symptoms, they should not be concerned. True or False
6. Swelling of the abdomen may indicate retention of excess fluid due to worsening HF. True or False
7. If patients take their medications as directed and follow the suggested lifestyle modifications, their HF condition will not return. True or False
8. When patients have aches and pains, aspirin, and non-steroidal anti-inflammatory drugs (NSAIDs like ibuprofen) should be recommended. True or False
9. It is ok to use potassium-based salt substitutes (like "No-Salt" or "Salt Sense") to season food. True or False
10. If patients feel thirsty, it is ok to remove fluid limits and allow them to drink. True or False
11. If a patient adds extra pillows at night to relieve shortness of breath, this does not mean that the HF condition has worsened. True or False
12. If a patient wakes up at night with difficulty breathing, and the breathing difficulty is relieved by getting out of bed and moving around, this does not mean that the HF condition has worsened. True or False
13. Lean deli meats are an acceptable food choice as part of the patient's diet. True or False
14. Once the patient's HF symptoms are gone, there is no need for obtaining daily weights. True or False
15. When assessing weight results, today's weight should be compared with the patient's weight from yesterday, not the patient's ideal or "dry" weight. True or False

The following 5 statements reflect signs or symptoms that patients may have. Mark "yes" (Y) or "no" (N) to signify that a patient should notify their HF physician of these signs or symptoms:

16. BP recording of 80/56 without any HF symptoms. Yes or No
17. Weight gain of 3 pounds in 5 days without symptoms. Yes or No
18. Dizziness or lightheadedness when arising that disappears within 10-15 minutes. Yes or No
19. New onset or worsening of fatigue. Yes or No
20. New onset or worsening of leg weakness or decreased ability to exercise. Yes or No

Appendix E. ROI Graph

RETURN ON INVESTMENT

CHF Discharge Education Project



Appendix F. AHRQ IDEAL Discharge Planning Resources

What is IDEAL Discharge Planning?

- **I**nclude the patient and family as full partners
- **D**iscuss with the patient and family the five key areas to prevent problems at home
- **E**ducate the patient and family throughout the hospital stay
- **A**ssess how well doctors and nurses explain the diagnosis, condition, and next steps in their care – use teach-back
- **L**isten to and honor the patient and family goals, preferences, observations, and concerns

Benefits of IDEAL Discharge Planning for Nurses

- Improves accuracy of information about the patient's condition and discharge situation
- Reduces risk and liability
- Enhances quality of care for patient
- Demonstrates that hospital staff consider patient perspective important
- Shows teamwork among hospital staff
- Patient and family have a better experience of care
 - Ensures that patients and families know how and what to do and will be less anxious once discharged

Appendix G. AHA CHF Checklist

The following checklist is intended to assist healthcare providers in reducing the risk of readmission for patients with heart failure transitioning to home care. Use this checklist to ensure that your patient/caregiver understands the discharge instructions and has the ability to perform self-care.



Medication Management

- Was a prescription given?
- Is the patient/caregiver able to get the prescription filled?
- Is the prescribed medication listed on patient's insurance formulary?
- Were medications and instructions on how to take them listed for the patient?
- Are there any known adverse reactions to the medications?
- Was a list with instructions on how to take the medications provided to a caregiver?
- Does the patient/caregiver understand the importance of medication adherence?

Self-Management

- Does the patient have access to transportation?
- Does the patient have financial barriers?
- Does the patient have language barriers?
- Is the patient able to perform care?
- Does the patient understand and know how to recognize new or worsening signs and symptoms of HF?

Will the patient be able to adhere to:

- Medication regimen?
- Low-sodium diet?
- Daily weigh-in?
- Exercise/activity plan or recommendation to participate in cardiac rehab?
- Monitoring new or worsening signs or symptoms of HF?

Lack of Communication (pending diagnostic results not communicated with PCP)

- Was transition/discharge summary sent to Primary Care Provider?
- Did a PCP note at the time of transition that a provider had been found prior to discharge?

Referral/Outpatient Needs Process

- Was a referral noted?
- Was there a referral follow-up?
Name: _____
- Was there a referral to an agency that was unable to meet individual needs?
Name: _____
- Was there an unaddressed comorbidity?
- Was mobility/home safety assessed?

Appendix H. Post-Discharge Nurse Survey

Post-Discharge Nurse Survey

1. Did you find the CHF discharge checklist helpful? Yes or No
2. Did you find the discharge checklist to be too time consuming? Yes or No
3. Did the checklist help you to be more organized during the discharge process?
Yes or No
4. Did the checklist help to keep the patient engaged during the discharge process?
Yes or No
5. If there is any changes you would recommend on how to improve the CHF discharge process, please comment below:

Appendix I. Statement of Determination

CNL Project: Statement of Non-Research Determination Form

Student Name: Eric Jason Byrd

Title of Project:

Discharge from Hospital to Home: Implementation and Use of AHRQ IDEAL CHF Discharge Planning and AHA CHF Discharge Checklist.

Brief Description of Project: To implement a CHF discharge checklist that can be utilized by the nurses while doing discharge teaching for our hospitalized CHF population while using elements and techniques of AHRQ IDEAL discharge planning and AHA CHF discharge checklist.

A) Aim Statement: The specific aim for the CHF discharge education project at this medical center is to decrease the number of 30-day readmission rates of recently discharged CHF patient from a baseline of 14% to 10% by July 2021.

B) Description of Intervention: To standardize implementation of a CHF management program based on the IDEAL discharge planning tool and AHA CHF discharge checklist by May 2021 in the Telemetry unit in a hospital in the Central Valley of California.

C) How will this intervention change practice? To ensure every bedside nurse in the Telemetry unit receives proper training in IDEAL Discharge Planning and the implementation of a multimodal team approach to reduce CHF readmission rates and implement the use of the AHA CHF discharge checklist for our CHF population to reduce CHF readmission rates.

D) Outcome measurements: % CHF patients without readmission <30-days of discharge:
Target will be 4%. Reduce CHF readmission rates from baseline of 14% to 10% by July 2021.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (<http://answers.hhs.gov/ohrp/categories/1569>)

This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
Discharge from Hospital to Home: Implementation and Use of IDEAL CHF Discharge Planning and AHA CHF Discharge Checklist.		
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	x	
The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.	x	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective	x	

comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.		
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment, or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	x	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	x	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	x	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	x	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	x	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>“This project was undertaken as an Evidence-based change of practice project at X hospital</i>	x	

<i>or agency and as such was not formally supervised by the Institutional Review Board.”</i>		
--	--	--

ANSWER KEY: If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print): Eric Jason Byrd

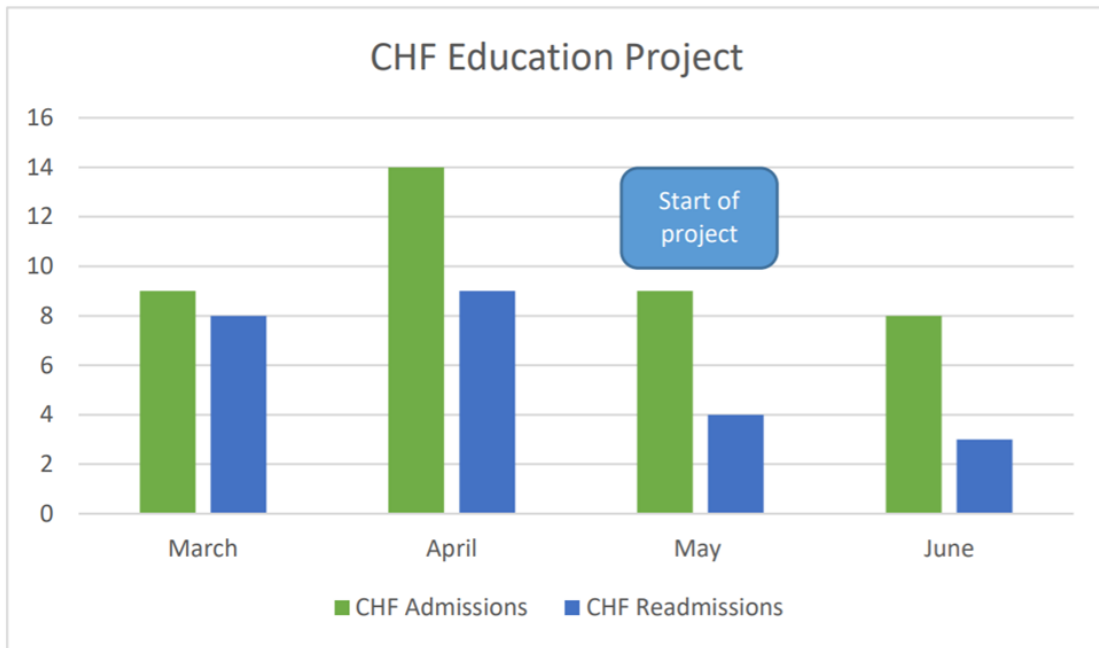
Signature of Student: Eric Jason Byrd DATE: 4/5/2021

SUPERVISING FACULTY MEMBER NAME (Please print):

Signature of Supervising Faculty Member .

DATE _____

Appendix J. Bar Graph



Appendix K. Team Charter

CHF Project Charter

Project Charter: To decrease readmission rates among our congestive heart failure (CHF) populations and to improve patient education at discharge.

Global Aim: To standardize implementation of a CHF management program based on the IDEAL discharge planning tool by May 2021 in the Telemetry unit in hospital A.

Specific Aim: To decrease the number of 30-day readmission rates of recently discharged CHF patient from a baseline of 14% to 10% by July 2021.

Background: Hospital readmission rates in the congestive heart failure (CHF) population is a quality concern. Data from the Centers from Medicare and Medicaid (CMS) suggests that about 25% of patients are readmitted within 30 days of initial hospitalization, and 35% of these readmissions are because of CHF (Park et al. 2019). Congestive heart failure currently affects about 6.5 million people in the United States and has an approximate 5-year mortality rate of 42% (Park et al., 2019). Due to Medicare's readmission reduction program, hospitals are implementing programs to reduce the readmission rates in all-cause diagnoses. Avoidable readmissions are used as indicators of a fragmented healthcare system that frequently leaves discharged patients confused about their self-care at home, unable to follow discharge instructions, or unable to get the necessary follow-up care to decrease the risk of readmission. The healthcare industry, with its limited resources, cannot spare the costly price of readmissions within our CHF population. In 2012, the CHF cost burden was estimated to be \$30 billion, and projections show that by 2030, total CHF costs will increase 125% from 2012 to nearly \$70 billion, which averages to \$244 for each US adult (Benjamin et al., 2019). Quality of care and patient safety should always be at the forefront of the healthcare delivery system, but resources must be directed towards innovations and strategies to improve care transition from hospital to home.

Sponsors:

Chief of Cardiology	Dr. HH
Chief Nursing Officer	KD
Quality Leader	JG
Adult Services Director	QN
Clinical Nurse Specialist	PG

Goals: To ensure every bedside nurse in the Telemetry unit receives proper training in IDEAL Discharge Planning and the implementation of a multimodal team approach to reduce CHF readmission rates that include the following:

1. Congestive heart failure IDEAL discharge planning education for nurses.
2. Identify nurse champions who will be educated in the IDEAL discharge planning tool.

3. Disseminate IDEAL discharge planning education to the front-line nurse through our nurse champions.
4. All nurses will integrate this new tool into their daily practice.
5. Promote self-care, help patients identify problems and seek solutions.
6. Assist patients with managing their daily checklists of watching their diet, daily morning weight, medications, activities, and follow-up appointments.

Measures:

Measure	Data Source	Target
Outcome		
Reduce CHF readmission rates from baseline of 14% to 10% by July 2021.	Daily readmission report-HealthConnect	4%
Process		
RN staff education for CHF IDEAL discharge instruction and teach-back technique.	Education report	80%
% CHF patients receiving IDEAL discharge instructions upon discharge.	Chart review-HealthConnect	100%
% CHF patients with documented IDEAL discharge instructions	Chart Review-HealthConnect	100%
Balancing		
Patient satisfaction	Patient feedback before discharge, Patient Care Experience surveys	Increase patient satisfaction
Nurse satisfaction	Nurses feedback after IDEAL discharge implementation	Increase nurse satisfaction
Hospital length of stay	Daily readmission report in HealthConnect	Reduced length of stay by 1 day.

Team:

MD Co-lead	Dr. HH
RN Co-lead	KN
CNS/Educator	PG
Adult Services Director	QN
Utilization Manager	KW
Data Analyst	SA
Staff nurse champions	GM, JM, MC, MT, EC
Pharmacy champions	KK
MD champions	Dr. MN

References:

Benjamin, E., Muntner, P., Alonso, A., Bittencourt, M., Callaway, C., & Carson, A. (2019). Heart disease and stroke statistics 2019 update: A report from the American Heart Association. *American Heart Association, 139*(10), 56–528. <https://doi.org/10.1161/CIR.0000000000000659>

Park, B., Ootob, E., Ullman, J., Rogers, J., Fasihuddin, F., Garg, S., Kakkar, S., Goldstein, M., Chandrasekhar, S., Pinney, S., & Atreja, A. (2019). Impact on readmission reduction among heart failure patients using digital health monitoring: Feasibility and adoptability study. *JMIR Medical Informatics, 7*(4), 1–10. <https://doi.org/10.2196/13353>

Measurement Strategy:

Background (Global Aim): To standardize implementation of a CHF management program based on the IDEAL discharge planning tool by May 2021 in the Telemetry unit in a hospital in the central valley of California.

Population Criteria: CHF patients admitted to the Telemetry unit with a diagnosis of CHF.

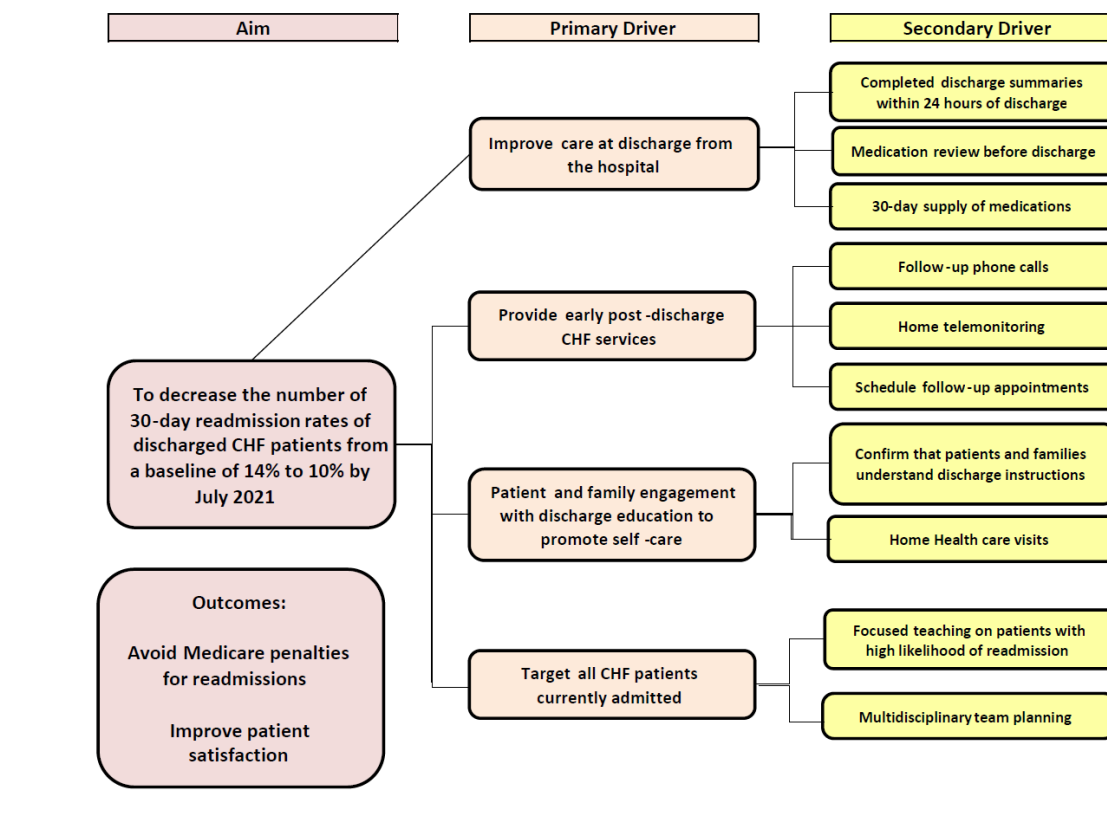
Data Collection Method: Data will be obtained from chart audits using HealthConnect reports, and readmission data obtained from HealthConnect. Data will be obtained from HealthConnect daily reports of patients admitted with the primary diagnosis of CHF. Data plan will be reevaluated at 30-60 days based on results.

Data Definitions:

Data Element	Definition
Age of patient	All patients over the age 50 will be used for project data.
Individualizing teach-back patient CHF education	Report from HealthConnect
Use of an IDEAL discharge education checklist	Standardized CHF education order set in HealthConnect for all CHF patients
Documentation within the HF care plan	CHF plan identified in CHF documentation in HealthConnect qd
Timely follow-up on HF patients after discharge	Report generated in HealthConnect from outpatient CHF clinic
Primary Diagnosis	Diagnosis at the time of admission
Primary care physician	Yes or No, patient assigned a PCP
CHF care program enrollee	Yes or No, patient actively participates in a CHF management program.
CHF patient	Yes or No, classified as a CHF patient in primary diagnosis.
Inpatient stays	Number of admitted hospital stays in the last 365 days.

Measure Description:

Measure	Measure Definition	Data Collection source	Goal
CHF readmissions less than 30-days of discharge	Info graph of the % of readmissions from January 2021 to present.	Chart audit in HealthConnect	Goal is to decrease by 4%
% # CHF patients with IDEAL discharge order set used	N= #CHF patients with IDEAL discharge order set used D= #CHF patients admitted	Chart review in HealthConnect	100%
% # CHF patients with documented CHF care plan in medical record	N= #CHF patients with documented CHF care plan in medical record D= #CHF patients admitted	Chart Review in HealthConnect	100%

Driver Diagram:**Changes to test:**

- 1) Standardized patient education tool through the use of IDEAL discharge planning improves CHF patient compliance to discharge instructions and reduces 30-day re-admissions.
- 2) Nursing staff using the CHF IDEAL discharge education and care plan assures all discharge information is communicated to the patient and family.
- 3) RN staff to use the checklist to ensure all aspects of the IDEAL CHF educational model are completed.

Gantt Chart:

CHF EDUCATION PROJECT											
#	Activity	Person Accountable	2021	2021	2021	2021	2021	2021	2021	2021	Status
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
1. Assessment Phase											
1A	Identify Congestive Heart Failure Project	Student									Complete
1B	Literature Review	Student									Complete
1C	Staff rounding with those who care for CHF inpatients	Student									Complete
2. Network Phase											
2A	Meeting and planning with mentor	Student									Complete
2B	Connect with team leaders of current CHF program	Student/Team									Complete
2C	Connect with CNS and CHF Team lead	Student/Team									Complete
3. Design and Coordination Phase											
3A	Planning meeting with mentor and CHF Team	Student/Mentor									Complete
3B	Develop survey for nursing staff	Student/Mentor									Complete
3C	Develop data management reports for CHF project	Student/Analyst									Complete
3D	Set goals for CHF project	Student/Team									Complete
3E	Developed education for nursing staff	Student/Team									Complete
3F	Developed education tool for CHF patients	Student/Team									Complete
3G	Developed teach-back tool for nursing staff	Student/Team									Complete
4. Cooperation Phase: Execute the Project											
4A	Peer to Peer teaching for nursing staff	Student/Team									Complete
4B	CHF patient education tool rollout	Student/Team									Complete
4C	Post-education interview with pts. regarding CHF tool	Student									Complete
4D	Follow-up with nursing staff about CHF tool/project	Student									Complete
4E	Compliance audit for the CHF education tool	Student/Mentor									Complete
5. Evaluation & Collaboration Phase: Sustain the Change											
5A	Nursing survey evaluations	Student									Complete
5B	Patient interview responses/data collection	Student/Mentor									Complete
5C	Document and monitor progress of CHF project	Student									Complete
5D	Data analysis	Student/Analyst									Complete
5E	Share and celebrate achievements with team members	Team									Complete
5F	Project presentation	Student									Complete

CNL Competencies:

- 1) Outcomes Manager – Expertise in the management of quality indicators such as CHF readmission rates and implementation of a CHF project to reduce readmission rates.
- 2) Client Advocate – Ensuring the best plan of care is implemented for our CHF population and individual needs are met before discharge from the hospital.
- 3) Team Manager – Coordinates multidisciplinary care, focusing on each CHF patient’s plan of care and evaluating any previous discharges and fallouts that lead to readmission.