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Reducing Hospital Readmissions: IDEAL Discharge Planning for Heart Failure Management

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### Reducing Hospital Readmissions: IDEAL Discharge Planning for Heart Failure Management

Heart failure (HF) has one of the highest readmission rates amongst all conditions in Medicare and Medicaid populations (Ketterer, Draus, Mossallam, & Hudson, 2014). According to the Centers for Disease control and Prevention (CDC), approximately 5.7 million adults in the United States will have heart failure, and half of these people die within 5 years of diagnosis (CDC, 2016). Patients with acute decompensated HF have a high mortality rate varying from 5-15% at 60 to 90 days post-discharge (Tung et al., 2016), and hospitals are facing increased penalties for excessive readmissions within 30 days, up to the maximum 3% in fiscal year 2017 under the Affordable Care Act (CMS, 2016).

Patients with HF are at high risk for frequent readmission due to self-care deficits. Many patients are initially focused only on their physical systems, e.g. shortness of breath, or weight gains with increased edema (Retrum et al., 2013). Yet, unhealthy behaviors and lifestyles also increase risks for heart failure because heart function is highly sensitive to dietary changes such as fluid and sodium intake, blood pressure control, proper use of medications, and other lifestyle choices. Although unavoidable progression of HF was identified by many patients as a primary reason for readmission, engaging patients in their own care, and constructing a meaningful patient-clinician relationship, determines in large part how successful the patient moves from illness to wellness or in maintaining wellness (Marshell, 2015). IDEAL Discharge Planning, promoted by the Agency for Health Research and Quality (AHRQ), is an evidence-based intervention that helps hospital nurses use a guide tool for engaging patients, as well as family, in educational efforts combined with discharge planning, to improve quality of care, patient satisfaction, and reduce preventable readmissions (AHRQ, 2017).

To intensify efforts to reduce 30-day readmissions and improve the quality of care and patient satisfaction, this project supports the hospital transition care program (TCP), led by registered nurses and social workers, in using a hospital screen toolkit to identify high-risk readmission patients, especially HF patients. We also provide additional follow-ups with discharge phone calls, providing safe transitions in order to prevent HF readmissions within 30 days. The hospital TCP, already highly targeted toward HF patient populations, bridges care gaps across different health care settings to improve transitional care and patient safety across the care-continuum, but only 10% of discharged HF patients can be followed. Most HF patients end up being discharged to home with instructions on managing their conditions given only the day of discharge; HF patients without TCP follow-up are significantly more likely to be readmitted.

A system analysis was performed to determine the cause of a high readmission rate in a Northern California acute hospital cardiac telemetry unit. More than 50% of patients in a total unit daily census were admitted or readmitted for heart failure. Root cause analysis indicated that shortened length of stays, disorganized educational processes and materials, high acuity workflow with lack of nursing resource support, and diverse patient populations with variable levels of health literacy in this busy microsystem led to missed opportunities in providing effective discharge education for high failure patients. The purpose of this project is to enable hospital administrators to drive decision-making toward implementing evidence-based interventions that improve patient safety, significantly reduce readmissions, and effect large cost-savings for the hospital.

### **Clinical Leadership Theme**

The Clinical Nurse Leader (CNL) is trained to address all the issues which affect microsystems, which may then affect macro-system outcomes, such as heart failure readmissions. The clinical leadership theme of this project focuses on two key components of the CNL role: communication and collaboration. The CNL strives to identify quality measures that need improvement, incorporates new evidence into practice, implements new guidelines for patient care, tracks data on these projects, and is able to show improved clinical outcomes that are cost effective within the microsystem (King & Gernard, 2016). The CNL, as a clinical outcomes manager, assumes accountability for quality outcomes for a specific group of clients within a unit or setting, and recognizes the influence of the meso-and macro-systems on the microsystem (AACN, 2013). The CNL theme focus is CNL as the care environment manager. The HF project identified clinical and cost outcomes that improve safety, effectiveness, timeliness, efficiency, quality, and the degrees to which all these are client-centered (AACN, 2013). A CNL competency that also supports this project is that a CNL can facilitate practice change based on best available evidence, resulting in quality, safety and fiscally responsible outcomes (AACN, 2013).

### **Statement of the Problem**

A 5P microsystem assessment provided information presenting the current state and function of a Northern California adult cardiac telemetry unit. As recently as December 2017, the yearly report for this unit indicated that the HF readmission rate was 27%, the highest readmission rate among community hospitals in that area. The unit consists of twenty-six beds and specializes in managing patients with a primary diagnosis of cardiovascular disease. These

patients need 24-hour continuous cardiac monitoring. Five to seven (out of 26) patients in the project unit's daily census are admitted for heart failure exacerbation. Another three to seven patients are admitted with acute HF symptoms, and nurses must also treat other acute conditions.

A chart review was performed to collect data from January 5 to March 5, 2018. The total sample included 50 HF patients admitted with a primary diagnosis of Heart Failure exacerbation. The time was tracked back to see history for 90 days and the results indicated that 18 of 50 (36%) patients had one readmission within 30 days, along with other visits to emergency department for HF exacerbation. The chart review also pointed out that only 18% of HF were followed by the hospital TCP, 20% of patients were discharged to SNF, 36% of HF patients were discharged to home for self-care without TCP, and 26% of HF patients were discharged with a home health service but 80% of them refused to be followed by the hospital TCP (Appendix A).

Inappropriate or premature discharge due to health system issues leads to harmful events and readmissions. Nearly 20% of 30-day readmissions are preventable and influenced greatly by risk factors including poor social support, poverty, and access to outpatient care (Renke & Ranji, 2015). Patients who indicated financial stress are admitted yet unable to purchase medications or obtain additional needed care. Some HF patients stated they do not feel ready to be discharged, but their doctor insists. This all implies that education needs to go beyond merely telling patients what to do; adherence and self-care education must work more comprehensively to deal with factors that underlie non-adherence (Retrum et al., 2013). Most people with low literacy are difficult to spot, and they become very good at hiding the problem, which leads to lack of understanding and consistency when it comes to self-care (Retrum et al., 2013). Patients with limited health literacy leads to a risk of adverse events and poor health outcomes.

### **Project Overview**

Aligning with the hospital's goals, the purpose of the project aims to achieve by the end of 2018 an overall reduction of 25% in HF readmissions within 30 days. The project can reduce HF readmissions by creating an environment where patient, families, clinicians, and hospital staff all work together as partners to improve the quality and safety of hospital care and care transitions in the unit. The process begins with educating nurses to use evidence-based practice, IDEAL Discharge Planning, along with engaging patients and families in preparing for discharge by learning self-monitoring, self-maintenance, and self-management of their own care. All of this happens from the first day of admission and the process doesn't end until HF patients are discharged. By working with this process, expectations include helping HF patients learn more about their health and health conditions to improve self-care abilities, while becoming more confident in managing their own health care. Engaging more with patients and families will also strengthen the patient-healthcare team relationship that enhances their care experience and empowers HF patients to be more actively involved in managing their own healthcare and decision-making. This results in a better care transition experience and prevents avoidable readmissions. It is important to work on this now because this acute hospital has the highest HF readmission rate among all branch hospitals.

The IDEAL Discharge Planning education program was created at the beginning of March. The Unit Champions, one for night shift and one for day shift, were created with role expectations. Due to budgetary constraints, the Unit Champions agreed to meet every two weeks for 10 minutes before starting their shifts; here they discussed the process and activities involved with promoting IDEAL Discharge planning and encouraged each other to assist and support

nurses with this project. The orientation program for IDEAL Discharge Planning began staff training at the beginning of April and continued for three weeks. The Unit Champions completed validation for IDEAL Discharge competency by the end of March and started validating nurses in IDEAL Discharge Planning competency in April.

The evaluation plan was discussed with the preceptor and unit manager to include the process and outcome evaluations. The Unit Champions were responsible for observations and auditing nurses who demonstrated the use of the IDEAL discharge tool; they also validated each nurse's ability in delivering discharge instructions and provided feedback and opportunities for improvement. The focus of the audits was the HF patient populations who will be discharged to home and the bedside nurses who take care of these HF patients. The results from observations and patient surveys are used to evaluate the change process and measure whether the staff and patient/family education have made a difference in care outcomes. The results from the data collection were discussed in 5-minute morning huddles and posted on the white board in the break room to encourage staff and provide opportunities for more learning. The ongoing auditing can be used to evaluate the process and measure the effectiveness of activities, efforts and education plans.

Data collection and analysis of patients' and staff surveys, as well as feedback, will help focus our work on the goals of the project. Routine measurement and monitoring of process and outcomes will help determine the impact of design changes. Since IDEAL Discharge Planning is designed to improve the process of transition and prepare the patient for discharge, an assessment can be conducted prior to discharge which evaluates HF patients' understanding of their discharge education and the outcome of using IDEAL Discharge Planning to improve the



process of care transitions. One month after beginning IDEAL Discharge Planning for patient engagement, and at again after two months, a chart review will be performed to track and monitor these target HF patients for outcomes and measurements for 30-day and 60-day HF patient readmission rates. Descriptive statistics will be used to compare unit heart failure patient readmissions pre- and post-education and will assist in disseminating results that show the big picture of the project impact and cost. The data collection of 30-day and 60-day HF patient readmission rates will indicate whether implementing process changes for best practices will improve HF patient education, and if they can be found as crucial components in decreasing HF patient 30-day readmission rates (Also see Appendix E: Project Timeline).

Process objectives for the project begin with collecting data from the unit for 2 months prior to initiation of the project, identifying all readmitted HF patients and existing problems. The data is analyzed and available literatures are reviewed to determine specific goals for the project that are commensurate with the hospital's goals. Based on these goals, a series of in-service education sessions are developed to introduce IDEAL Discharge Planning to telemetry nurses, and implementation of the project begins in a unit that focuses on the HF patient population. We identify Unit Champions who work together enthusiastically with the project and set up times for meetings to discuss roles, expectations, and activities. A white board list of steps with videos are available for demonstrations that participants use, review, and sign when completed. After the team then begins promoting demonstrations at bedside with HF patients and families. Finally, the 30-day readmission rates on HF patient populations are collected 2 months after implementation of the project to evaluate the results.

Outcome objectives of the project are 100% of telemetry nurses in the unit will complete IDEAL Discharge Planning teaching plans, view videos of demonstrations and understand the purpose and process of the project with 100% accuracy in skills. By the end of May, with at least 80% of telemetry nurses routinely using IDEAL Discharge Planning, an intermediary goal is to decrease HF readmissions rate by 20% (from current 27% to 22% after two months practice). If this goal can be met, then it is highly possible to have an overall reduction of 25% by the end of the year 2018.

Effective patient education has been strongly recommended as a strategy which can significantly reduce 30-day HF readmission and mortality (David, Howard, Dalting, & Britting, 2018). Without effective education, HF patients are at great risk of returning to the hospital within 30 days, and the hospital may also face paying additional penalties for excessive readmissions. This project will develop evidence-based interventions that more effectively assist staff in providing patient-centered education, especially and primarily to HF patient populations in order to reduce readmissions. The microsystem is promoted to educate staff on use of the IDEAL discharge strategy, starting from the first day of admission all the way to discharge, effectively communicating with patient and family regarding the patient's condition, the care process, care goals, and using teach-back methods to assess levels of understanding achieved. We desire to arrive at full integration of pre- and post-hospital discharge instructions across care services.

## **Methodology**

### **Rationale**

A Fishbone Diagram (Appendix B) and SWOT analysis (Appendix C) identified underlying causes, barriers, and risk factors that influence current problems in this microsystem.

The results from a needs-assessment revealed that risk factors for ineffective patient education, according to patients' self-reports, were most related to lack of support from staff, low health literacy, and lack of motivation. The factors that inhibited nurses' engagement in patient education included work overload, time pressure from other patients care, low priority given to patient education, lack of educational resources, lack of confidence to provide education, and lack of policy. However, the root analysis indicated that shortened length of hospital stays, disorganized educational processes and materials, high acuity workflow with lack of nursing resource support, and diverse patient populations with variable levels of health literacy in this microsystem has led to missing an opportunity in providing an effective patient -centered discharge education for HF patients, thus helping with a safe transition.

A considerable amount of research has proven interventions can both reduce readmissions and create savings during treatment of patients with HF. Effective patient education not only enhances patients' knowledge for improved self-care but is also associated with high-quality health care services with patients more likely to adhere to treatment (Livne, Peterfreund, & Sheps, 2017). Nurses must determine where the gaps in patients' knowledge exists, and work to connect the dots for more complete comprehension of care instructions (AHRQ, 2017). Meaningful patient engagement is critical and continues to be a core priority for healthcare professionals; nurses have a large responsibility to provide effective patient education that improves patient self-care management of chronic disease, such as heart failure. Effective patient education should start on the first day of admission. Patient understanding of information communicated by healthcare providers can enable them to participate responsibly in their care and lead to enhanced patient satisfaction, better compliance with treatment instructions,

improved outcomes, decreased treatment and costs, and further reductions in readmissions (Marcus, 2014).

### **Cost Analysis**

The facility had a heart failure readmission rate at 27% in 2017. According to the Centers for Medicare and Medicaid Services (CMS 2015), approximately one in four CHF patients are readmitted within 30 days of discharge and the average cost per CHF readmission is \$13,000. At this facility, assuming the same number of 1192 high and medium risk CHF patients are discharged, a total of 321 patients (27%) would be readmitted and cost the facility more than \$4M in 2018. The goal of this project is to have an overall reduction of 25% in HF readmissions within 30 days by the end of the year. If 80 patients (approximately 25%) are not readmitted, a potential savings in 2018 would be \$1,040,000.

The hospital transitional program for heart failure patients is coordinated by a RN and a social worker who follow 30 to 45 heart failure patients per day. According to the facility salary chart, the average salary for a regular full-time medical social worker (MSW) is \$92,162 and the full-time RN is approximately \$130,000. This project is designed to have a Clinical Nurse Leader (CNL) practicing at the microsystem level to help promote effective patient education at bedside, thus reducing readmission 25% by the end of the year. The total budget estimated for a CNL working 220 hours for this project is \$11,000 based on the minimum rate of \$50 per hour. The three proposed educational activities will serve to help staff improve communication skills and will be taught during staff meeting hours. Each activity takes 10 minutes, so approximately 30 minutes total. The cost for 30 minutes with 30 registered nurses will be \$750. The material used for this project will include a poster to introduce the project in a staff meeting,

200 papers used to make patient handouts and patient surveys, and 30 pens for rewards and for taking surveys – total cost around \$100. The benefit of a CNL-led project to coordinate with the hospital transitional program will contribute to greater fiscal responsibility and potentially save the costs of readmission by approximately \$1,043,650 in one year (Appendix D). Evaluation of the project costs weighed against the outcomes will be used to gain support of the project for use outside of the initial unit.

### **Change Theory**

To gain a reduction of 20% in HF readmissions by the end of May in 2018, Kotter's Eight Steps to Change was used as a framework to facilitate and create a culture of change. The first step was to create urgency. In order to increase the urgency for change, data collection from a comprehensive microsystem and a needs-assessment were analyzed and edited in PPTs to show how great the need for change was. Evidence was presented during staff meetings that introduced the project and sought support from all involved. Literature and policies were reviewed to provide even more evidence supporting the need for change. The second step was to form a powerful coalition. The unit manager, educator, the hospital TCP lead, and the hospital CHF committee lead were invited to staff meetings or morning huddles to support this project and share some care tips. The third step was to create a vision for change, to "see the end in the beginning." Change requires giving up old behaviors so new behaviors can be adopted (Grossman and Valiga, 2013). In order to give a clear vision that helps staff nurses feel the path is easy to follow, a white board was created and placed in the Unit breakroom; it presented the project, steps of IDEAL Discharge Planning, and the timeline of the project. The fourth step was to communicate the vision. Morning huddles updated everyone on the process and gave results

from audits. The fifth step was to remove obstacles. In order to support staff and effectively promote this new approach, the Unit Champions were created, who helped audit the process consistently which helps monitor quality and prevent new barriers from cropping up. It is usually hard for senior nurses or leaders to give up their old practices and adopt new changes, so it's crucial to listen to staff concerns and offer extra support to help them become more confident with changes. The sixth step was to create short-term wins. A positive learning environment was promoted and rewarded staff nurses and patients when they did a good job in returned demonstrations or in the audits. Pizza parties or similar fun foods were served for celebration when the goal was met after two months of practicing IDEAL Discharge Planning. The seventh step was to build on the changes. That means the change is definitely working, that a solid foundation has been created. The eighth step was to evaluate the change and offer reinforcement of successful outcomes. If IDEAL Discharge Planning can be successfully promoted, then it will effectively prevent or reduce HF readmissions. The proposal was written and followed the hospital process to get it approved. The hospital will promote this evidence-based, nurse-led project to other units, thus creating a culture of change throughout the healthcare system, improving patient outcomes and promoting cost-effective care but high-quality of care.

### **Data Source/Literature Review**

A literature review was conducted to identify root causes of readmissions and highlight the elements defining interventions that can be used to improve transitions of care and reduce avoidable HF hospital readmissions. While conducting research, several databases were utilized including: CINAHL, PubMed, and Google Scholar. The keywords “nursing”, “readmissions”, “patient education”, and “heart failure” were used to help with the research. While the key words

link to “nursing”, “heart failure”, and “readmissions”, most nursing interventions in the literature pointed to “patient education”, “care coordination”, and “communication”.

The PICO statement utilized was “What can nurses do to provide and improve effective patient education that reduces HF readmissions?” The search results were limited to peer reviewed journals within the last 5 years. The PICO was as follows: P (Population) involved all patients admitted to the telemetry cardiac unit for heart failure exacerbation; I (Intervention) provided effective patient education to enhance self-management abilities; C (Comparison) was usual care, without extra learning activities; and O (Outcome) meant readmission rate reduction by 25%.

There are factors associated with patients, hospital structure, and processes that increase the risk of HF patient readmissions. Hospital readmission may result from failures in communication as well as from poor coordination of services, incomplete treatment, incomplete discharge planning, and/or inadequate access to care (Mansukhani et al., 2015). Malatji and colleagues (2017) conducted a study which pointed out more than 55% of nurses surveyed report they are unable to complete even basic nursing care due to staff patterns, patient acuities, and workload, which may lead to omitted nursing care and affect patient safety and quality of care. There is a correlation between missing nursing care and heart failure readmission. Furthermore, Carthon and colleagues (2015) used a cross-sectional examination to study the relationship between missing nursing care and hospital readmissions, and the result indicated that the most frequently missed nursing care activities across all hospitals in their sample included talking to and comforting patients (42.0%), developing and updating care plans (35.8%), and educating patients and families (31.5%).

Bedside nurses must help HF patients better manage their conditions to prevent 30-day readmissions. Retrum and colleagues (2013) did a descriptive qualitative study to explore the factors from assessment of patient perspectives regarding HF readmission. They performed in-depth interviews of patients (n=28) readmitted within 6 months of index HF admission. Reasons reported in the interviews for readmission were distressing symptoms, unavoidable progression of illness, psychosocial factors, adherence to self-care recommendations, and health system failures. To identify and control patient factors is crucial. Understanding why a patient returns to the hospital so soon after discharge is key to preventing readmission and solving the challenges of a hospital's financial health, especial a value-based reimbursement environment. Retrum et.al. (2013) suggested that future interventions designed to reduce HF readmissions should be multi-faceted, systemic in nature, and integrate patient input.

The nature and severity of HF symptoms greatly depend on the patient's knowledge, cooperation, and active participation in their health management (Zamanzadeh et al., 2013). Herber, Bückner, Metzendorf, and Barroso (2017) conducted a research study by used meta-summary techniques to integrate the findings of qualitative studies pertaining to barriers and facilitators to self-care within 2264 papers and 31 reports based on the accounts of 814 patients. The main themes relating to barriers and facilitators to self-care were: beliefs, benefits of self-care, comorbidities, financial constraints, symptom recognition, ethnic background, inconsistent self-care, insufficient information, positive and negative emotions, organizational context, past experiences, physical environment, self-initiative, self-care adverse effects, social context and personal preferences (Herber et al., 2017). However, improving health and preventing HF from progressing by adopting self-care skills, adhering to complex treatment regimens, and changing lifestyle behaviors are particularly challenging. The study suggested that future intervention



development could address these barriers and facilitators in order to further enhance self-care abilities in heart failure patients.

Dickson and colleagues (2014) conducted a study using randomized controlled design in which individuals were either randomized to an intervention that focused on building skill in essential self-care maintenance behaviors (e.g., following a low salt diet) and effective self-care management (e.g., symptom recognition), or to a wait-list control group that was offered the intervention after 3 months. The study concluded that individuals may not have been able to translate knowledge into self-care behaviors and address the confidence or self-efficacy that is necessary for self-care. The study suggested that intervention components like role-playing and reinforcement through practice exercises, as used in our intervention, help people translate the content into practice and may have contributed to the positive results in self-care maintenance and management that helps sustain effective self-care (Dickson et al., 2014).

Low health literacy, which has been reported in 27% to 54% of patients with HF, contributes to poor HF self-care (Dickson et.al, 2015). Effective education must focus on individuated education plans that are based on assessment of the patients' learning needs and health literacy in order to deliver effective education. Dickson and colleagues (2015) tested the impact of language-free, low literacy self-care management patient education materials in an ethnically diverse multilingual heart failure population; the results indicated that easy to use, language-free, low literacy educational materials can lead to significant improvement in HF self-care management behaviors in a diverse population, which is critical to averting adverse HF outcomes.

Avoidable readmissions are a strong indicator of a fragmented health care system that too often leaves discharged patients confused about how to care for themselves at home, and unable

to follow instructions and get the necessary follow-up care (Ness & Kramer, 2013). When patients come to the hospital, they are often frightened and full of questions. Many HF patients feel anxious and overwhelmed at the time of discharge, especially those patients frequently readmitted for HF exacerbation, but they don't want to bother nurses and nurses seem not to have time for them. Numerous factors may also inhibit nurses' engagement in patient education, including work overload and time pressure, difficulty in communication with patients, lack of educational resources, insufficient knowledge and skills, limited managerial support, low priority given to patient education (Livne, Ilana, and Sheps, 2017). Understanding the experience of their hospital stay firsthand, along with risk factors of HF patients participating in self-management of their condition and needs, is an undeniable necessity in providing effective discharge instructions to improve care outcomes. It's crucial that nurses assume this responsibility to provide HF patients with effective education from Day 1 of admissions and promote higher quality health care until and beyond discharge.

### **Timeline**

This project began in early February 2018 and will conclude by the end of May 2018. Gathering initial project data was delayed due to other projects already initiated in the chosen unit, and bedside nurses were stressed out by an additional pilot project to work on. Fifty HF patients' charts were reviewed from January 5 to March 5, and for several months prior to admission, in order to collect data that would help us understand the causes, factors, and barriers related to readmissions. Data collections including patient and staff surveys, roots and causes were integrated into the project to state the theme and catch staff attention (Appendices A, B, C, D). PowerPoint presentations were created to introduce the project in March at staff meetings. Chosen Unit Champions met every two weeks for 10 minutes before starting their shifts. The

orientation program for IDEAL Discharge Planning was scheduled to start at the beginning of April and continue for three weeks. The Unit Champions completed validation for IDEAL Discharge competency by the end of March and started validating nurses in IDEAL Discharge Planning competency in April.

One month after initiating IDEAL Discharge Planning, and at again after two months, a chart review will be performed to track and monitor these target HF patients for outcomes and measurements for 30-day and 60-day HF patient readmission rates. Descriptive statistics will be used to compare Unit heart failure patient readmissions pre- and post-education and will assist in disseminating results that show the big picture of the project impact and cost. The data collection of 30-day and 60-day HF patient readmission rates will indicate whether implementing process changes for best practices improved HF patient education, and if they can be found as crucial components in decreasing HF patient 30-day readmission rates.

### **Expected Results**

Expected results of the project include ensuring every bedside nurse in the target unit receives training in IDEAL Discharge Planning. All nurses will integrate this new tool into their daily practice to promote self-care, help patients identify problems and seek solutions, manage their daily checklists by watching their diet, daily morning weight, medications, activities, and follow-up appointments. The results of chart reviews and data collections indicate an outstanding opportunity to develop a project for best practices in HF patient education that will reduce HF 30-day readmissions.

Nurses will demonstrate that hospital staff view the patient's perspective as important, integrate patient- and family-centered care into daily operations of the microsystem, increase patients' and families' self-confidence, and lessen anxiety in managing their own conditions and

related care and treatment. We will avoid excessive 30-day readmissions which are due to a lack of capacity for self-care and poor care coordination. Nurses will evaluate the patients' and families' comprehension and understanding of instructions, addresses care issues with ongoing educational support, and reinforce patients' active and central role in managing their illness and care, thus achieving improved and effective patient outcomes. Nurses will accompany patients in becoming familiar with skills and knowledge needed at home. Nurses will create an environment where patients, families, clinicians, and hospital staff all work together as partners to improve the quality and safety of hospital care before, during and after transition to home care (AHRQ, 2017). In congruence with the theme of the project, the expected results support creating a work environment that practically facilitates nurses' activities and patient education activities, especially in terms of providing clear guidelines and teaching resources, while developing nursing education and communication skills.

### **Nursing Relevance**

Many studies linked to readmissions are more focused on creating standard discharge process to adequately provide appropriate resources and referrals. However, each patient's central role in managing his or her own illness, until now neglected, should be emphasized and promoted. What is essentially missing in protocols thus far is "accompaniment." Accompaniment transforms traditional educational efforts that simply lecture into two-way streets of learning. It ensures that any effort becomes self-sustaining, and it is my experience this is essentially the missing ingredient to increase HF patients' capacity for managing their own care after discharge. More accompaniment is one of the keys in reducing readmissions.

Using a structured needs assessment to identify areas of concern and provide focused resources to patients may prove to be an effective way to tailor assistance for patients' needs

(Kripalani, Theobald, Antil, & Vasilevskis, 2014). The CNL is strategically positioned to partner with individuals to initiate and maintain healthier lifestyles, focusing on the human response to symptoms and diagnoses. A comparison of the project unit's pre- and post-implementation HF readmission rates will address the viability of applying cost-containment strategies of care delivery in this new health arena; undoubtedly a reduction in health care costs will sustain and ensure quality outcomes for groups of clients. Changes in healthcare delivery and financing are challenging the traditional practice of nursing, but also create opportunities for the nursing profession to take a leadership role in shaping the future of health care. The CNL strives to identify quality measures that need improving, incorporates new evidence into practice, implements new guidelines for patient care, tracks data on these projects, and is able to show improved clinical outcomes that are immensely cost effective within microsystems (King & Gernard, 2016).

### **Summary Report**

This microsystem consists of twenty-six telemetry beds and 50% of patients were admitted with a primary diagnosis of cardiovascular disease. The methods I used to start were chart reviews and staff/patient interviews to critically evaluate the microsystem and anticipate risks to patient safety. The hospital yearly report indicated the HF readmission rate was 27%. Data collection from a chart review of 50 discharged HF patients revealed 18 of 50 (36%) patients returned to hospital within 30 days (see Appendix A). The hospital TCP could only follow 18% of HF patients after discharge to home (see Appendix A). Fishbone and root cause analysis identified the underlying causes, indicating patients with HF are at high risk for frequent readmission primarily due to self-care deficits which lead to critical readmissions. The results from a needs-assessment revealed that risk factors for ineffective patient education, according to

patients' self-reports, were most related to lack of support from staff, low health literacy, and lack of motivation (see Appendix B). The factors that inhibited nurses' engagement in patient education included work overload, time pressure from other patients care, low priority given to patient education, lack of educational resources, lack of confidence to provide education, and lack of policy (see Appendix B). The purpose of the project is to reduce 30-day hospital readmissions in HF patients who are currently admitted or readmitted for acute heart failure exacerbation within the telemetry microsystem. If the causes and the barriers in RCA can be adequately addressed in this project, we will prevent and significantly reduce recurrence of hospital readmissions.

This CNL-led project started in early March and has focused on two components of the CNL role, communication and collaboration, incorporating new evidence into practice to show improved clinical outcomes that are cost effective within the microsystem. The evidence from the literature review also supports the project. The PICO statement and nursing databases used included CINAHL, PubMed, and Google Scholar to help search scholarly publications limited to peer reviewed journals within the last 5 years. While using the keywords "nursing", "readmissions", and "heart failure" to search related available information, most nursing interventions in the literature pointed to "patient education", "care coordination", and "communication". IDEAL Discharge Planning, a multidisciplinary approach, was introduced to support bedside nurses to more systematically deliver individualized education plans that use plain language to address health literacy and help patients better understand their medical conditions and meet their needs (see Appendix H). IDEAL Discharge Planning also emphasizes healthcare professionals working in interprofessional teams and collaboratively identifying discharge needs which prepare patients for a safe transition to home.

The intermediary goal of the project is to have a reduction of 20% in HF 30-day readmissions after two months practice. To achieve the goals of the project, Kotter's Eight Steps to Change theory was used to define the elements and activities to promote change. The PPTs, white board, videos for demonstration, and Unit Champions were developed to educate and support nurses to achieve objectives and lead change. The published materials that nurses used for patient education during this project were the ones the hospital approved to use for patients.

This project focused on HF populations admitted and treated with the primary or secondary admitting diagnosis of heart failure in the microsystem. The patients' ages ranged from 45 to 95, the majority of the patients were between the ages of 55 to 80. Many patients have comorbidities with other chronic conditions. Approximately 25% of patients still work either part-time or full-time jobs. Data collections for this project are focused on the evaluation of objectives and processes. The unit is fast paced, most HF patients stay in the hospital for an average of 2 to 5 days to treat acute HF symptoms. With shorter lengths of hospital stays and limited time for teaching, data collections on HF patients will be collected prior to participating in IDEAL activities and on the day of discharge – evaluation of self-care abilities will be taken by daily checklist (see Appendix F). The audits focus on the HF patient populations who will be discharged to home and nurses who take care of these HF patients. The results from observations and auditing tools are used to evaluate the change process and measure whether the staff and patient/family education have made a difference in care outcomes. Descriptive statistics are used to compare HF patient pre- and post-education and evaluate the effectiveness and efficiency of the patient discharge education; these statistics are posted in the break room to share with staff (see Appendix F). Data collections for staff training in the steps of IDEAL Discharge Planning are included to evaluate outcomes of nurses receiving IDEAL training sessions, competency, and

returned demonstration in performance. Unit champions are responsible for observations of nurses demonstrating the use of IDEAL Discharge Planning for patient engagement. IDEAL Discharge Planning was introduced to staff in early March, however, an unexpected turn caused a delay in the project. With the process of implementing the IDEAL Discharge Planning delayed, the data collection of 30-day and 60-day HF patient readmission rates will be postponed until staff training is complete and IDEAL practice can be promoted at bedside. The process of assessing all measures will require more time to determine if the process needs to be adjusted to facilitate desired change.

The project still managed to provide training to the staff, with one third of nurses in the microsystem needing to complete staff training and validation of IDEAL competency before IDEAL GO Live. There were a few senior nurses with some degree of resistance to change. In order to help these senior nurses in the unit agree to participate in the project, a white board was created in the break room and printed out PPTs on a poster to introduce the project and goals. An easy-to-carry, card-size cheat sheet listing steps of IDEAL Discharge Planning was created to help staff retain their training and also could be used for auditing purposes (see appendix G). The PPTs were also mailed to staff mail boxes to engage the project with all staff possible. It's important to talk to staff respectfully to understand the reasons of resistance to change, address their concerns, and offer additional help and support that could assist them to adopt change.

The IDEAL GO Live won't happen till June. Although the project is just a pilot project and implemented in a microsystem only, The CNL acts as a full partner and collaborates with other staff to identify clinical and cost outcomes and lead change that improves safety, effectiveness, timeliness, efficiency, quality, and the degree to which care is patient-centered (King & Gerard, 2016). The goal of this project is to have an overall reduction of 25% in HF 30-



day readmissions by the end of the year of 2018. Two weeks ago, the project was introduced to the director of the hospital transition unit. The director was interested in promoting this project in microsystems to bridge the care gaps for transitions and stated that she would like to introduce my project to her boss for further evaluation. This CNL-led project is an evidence-based and research-based practice and follows RCA and needs assessment to identify opportunities for quality and safety improvement. HF has the highest readmission rate for all chronic conditions (CMC, 2016). The outcome evaluation for this project is found to reduce readmissions for patients and improve hospital performance on the 30-day readmission process measure, this project will eventually gain support and be promoted and to other microsystems and other patient populations within the hospital organization.

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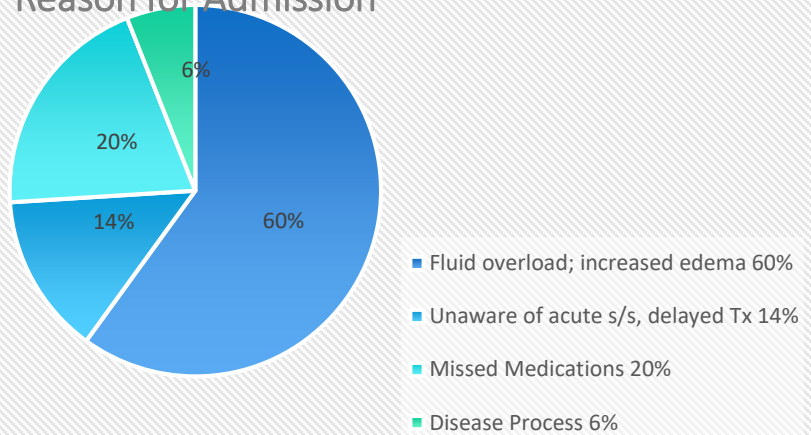
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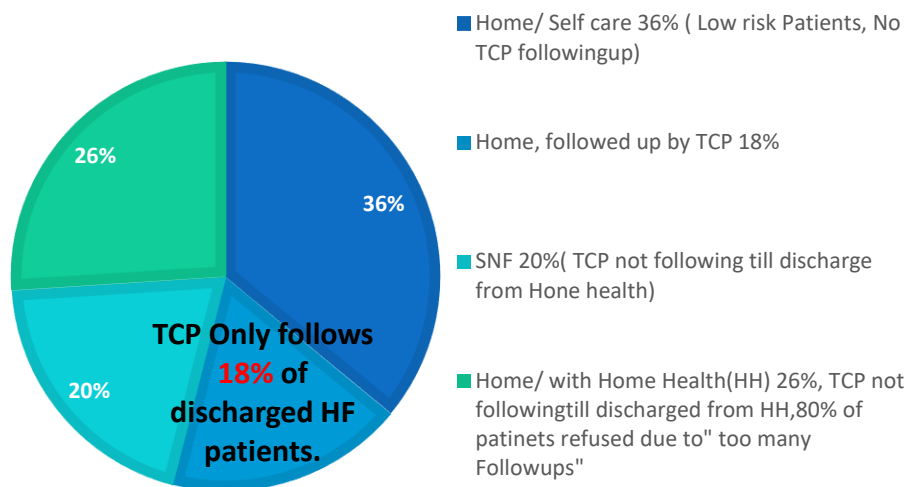
Appendix A

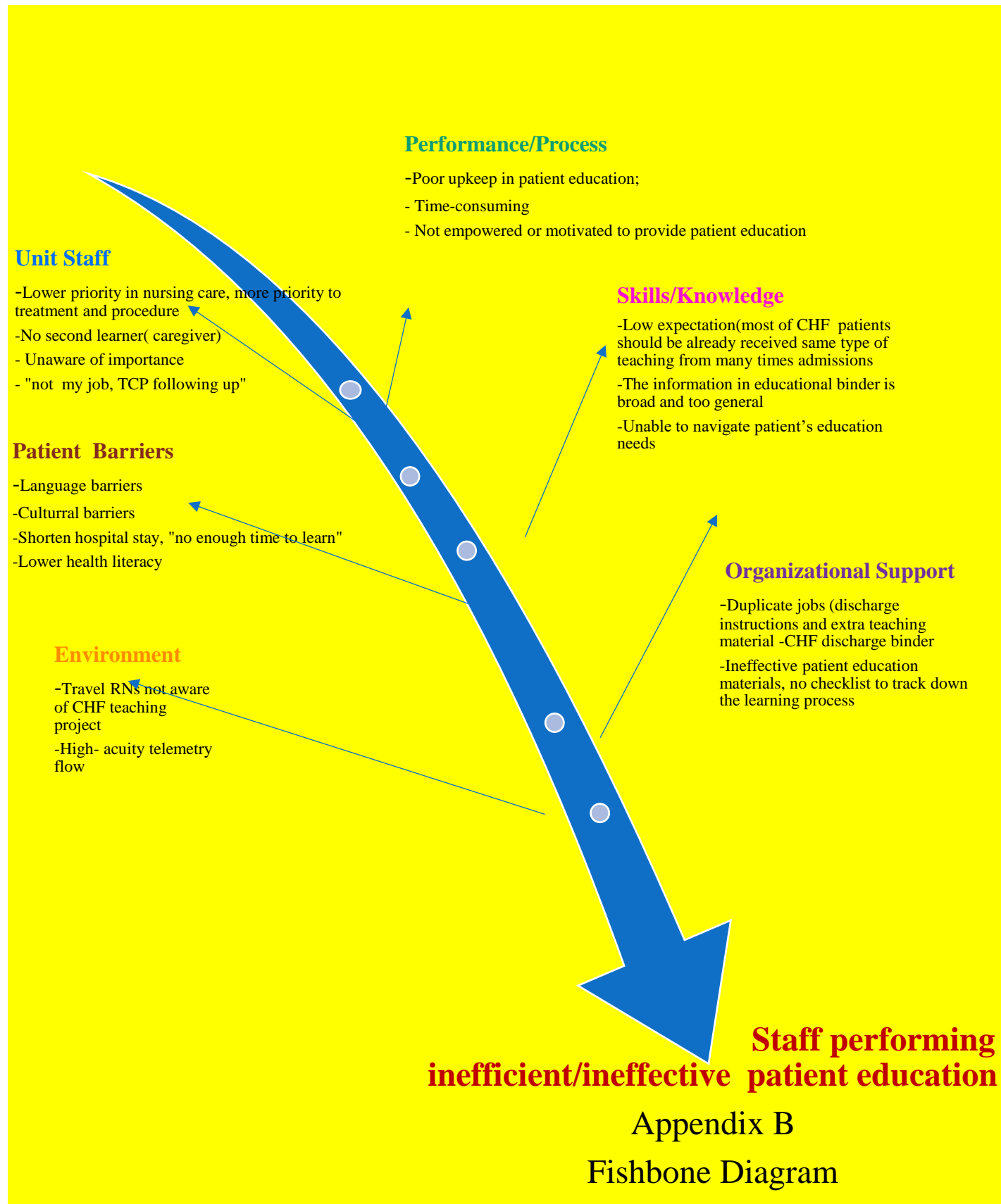
<b>Hospital Chart Review</b>	
Patient Sample population	50 patients
Location	Admission primary Diagnosis: Heart Failure exacerbation; Acute on Chronic Heart Failure
Collecting Data	An adult cardiac telemetry Unit of an acute hospital located in Santa Clara, California, Unit 335.
FOCUS Area	From Jan 5 to March 5, 2018( 2 Months )
	Hx of Readmission; TCP or other program follow-ups; Reason for Readmissions;

Reason for Admission



DISHCHARGE TRANSITIONS

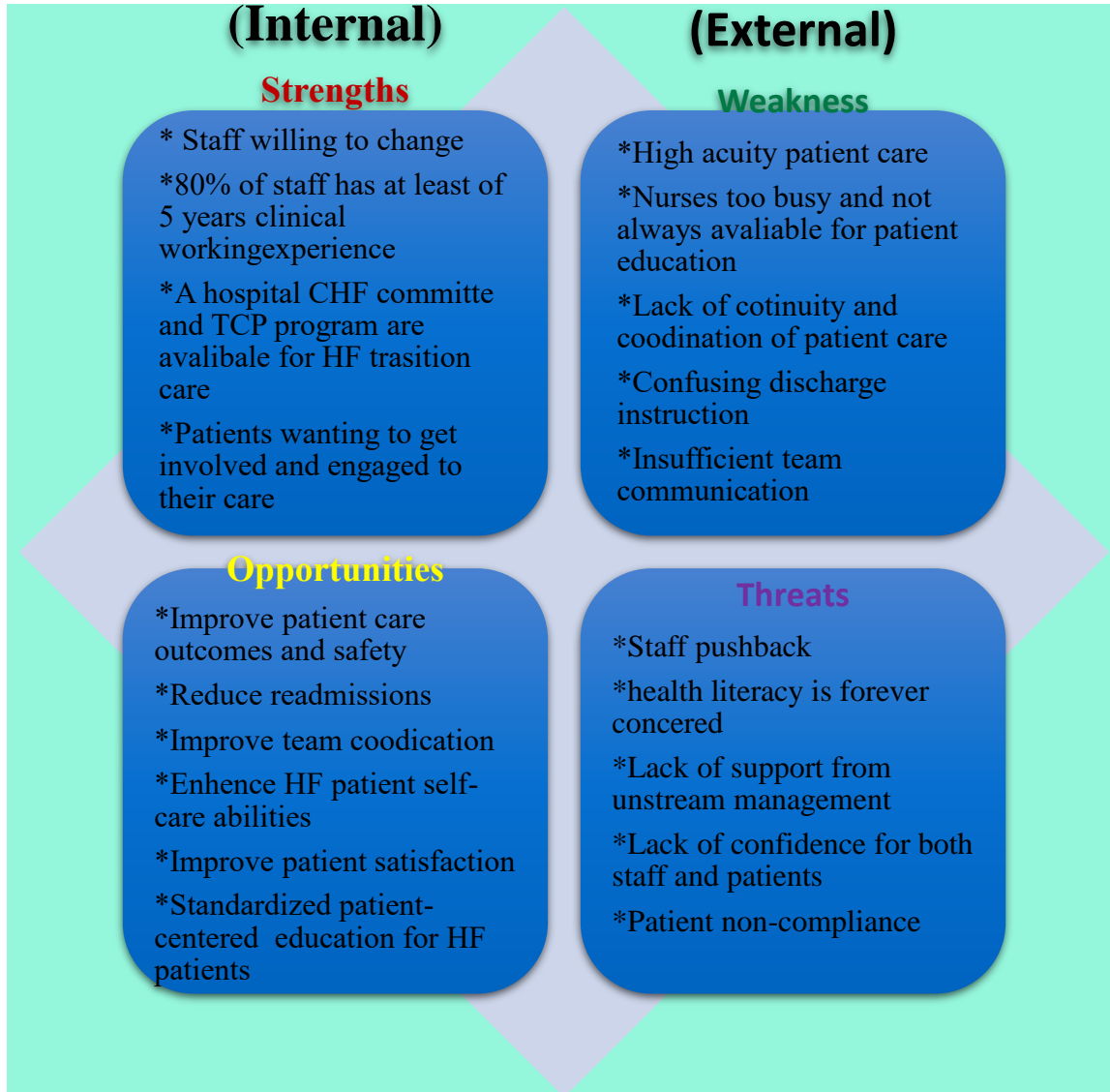




Appendix B  
Fishbone Diagram

Appendix C

SWOT Analysis





**Appendix D**  
Cost Analysis

❖ **The extra cost spent to treat Heart Failure Hospital Readmissions in 2017 for an acute hospital**

2017 Heart Failure Readmissions	
Cost of readmission per person/ per time \$ 13000(per CMS)	
Readmission rate :27%	
Total discharged HF patient: 1192	
Total HF readmissions within 30 days: 321	
<b>Total cost of HF readmissions (27%): \$ 4,173,000</b>	
Cost of TCP(including a RN and a social worker): \$22,162	
<b>Total cost spent for HF patient with a reduction program: \$ 4,395,162</b>	

❖ **Cost to develop a CNL-led project**

The total cost to hire a CNL for 220 hours (\$ 50 per hour)	\$11000
The total cost for 3 times 10-minute meeting for 30 RNs	\$750
The total cost for material and papers	\$100
<b>The total cost for a 220-hour CNL led project: \$ 11,850</b>	

❖ **Assuming the same number of HF patient discharged in 2018**

Total cost of HF readmissions (27%)	\$ 4,173,000
Cost of a TCP team per year (the original plan)	\$ 22,162
The total cost for a 220-hour CNL led project	\$ 11,850
<b>Total cost spent for HF readmissions with a reduction program (A TCP team and a CNL- led project):</b>	<b>\$ 4,407,012</b>

❖ **If the goal can be met to reduce 25% of HF patient hospital admissions, the totally saving cost is:**

Total cost spent for HF patient with a reduction program (A TCP team and a CNL- led project):	\$ 4,407,012
<b>The saving cost for 25% reduction of HF patient hospital admissions</b>	<b><u>\$1,043,250</u></b>

**Appendix E**

Project Timeline

Activites	1/ 29	2/ 5	2/ 19	3/ 5	3/ 12	3/ 26	4/ 9	4/ 23	5/ 7	5/ 14	5/ 21	June- July (ON Going)
<b>Assess microsystem/ Needs assessment/collect pre-admission rate</b>												
➤ Chart review on unit HF patients for 2 months(Cause and effect diagrams)												
➤ Patient/staff surveys												
➤ Brainstorming												
➤ Literature review/ Data analysis												
<b>Theme/Design &amp; confirm Project</b>												
➤ Meetings with Stakeholder												
➤ Develop IDEAL Discharge Planning												
<b>ment IDEAL Discharge Planning education program /action plans</b>												



**Appendix F**

Evaluation Tool for Patient daily self -Check Plans learning checklist

Medical Numbers:                      Age:    Gender: M/F  
**Pre-education/ Post-education/Discharge**    Primary Language:

Date:	Verbalize understanding	Demonstrate Understanding	Need Reinforcement	Second Learner Needed
1. Able to state the elements of daily self-monitor plan				
2. Able to point out the HF Zone managing HF symptoms				
3. Able to follow the checklist to monitor acute sign and symptom of HF to call 911 or call advice nurse				
<b>Confidence scale in using Daily self-check plan for self-monitoring</b> (Not at All) <b>1 2 3 4 5 6 7 8 9 10</b> (Very Confident)				
<b>Comments</b>				

## Heart Failure management Daily Self-Check Plan

Daily Weight Check

Meds as Directed

Low Sodium diet, less 2000 mg per day

Follow-ups Visits

Healthy Lifestyles

**Green Zone  
(Goal Zone)**

**Yellow Zone  
(Warning Zone)**

**Red Zone  
(Emergency Zone)**


<ul style="list-style-type: none"> <li><input type="checkbox"/> No shortness of Breath</li> <li><input type="checkbox"/> Physical activity level is Normal</li> <li><input type="checkbox"/> No new swelling on feet, ankles, legs or stomach</li> <li><input type="checkbox"/> Weight check stable Weight: _____</li> <li><input type="checkbox"/> No chest pain</li> </ul> <p style="margin-top: 10px;">Great! Continue daily self - check</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More shortness of Breath</li> <li><input type="checkbox"/> Dry hacky cough</li> <li><input type="checkbox"/> More swelling on feet, ankles, legs or stomach</li> <li><input type="checkbox"/> A weight gain of 2 pounds a day or 5 pounds a week</li> <li><input type="checkbox"/> Uneasy and worsening shortness with activities, need to sleep sitting up in a chair</li> </ul> <p style="margin-top: 10px; text-align: center;">Call Advice Nurse: (408)554-9800</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Struggling to breathe. Unrelieved Shortness of breath while sitting still</li> <li><input type="checkbox"/> Coughing up pink, frothy sputum</li> <li><input type="checkbox"/> Chest pain</li> <li><input type="checkbox"/> Increased confusion</li> </ul> <p style="margin-top: 10px; text-align: center;"> <a href="#" style="color: white; text-decoration: underline;">Call 911 or go to the nearest hospital</a> </p>
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**Appendix G**

Evaluation Tool for Staff IDEAL Training

**Data:**

**Name:**

Learning Objectives	Passed	Maybe	Not Passed	Name of signed off Unit companion	comments
1. Complete training and understand the function of IDEAL Discharge Planning					
2. Able to state the elements (steps) of IDEAL					
3. Able to demonstrate a returned demonstration with unit companions					
4. Confidence scale in using IDEAL at bedside for patient engagement	(Not at All) 1 2 3 4 5 6 7 8 9 10 (Very Confident) 				


**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 (Lifestyle, medications, warning s/s, test results, follow-ups)
- 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’s goals, preferences, observations, and concerns

**Appendix H**

Evaluation of the IDEAL Education

Data:  
Name:

The objectives of the course were clear	(Strongly Disagree) <b>1 2 3 4 5</b> (Strongly Agree)
The course content was consistent with the objectives	(Strongly Disagree) <b>1 2 3 4 5</b> (Strongly Agree)
The course was valuable for my professional development	(Strongly Disagree) <b>1 2 3 4 5</b> (Strongly Agree)
The material contributed to learning and meeting the course objectives	(Strongly Disagree) <b>1 2 3 4 5</b> (Strongly Agree)
<p>How convinced are you that it's important to use IDEAL to improve patient engagement?                  (Not at All) <b>1 2 3 4 5 6 7 8 9 10</b> (Very important)</p> 	
Comments and Suggestions	