

**Heart Failure Patient Discharge Using Teach-Back  
Method of Education: A Quality Improvement Project**

Elizabeth Solomon

Touro University

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DNP Project Chair: Dr. Jessica Grimm

DNP Project Team Member: Dr. Theresa Tarrant

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### **Abstract**

Heart failure is a growing worldwide problem. The growing burden of managing this progressive chronic disease is expensive. Effective management of this chronic debilitating disease requires vigilant patient and caregiver engagement. Self-management is complicated and requires patient understanding of the importance of adhering to medication regimens, monitoring fluid and sodium intake, daily monitoring of weight, and symptom management. Teach-back information exchange is associated with higher levels of information retention and improved health literacy. The focus of this quality improvement project was to reinforce the importance of the teach-back method and improve consistent documentation of education provided to patients on the IPOC. The Donabedian model provided the framework used for this project. A paired-samples t-test determined that there was a significant improvement in the Conviction and Confidence of the nursing staff in using the teach-back method. Pre and Post intervention chart audits demonstrated a significant increase in the documentation of the use of the teach-back method. Optimizing the use of the teach-back method provides benefits to patients and their family members by improving their understanding of HF compliance with treatment regimens and self-management activities. The correct and consistent use of the teach back method can contribute to positive health outcomes.

*Keywords: heart failure, patient education, nurse education, self-management*

## **Heart Failure Patient Discharge Using Teach-Back Method of Education: A Quality Improvement Project**

Heart failure is a growing problem affecting millions and "accounts for one-third of all deaths worldwide" (Savarese, 2017). The Centers for Disease Control (CDC) reports, "6.2 million adults in the United States have heart failure" (CDC, 2020, para 1). Heart failure (HF) is a progressive chronic illness that impairs the ventricles' ability to pump blood to the rest of the body. For patients 65 years and older, HF is the leading cause of hospitalization (Olofsson et al., 2016). If not correctly managed, projections anticipate 50% of those diagnosed with heart failure will die within a year (2020). Billions of dollars are spent on hospitalizations, and HF has the highest recidivism of all chronic illnesses, which places an additional burden on a healthcare system with limited resources (American Heart Association, n.d.).

In 2001, The Joint Commission (TJC) published treatment guidelines for HF known as The Heart Failure Core Measure Set. There are four measures in the set. These guidelines include specific medications that have proven efficacy, dietary restrictions, and lifestyle modifications include daily weight and symptom management (Centers for Medicare and Medicaid Services (CMS) and TJC have aligned measures to streamline documentation of compliance of efforts to improve health care delivery (TJC, 2021, para.1). The Core Measures are reviewed and revised to reflect best practices. Some measure elements were retired or modified when performance indicators were consistently achieved. Additional measures were added. The core measures were most recently revised in 2020 (Shore, 2020).

The Patient Protection and Affordable Care Act (ACA) was signed into law in March of 2010 (Healthcare, n.d.) One of the several goals of the ACA is to improve the quality of care by encouraging "hospitals to improve communication and care coordination to engage patients and

caregivers in discharge plans better and reduce avoidable readmissions" (CMS, 2020, para. 1). CMS reduces payment based on poor outcomes, specifically HF 30-day readmissions. This value-based initiative required quality measure reporting beginning in 2012. Simply put, the amount of reimbursement is tied to performance outcomes. (CMS, 2020).

One element of the HF core measure focuses on patient education. The criterion requires staff to provide educational materials to the patient or the caregiver upon discharge from the hospital (AHA Heart Failure Fact Sheet, 2020). The measure does not mandate nurses to assess patient comprehension of presented materials. Patients are often discharged from health care facilities without evaluating whether the patient or caregiver understands and can apply discharge instructions, specifically instruction involving self-management of their progressive disorder. Effective management of this chronic debilitating disease requires vigilant patient and caregiver engagement. Patient understanding of the importance of adhering to medication regimens, monitoring fluid and sodium intake, daily monitoring of weight, and symptom management are the foundation of self-management. Yen and Leasure (2019) report that using the teach-back method of patient instruction is associated with improved patient understanding and compliance with self-care activities.

Nurses and other healthcare providers use teach-back to assess a patient's level of comprehension. The nurse provides verbal instruction and may use various tools such as preprinted information, pictures, or audiovisual materials to promote learning. The nurse asks the patient to explain what has been taught in their own words. If the patient cannot recall the material taught, the nurse repeats instruction until the patient successfully restates the information taught (Anderson et al., 2020).

The site chosen for this quality improvement project is a 306-bed acute care hospital in urban Las Vegas, Nevada.

This project aims to encourage teach-back when providing discharge instructions on self-care management activities. Responsibility for patient understanding lies with the nurse, not the patient. Coleman et al. (2017) support the training of healthcare workers in teach-back and other activities to support health literacy. A post-intervention survey would ask if the nurses were currently using the teach-back method, whether the nurses' confidence in using the teach-back method with patients is improved, and whether the nurses' evaluation of patient knowledge is improved.

The nurses' instruction and delivery of surveys could be completed in about six weeks. The project's goals are to improve nurses' knowledge of the teach-back method of patient education and have implemented this type of education delivery for all HF patients.

### **Problem Identification**

A high number of HF patients are readmitted to the hospital, and readmissions are costly. Effective self-management of HF may reduce heart failure readmissions. Lower health care literacy rates are associated with adverse outcomes in chronic disease management (HRSA, n.d.). Teach-back information exchange is associated with higher levels of information retention and improved health literacy. This project attempts to improve the patient discharge procedure of HF patients by using the teach-back method.

### **Problem Questions**

Question: Will implementing a nurse-led teach-back protocol for teach-back improve comprehension of self-management activities for patients with heart failure?

(P) Problem: Self-management of heart failure requires engaged patient participation to improve quality of life and reduce hospital admissions.

(I) Intervention: Expert will design, and nurses will employ teach-back protocol to improve comprehension of self-management activities.

(C) Comparison: Nurses present patients with written materials on self-care activities and may or may not teach; therefore, little interaction to assess comprehension.

(O) Outcome: To improve nursing knowledge of teaching efforts using the teach-back method leading to improved comprehension for self-management activities in patients with heart failure.

(T) Time: Timeframe of DNP project.

### **Search Methods**

A literature review was conducted using the ProQuest, Cochrane, EBSCO, AHRQ (guidelines.gov), UpToDate, and Cumulative Index of Nursing and Allied Health Literature (CINAHL) to support this project. Databases were searched using the following terms: 1) Self-management of Heart Failure, 2) Teach-Back, and 3) Nursing barriers to using teach-back. Articles not peer-reviewed, more than five years old, or that were duplicates were rejected. The primary search yielded 76 articles. Studies that included other educational interventions such as smartphone cues or avatars were eliminated. The number of articles was reduced to 52. The articles were selected for additional review if they fell into one of three categories.

1. Studies that explored the lack of patient knowledge on self-management of HF
2. Studies that explored the use of teach-back to improve patient knowledge and

compliance with treatment regimens.

3. Studies that explored the nurses' knowledge in providing education on heart failure self-management education.

## **Review Synthesis**

### **Impact of Heart Failure**

Heart failure is a growing worldwide problem. The growing burden of managing this progressive chronic disease is expensive. The European Society of Cardiology (2021) reports, "The number of patients with heart failure worldwide nearly doubled from 33.5 million in 1990 to 64.3 million in 2017" (para. 1). There are more than one million hospitalizations annually (Jackson et al., 2018). American Heart Association reports that over 6 million people in the United States have heart failure, and by 2030, over 8 million individuals are projected to be affected (AHA, 2021). Over 108 billion dollars per year is spent worldwide on HF, with the United States responsible for over 28% of the total amount spent. The health care burden related to HF will only worsen as the population ages. People are living longer, and the cost of managing chronic illness is growing faster than treatments. Thousands of studies have been conducted worldwide to identify possible strategies to mitigate the associated direct and indirect costs.

### **National Guidelines for Heart Failure Discharge**

Self-management is complicated and is multifaceted. The American Heart Association has identified vital self-management activities for HF, including knowledge of medication regimen, sodium intake, exercise/activity, daily weight, recommendations, and symptom monitoring (AHA, 2021).



The medication regimen for patients with heart failure typically consists of three different types of medications, and each medication is administered multiple times each day. The medications include Angiotensin-converting enzyme inhibitor or an angiotensin II receptor blocker (ARB) for patients with left ventricular dysfunction. HF patients should also monitor their sodium intake, which should be limited to no more than two grams per day, and be instructed on how to read food labels to determine the actual content of sodium. Activity levels are individualized and may change depending upon symptoms and vital signs, early identification of subtle symptoms indicating an exacerbation, and most importantly, when additional help is needed to manage their condition. Smoking cessation and information regarding alcohol consumption should be given. Additional help includes medication adjustments, other directions by the primary care provider, or when going to the emergency room is a priority (Horowitz & Krumholtz, 2020).

### **Heart Failure Self-Management Education**

*Reduction in hospital readmission* Boyde et al. (2018) conducted a randomized control study to determine the effectiveness of heart failure self-management activities and the effect on hospital readmissions. The study was conducted in Australia over 12 months. During this time, 200 patients with HF were followed, after an individualized educational intervention based on the patient's learning needs with self-management activities. Education included viewing a DVD, verbal interaction with the care provider, and preprinted instructions followed by a teach-back evaluation. At 12 months, the group receiving the education had a 30% reduction in unplanned hospital readmissions ( $p=0.005$ ).

A systematic review and meta-analysis conducted of previously published randomized control trials done by Qui et al. (2020) found the nurse-led heart failure programs reduced the

risk for rehospitalization and mortality for heart failure patients. The nurse-led intervention program included patient education on self-management, physical examination, and psychosocial support for patients. Ninety-five articles met eligibility requirements. Within the 95 articles, there were 3282 total participants studied; 1571 patients were assigned to the nurse-led intervention group, and 1711 patients received the usual care. Rehospitalization was significantly lower with the group of patients receiving nurse-led educational intervention ( $p < 0.001$ ). Readmissions 12-24 months following the intervention were still significantly lower ( $p < 0.001$ ) with the group of patients receiving the intervention.

***Compliance and application of self-management behaviors*** Daley et al. (2019)

conducted a narrative synthesis of 73 qualitative studies evaluating patient's knowledge of HF. The researchers identified several themes related to HF knowledge: content, development, application, communication, and experience. Patients may understand what HF is, but applying the knowledge is vital to develop strategies for adjusting, or when to communicate changes to their primary care provider, leading to a greater level of autonomy and empowerment.

**Use of Teach-Back Method as a Discharge Education Technique**

***Definition of the teach-back method*** The Agency for Healthcare Quality reports that most information provided to patients is forgotten immediately and what is retained is incorrect (AHRQ, para 3.) The teach-back method is a technique used to assess a patient's level of understanding of information presented. The teach-back method involves asking patients to explain what has been told to them to the health care provider, using their own words. If there is a misunderstanding, the information is clarified by the health care provider. This process is repeated until the patient can correctly recall the information provided (Talevsky et al., 2020).

Studies confirm that the use of the teach-back method has a comprehensive benefit to different patient populations (AHRQ, 2020).

***Benefits of the teach-back method*** Mesbahi et al. (2020) conducted a quasi-experimental study on 80 acute care patients with HF, demonstrating the positive effect on self-management behaviors when the teach-back method is used. In this study, patients were divided into two groups. The group receiving the teach-back intervention could recall information on diet, medication regimen, fluid intake, weight control, and symptoms of disease exacerbation three months after the educational intervention ( $p < 0.001$ ). The intervention group also had fewer hospital readmissions ( $p < 0.002$ ).

Dinh et al. (2019) conducted a single-site cluster randomized control trial with six hospital wards randomized into two study groups. The intervention group was provided a booklet on heart failure, a weighing scale, a diary, and the teach-back method was used. This group had a greater understanding of heart failure self-management activities than the control group when initially taught and could recall the information 90 days post-intervention.

Mahajan et al. (2020) conducted a study on the patient's ability to recall information during discharge from the emergency room using the teach-back method. A single-center, prospective cohort study was conducted using one-way ANOVA and chi-square for statistical analysis. The findings demonstrated that nurses who used the teach-back method used less time than other education methods. The average amount of time used during an interview using teach-back averaged 1:39 minutes compared with an average of 3:11 minutes for patients with an accurate recall and comprehension of the presented material.

Yen and Leasure (2019) conducted a systematic literature review of 26 articles evaluating the effect of the teach-back method on patient education. This study was not specific to heart

failure but used the teach-back method in a wide variety of disease states and patient populations. The study found that the teach-back method effectively reinforced or confirmed material presented without regard to the underlying patient problem.

### **Barriers for Effective Teach-Back Use**

*Insufficient knowledge of heart failure self-management* Jankowska-Polanska et al. (2017) conducted a cross-sectional study using a descriptive design. This study identified a lack of nursing knowledge of concepts related to heart failure such as diet, monitoring of blood pressure, symptom management, and when additional interventions are needed. A convenience survey conducted by Sundel and Emerson (2018) identified knowledge deficits in HF self-management strategies with nurses. Researchers created and pre and post-test to evaluate the nurse's knowledge of HF self-management activities. Nurses could answer questions related to weight management with only a 70% accuracy. Nurses spend the most time with patients and provide most of the education involving self-management activities of HF. A meaningful educational opportunity may be missed when nurses do not know basic self-management strategies (Albert, 2016).

*Inconsistent use of the teach-back method* Talevski et al. (2020) conducted a systematic review of the implementation of teach-back in various health care settings. The study also demonstrated that the teach-back is method is effective across varied clinical settings and different patient populations. Researchers also identified the importance of including a structured training of health care providers education on how to perform the teach-back. Hospitals having structured teach-back protocols had improved compliance by nurses and sustained a drop in HF recidivism. In a study of patient safety practices at six United States (US) hospitals, the US Government Accountability Office (GAO) (2016) reports one gap in implementing an evidence-

based practice is ensuring compliance with the best practice. Verifying compliance requires surveillance and data collection.

### **Review Synthesis**

Effective management of heart failure requires the active participation of patients in self-management activities. The literature review outlines specific self-management activities for HF (AHA, 2021; Horowitz & Krumholtz, 2020). Studies demonstrate a correlation between inadequate self-management outlined activities and hospital readmissions (Boyde et al., 2018; Qui et al., 2020; Mesbahi et al., 2020). Nurse-led patient education on HF self-management activities correlates with greater understanding with meaningful compliance (Do et al. 2015; Daley et al. 2019). Studies demonstrate the effectiveness of the teach-back method of education and the retention of information needed to positively affect self-management behaviors (AHRQ 2021; Tavlesvsky et al., 2020; Mesbahi et al., 2020; Dinh et al. 2019; Mahajan et al., 2020). Improving the nurse's knowledge base of heart failure (Jankowska-Polanska et al. 2017; Sundel & Emerson, 2018) and providing a plan for consistent use of the teach-back method to evaluate the patient's understanding is an essential step to improving the patient's quality of life, and a meaningful reduction in hospital readmissions for HF patients (Talevski et al., 2020).

### **Project Objectives**

In the timeframe of this DNP Project, the Doctor of Nursing Practice (DNP) student will:

1. Educate on the teach-back method for nurses using standardized Interdisciplinary Plan of Care (IPOC) for HF discharge.
2. Measure nurses' confidence and frequency of using teach-back with a pre and post-test using a Conviction and Confidence Scale (CCS) (AHRQ, 2020).
3. Improve nurse utilization of the teach-back method by 30% within a 5-week time frame.

## **Theoretical Framework**

The Donabedian model provided the framework used for this project. Moran et al. write, "A conceptual framework is a group of concepts that are broadly defined and systematically organized to provide a focus, a rationale, and a tool for the integration and interpretation of information" (2016, p.127). The model focuses on three components: the structure of the project, the process to be improved, and the desired outcomes (Hall & Roussel, 2017).

### **Historical Development of the Theory**

The earliest contributions in developing quality improvement and patient safety-initiated efforts led to evidence-based practices that improved clinical outcomes (Hall & Roussel, 2017). Healthcare leaders were trying to solve problems of inefficiency and adverse outcomes. Identified solutions were influenced by efforts from diverse sectors, including the aviation and manufacturing industries. W. Edwards Deming was a visionary who believed that quality was a continual process. He spent many years working in Japan working with engineers and top managers to improve efficiencies. He focused on how well employees worked and learned together (Deming Institute, 2021). The statistical controls used in corporations led to quantifying healthcare outcomes—the ability to quantify outcomes led to the implementation of Total Quality Management (TQM) (Hall & Roussel, 2017).

In 1965, Medicare and Medicaid programs were enacted. Soon after, Avedis Donabedian, a professor of medical care organizations, was asked to review the findings of quality assessment. His findings were published in an article titled "Evaluating the Quality of Medical Care" in October 1965. This became the foundation of his work on the theory and practice of quality assurance. "Donabedian proposed a triad of structure, process, and outcomes to evaluate the quality of health care" (Ayanian, Matrkel, 2016, p, 206). This flexible framework

is still used by physicians, health care organizations, accrediting, and regulatory agencies (Ayanian & Matrkel, 2016).

### **Application of Major Tenets of the Theory**

The model focuses on three components: the project's structure, the process to be improved, and the desired outcomes (Hall & Roussel, 2017).

#### **Structure**

The structure includes a description of where the patient care is provided. The description includes the site, the staff providing the care, and the resources used (Ayanian & Matrkel, 2016). Using the Donabedian framework, the setting is the medical-surgical floor, the resources needed for the intervention, and include the active participants. The nurses and the patients are the active participants within the setting (Ayanian & Matrkel, 2016). The nurses are the primary participants as they will receive the education from the DNP student, and the patients will receive education from the nursing staff as shown in Appendix A.

#### **Process**

The Donabedian model describes the process as the mechanism of care, or the actions taken in healthcare delivery. These actions include patient education, treatment, diagnosis, and preventative care.

This project involves a process change by altering how nurses provide discharge education, specifically evaluating patients' ability to recall and comprehend presented self-management information. The site hospital currently has a discharge process in place. The electronic health record for the project site has an IPOC. Although the IPOC is comprehensive to address the care for all patients, the IPOC includes specific educational necessities for HF patients. Specific needs include a comprehensive list of prepopulated fields, including

medications, physical activity, self-management activities, and follow-up care. Each field can be customized to meet patient needs. Patient education fields include documenting the method of providing education. One of the identified approaches is the teach-back method. Other methods include discussion and providing preprinted materials. Informal conversations with nursing staff indicate inconsistent use of documentation within the IPOC.

### **Desired Outcomes**

For this project, the desired outcome is to educate the nurses on using the teach-back method. The second outcome is to improve the nurses' confidence and utilization in using the teach-back method, as shown in Table 1. The tool used to measure the outcome is the Conviction and Confidence Scale (AHRQ, 2021). Providing education for the nurses improves the consistent use of the teach-back method (Sundel & Emerson 2018).

Hall and Roussel (2017) write that outcomes include all changes in patients because of the care provided. Potential desired outcomes could include a decrease in unplanned hospital readmissions. Studies have shown that patients who received education about their HF using the teach-back method had fewer readmissions than those who did not receive education with the teach-back method (Boyde et al. 2018; Qui et al. 2020; Tavlesvsky et al. 2020; Mesbahi, Kermansaravi, and Kiyani 2020). Quality of life is improved in patients who received an education with the teach-back methods. Other studies have demonstrated the positive impact of teach-back and self-management behaviors (AHRQ 2021; Tavlesvsky et al., 2020; Mesbahi et al., 2020; Dinh et al., 2019; Mahajan et al., 2020).

### **Setting**

The setting is an acute care hospital centrally located in the Las Vegas valley. This hospital serves a diverse population. There are 306 acute care beds. This project was



implemented in the 32-bed intermediate care unit (IMC). The operating system for the electronic health record (EHR) is Cerner.

### **Population of Interest**

The direct population of interest is the nursing staff working on the intermediate care unit (IMC). The IMC nurses routinely provide care to HF patients. The nursing staff on the IMC is comprised of the Unit Manager and five clinical supervisors who are registered nurses offering support to the care staff. There are 42 registered nurses and 13 certified nursing assistants (CNAs) providing direct patient care (T. Hearn. Personal communication, July 15, 2021). The indirect population of interest are the patients diagnosed with HF being discharged from the hospital.

### **Stakeholders**

Internal and external stakeholders have a significant interest in the outcome of the project and are directly or indirectly affected by the outcome of the project (Reavy, 2016). Internal stakeholders include hospital leadership at all levels, the hospital education department, and nurses working on the IMC unit. External stakeholders include patients with heart failure diagnosis and discharged from IMC. There is an affiliation agreement between Touro University Nevada and the project site in place. The Nursing Leadership, hospital educators, and quality improvement department are supportive and approve of this project. The Chief Nursing Officer has oversight of all nursing staff (Cherry & Jacob, 2019). The education department facilitates access to the staff for educational interventions. The Quality Improvement department can assist with data mining to complete chart audits.

## **Interventions**

The purpose of this quality improvement project is to focus on reinforcing the importance of using the teach-back method of education when preparing patients for discharge who were diagnosed with heart failure (Appendix B). The educational intervention for this project involves the IMC nurses at the site facility. The education includes a PowerPoint presentation, and a demonstration is provided to the nurses on how to document patient education using the teach-back method on the IPOC. Two interactive scenarios reinforce HF education and the documentation of the teaching on the IPOC. The education for the IMC nurses is scheduled during downtime or meal breaks. Multiple interventions are provided to accommodate varied work shifts for the nursing staff. Survey data obtained from each intervention is analyzed as individual groups and analyzed together.

A retrospective chart audit is used to establish baseline compliance with documentation of using the teach-back method to measure patient comprehension of HF education on the IPOC. The intervention includes participants completing a pretest and demographic questions. Pre- and post-intervention chart audits are conducted within 30 days before and 30 days after the intervention. The post-intervention audits measure the compliance with documentation of the teach-back method using the IPOC.

## **Tools**

*The Conviction and Confidence Scale* (CCS) is a five-question tool provided by the AHRQ in a tool kit to promote healthcare literacy (AHRQ, 2020) (Appendix C). This self-assessment tool measures beliefs in communication skills, the importance of using the teach-back method, and the projected use of the teach-back method. This tool has been used in various clinical settings, various levels of care, reporting positive outcomes when instruction in the use

of teach-back is provided in a structured environment (Talevski et al., 2020). This author has been unable to find studies using Cronbach's alpha to demonstrate the Conviction and Confidence Scale reliability. Studies reviewed have indicated that staff reports an increase in their ability and the importance of using the teach-back method (Scott et al., 2019; Dinh et al., 2019).

In addition to the Conviction and Confidence Scale (AHRQ, 2020), a second survey was developed by this author consisting of three Likert Scale questions. The questions are a self-assessment of the nurses' perception of their knowledge of and ability to use the IPOC when documenting discharge education using the teach-back method to assess patient comprehension for discharge education patients diagnosed with HF. The IPOC Self-Assessment tool has five levels of agreement for the participant to choose: strongly disagree, disagree, neither, agree, or strongly agree (Appendix D).

There are also demographic questions regarding age, years of practice as a registered nurse, gender, and highest earned nursing degree. Demographic information is obtained to evaluate the relationship with the level of education, duration of employment as a registered nurse, gender, or the participant's age using the teach-back method (Appendix D).

### **Chart Review Tool**

The project lead created a chart tool (Appendix E and Appendix F) that was approved by the project team to record compliance documenting using the teach-back method on the IPOC pre and post-intervention.

### **Education Materials**

A PowerPoint presentation on the Teach-Back Method to improve patient understanding of patient care activities is presented to attendees (Appendix G). There are two case scenarios for

discussion to reinforce the material presented (Appendix H). A demonstration is provided on how to document the use of the teach-back method on the IPOC. Handouts (Appendix I) are provided to staff members with sample phrases, words, or phrases to avoid and screenshots of IPOC documentation. The project lead developed all educational materials. The project team evaluated and approved the materials during the proposal development and by the site leadership before the scheduled intervention.

### **Data Collection**

The purpose of data collection is to capture relevant information to measure the objectives of the project. All data were collected pre-and post-intervention. A retrospective audit of 25 charts on patients discharged from IMC with HF diagnosis was conducted no more than 30 days before and 30 days after the intervention. The record review is conducted by the project lead using the EHR of the host facility. Discharge records are selected using specific criteria, including unit, date of discharge, and HF diagnosis. The information collected from the pre- and post-chart audits is recorded using the chart audit form (Appendix E and Appendix F). The data were tabulated using an Excel Spreadsheet. The purpose of the chart audit is to measure the degree of compliance in using the IPOC to document the use of the teach-back method.

The CCS and the IPOC surveys were given to participants immediately before and post-intervention. The surveys are printed on paper, and each participant was given two surveys to complete. One survey was completed before the intervention, and the second was completed immediately post-intervention. The surveys were collected, and each of the responses was entered into an Excel spreadsheet. The responses were assigned corresponding numerical codes. For example, a yes response was a two, and a no response was a one. Comparisons were made between pre- and post-intervention using the appropriate statistical analysis.

### **Ethics/Human Subjects Protection**

The project lead implemented appropriate measures to mitigate any ethical concerns during this project. A quality improvement project is exempt from IRB review. For further clarification, a determination form was completed and submitted to the IRB for final determination. No patient identifying information was collected or documented on the chart audit tool. Each of the records was assigned a number at the time of the chart audit that corresponds to the codebook for statistical analysis. The assigned number is known only to the project lead. The medical records were reviewed only to determine if the teach-back method was documented in the medical record on the IPOC. At the conclusion of the project's implementation, all printed materials related to data collection were placed in the facility's secure document shredding bin. The hosting site facility monitors all activities involving the nursing staff and the records of discharged patients.

Subject participation in this quality improvement project was voluntary. This intervention was offered during mealtime breaks, and food was provided to all staff regardless of the level of participation. A gift card for a nominal amount was given to participants upon completion of all the documents. The risks of participation include the added time constraints to the participants, and the self-reflection to complete the surveys may cause some feelings of unease. The benefits of participation include learning or reinforcing a patient education skill applicable to all levels of care and patient populations. Completion of the pre-and post-surveys implies consent and the willingness to participate. Each pre- and post-survey was assigned a unique number to facilitate data entry into the statistical software program and ensure that the participant completed both surveys. There was no identifiable information obtained from the student participants. All data obtained are reported in aggregate form only.

## Measures/Plan for Analysis

The project leader completed basic statistical methods using SPSS to perform the statistical operations. A statistician was consulted to ensure the appropriate methods were used to analyze the data obtained.

*The Conviction and Confidence Scale* is a self-assessment survey. This self-assessment tool measures the beliefs in communication skills, the importance of using the Teach-back method, and the projected use of the teach-back method. The project lead developed a codebook to compare the pre-and post-intervention of the CCS. The pre- and post-surveys were assigned a number corresponding with a line entry in the codebook. The assigned numbers ensure that an equal number of surveys by each participant are collected. Statistical analysis is completed using the SPSS software. The paired intervals are the "pre-intervention survey score" and the "post-intervention survey score."

There should not be any significant outliers in the two groups. The dependent variable is the change in the staff knowledge, and the independent variables are the educational activities within the intervention. A Paired t-test compares the relationship of the pre-and post-intervention of the nurse's perception on the Teach-back method of education using the CCS (Pallant, 2020).

*IPOC Use Survey* focuses on the nurse's self-perception, consists of three questions using a five (5) point Likert Scale. The project lead created a second data codebook to evaluate the IPOC survey. For each statement in the survey, the participant could choose five levels of agreement: strongly disagree, disagree, neither, agree, or strongly agree. The project lead assigned a numeric identifier to each level of agreement, with "1" indicating strong disagreement and "5" correlating with a strong agreement for each statement. SPSS software is used to conduct

a Paired t-test to measure the nurses' pre and post-intervention attitudes towards using the IPOC for teach-back documentation.

*Retrospective chart audits* were completed to evaluate compliance with the documentation of the teach-back method on the IPOC. The project lead created the third codebook to facilitate this evaluation. Twenty-five charts were reviewed within 30 days pre-intervention, and 17 records were reviewed within 30 days. Data are displayed in a frequency and distribution table showing the data before pre-and post-intervention using SPSS software.

### **Analysis of Results**

The focus of this quality improvement initiative was to reinforce the use of the teach-back method of education and the importance of documenting the education provided on the IPOC. The statistical analysis of the data collected during the quality improvement project was completed using the Statistical Package for Social Science (SPSS) version 28.

There were 21 participants from the educational interventions which occurred over three days. Data from one of the surveys were not used in the analysis because the survey was completed incorrectly. All surveys were numbered, so the pre-intervention and post-intervention surveys could not be linked to any participant. Some nursing staff put their names on the surveys, and all personal identifiable information was redacted. Aside from the one survey that was not used, the data collected occurred as expected.

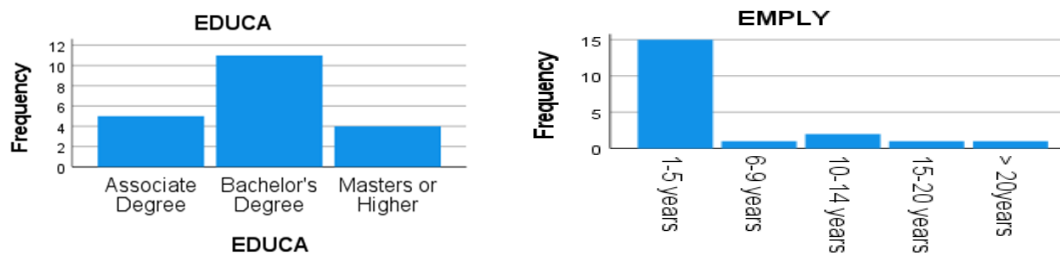
## Demographics

Table 1: Demographic Data; Age

		AGE			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 years	2	10.0	10.0	10.0
	26-35 years	10	50.0	50.0	60.0
	36-45 years	6	30.0	30.0	90.0
	46-55 years	1	5.0	5.0	95.0
	56-65 years	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Analysis of the participants' demographic data indicates that a majority (60%) were 35 years of age or younger, and (75%) had worked less than five years as a registered nurse. The majority of the nurse participants (55%) had a bachelor's degree, with associate degree holders comprising 25% of the participants.

Table 2: Demographic Data; Education and Employment



## Conviction and Confidence

A paired-samples t-test was conducted to determine the effect of training on the nurses' self-perception of using the teach-back method of education. Four pairs of data were compared.



Table 3: Conviction and Confidence Scale Results

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CONVC1	9.50	20	.827	.185
	CONVC2	9.85	20	.489	.109
Pair 2	CONFID1	8.60	20	1.314	.294
	CONFID2	9.30	20	1.031	.231
Pair 3	FREQN1	4.35	20	.933	.209
	FREQN2	4.45	20	.759	.170
Pair 4	TBELE1	8.70	20	2.179	.487
	TBELE2	9.35	20	1.755	.393

Table 4: Conviction and Confidence Scale Results

Paired Samples Test										
		Paired Differences					Significance			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	CONVC1 - CONVC2	-.350	.745	.167	-.699	-.001	-2.101	19	.025	.049
Pair 2	CONFID1 - CONFID2	-.700	1.490	.333	-1.397	-.003	-2.101	19	.025	.049
Pair 3	FREQN1 - FREQN2	-.100	.447	.100	-.309	.109	-1.000	19	.165	.330
Pair 4	TBELE1 - TBELE2	-.650	1.565	.350	-1.383	.083	-1.857	19	.039	.079

The first data set was the survey question, “How Convinced are you that it is important to use teach-back?” The pre-intervention was (CONVC1, M=9.5, SD = .827), and post-intervention was (CONVC2, M=9.85, SD = .489,  $t(19) = -2.01$ ,  $p < .05$  (two-tailed)). For the second question, “How confident are you in your ability to use teach-back?” the pre-intervention was (CONFID1, M = 8.60, SD = 1.314) and post-intervention was (CONFID2, M = 9.3, SD = 1.031,  $t(19) = -2.01$ ,  $p < .05$ ). The third question asked, “How often do you ask patients to explain back, in their own words what they need to know or do to take care of themselves?” The pre-intervention was (FREQN1, M = 4.35, SD = .933) and post-intervention was (FREQN2 M=4.45, SD=.759,  $t(19) = -1.00$ ,  $p > .05$ ). The final question asked, “How many elements of effective teach-back were used?” There were a total of 11 elements listed to select from. The pre-intervention was

(TBELE1,  $M=8.70$ ,  $SD = 2.179$ ), post-intervention was (TREBE2,  $M=9.35$ ,  $SD = 1.755$ ,  $t(19)$ ,  $=1.857$ ,  $p > .079$ ).

Table 5: Conviction and Confidence Scale Results

Paired Samples Effect Sizes						
			Standardizer <sup>a</sup>	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	CONVC1 - CONVC2	Cohen's d	.745	-.470	-.927	-.001
		Hedges' correction	.760	-.460	-.908	-.001
Pair 2	CONFID1 - CONFID2	Cohen's d	1.490	-.470	-.927	-.001
		Hedges' correction	1.521	-.460	-.908	-.001
Pair 3	FREQN1 - FREQN2	Cohen's d	.447	-.224	-.665	.223
		Hedges' correction	.456	-.219	-.651	.219
Pair 4	TBELE1 - TBELE2	Cohen's d	1.565	-.415	-.868	.047
		Hedges' correction	1.597	-.407	-.850	.046

a. The denominator used in estimating the effect sizes.  
Cohen's d uses the sample standard deviation of the mean difference.  
Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

## Interdisciplinary Plan of Care Documentation

A paired-samples t-test was conducted to determine the effect of training on the nurses' self-perception of the use of the IPOC to document the use of teach-back when providing education on self-management activities for patients with heart failure. For the first statement, "It is important to document the use of the teach-back method": scored preintervention (TBIPO1 ( $M = 4.55$ ,  $SD = .510$ ) to post intervention (TBIO2 ( $M = 4.852$ ,  $SD = .366$   $t(19) = -2.84$ ,  $p < .050$ )). The second statement, "I am confident in my knowledge of how to document the use of teach-back on the IPOC." The pre-implementation was, (IPOK1  $M = 4.15$ ,  $SD = .933$ ) to post-implementation of (TBIO2 ( $M = 4.60$ ,  $SD = .940$   $t(19) = -1.630$   $p = >.05$ ). The third statement, "After taking this class, I plan to use the IPOC to document patient education using the teach-back method." The pre-implementation was (IPOCP1,  $M = 4.75$ ,  $SD = .099$ ) to post-implementation of (TBIO2 ( $M = 4.85$ ,  $SD = .082$   $t(19) = -1.453$   $p = >.05$ )).

Table 6: IPOC Documentation Results

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	TBIPO1	4.55	20	.510	.114
	TBIPO2	4.85	20	.366	.082
Pair 2	IPOK1	4.15	20	.933	.209
	IPOK2	4.60	20	.940	.210
Pair 3	IPOCP1	4.75	20	.444	.099
	IPOCP2	4.85	20	.366	.082

Table 7: IPOC Documentation Results t-test

		Paired Samples Test								
		Paired Differences				Significance				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	TBIPO1 - TBIPO2	-.300	.470	.105	-.520	-.080	-2.854	19	.005	.010
Pair 2	IPOK1 - IPOK2	-.450	1.234	.276	-1.028	.128	-1.630	19	.060	.119
Pair 3	IPOCP1 - IPOCP2	-.100	.308	.069	-.244	.044	-1.453	19	.081	.163

## Chart Audit

Pre-implementation retrospective chart audits were completed. The search criteria for the chart audits included diagnosis code of I50, which includes all types of heart failure, and community discharges from the intermediate care unit within 30 days before the education intervention. Only 14 of the charts reviewed were discharged to home. Of the 14 reviewed records, only 24% of the records indicated that a plan of care for heart failure was activated with teach-back documented. The remaining eight discharge records did not have a heart failure plan of care initiated, and no documentation of the teach-back method was used. The remaining 40% of the discharges had a HF plan of care initiated, but the IPOC was discontinued for various

unknown reasons. Twelve percent of the records or three patients had expired or were discharged to hospice. One patient left against medical advice (A.M.A.), and the remaining 28% of the records indicated a discharge to either a skilled nursing facility or long-term acute care.

Table 8: Pre-Implementation Chart Audits

Type of Discharge	Number (25)	Percentage
Home (teach-back documented on IPOC)	6	24%
Home (teach-back not documented on IPOC)	8	32%
Expired (teach-back not documented on IPOC)	1	4%
Hospice (teach-back not documented on IPOC)	2	8%
Against Medical Advice (teach-back not documented on IPOC)	1	4%
Skilled Nursing Facility (teach-back not documented on IPOC)	5	20%
Long-Term Acute Care (teach-back not documented on IPOC)	2	8%

Post-implementation chart audits were conducted. The same search criteria was used for the pre-intervention audits. Seventeen charts met the criteria for review. Of the 17 charts reviewed, 14 of the reviewed records had documented HF education on the IPOC. Three of the 17 records had a HF plan of care that was discontinued. One of the three records indicated a discharge location other than home and documentation of HF education was not present in the IPOC. Data is displayed in a frequency and distribution table showing the data before pre-and post-intervention using SPSS software.

Table 9: Post-Intervention Chart Audits

Type of Discharge	Number (17)	Percentage
Home (teach-back documented on IPOC)	<b>14</b>	<b>82.3%</b>
Home (teach-back not documented on IPOC)	<b>1</b>	<b>5.8%</b>
Long-Term Acute Care (teach-back not documented on IPOC)	<b>2</b>	<b>11.76%</b>

### Discussion of Findings

The objectives of this DNP project were to: educate the nurses on the teach-back method of education, evaluate the nurse's confidence and frequency of using teach-back, and improve nurse utilization of the teach-back method by 30% within the five-week timeframe. The results of the data analysis indicate that four weeks after the implementation, the quality improvement project met the expected objectives and was successful.

The nurses were familiar with teach-back, and many reported using teach-back as part of their routine patient care activities. Discussion during the intervention provided an opportunity for the nursing staff to verbalize challenges in providing teach-back education. Several nurses reported that many of the patients in the IMC unit have a higher acuity level than a medical-surgical unit. The higher acuity levels contribute to decreased cognitive abilities needed to actively participate in the teach-back method. The chart audits performed before the project implementation supported the nurses' verbalizations regarding the high patient acuity levels. Almost half of the patients discharged from the hospital were placed in long-term care, expired, or needed additional care before returning home. This finding provided an ad hoc opportunity to

instruct the nurses on providing targeted educational interventions such as reporting subtle symptoms to care providers that would improve the patient's comfort level.

Chart audits were the final outcome measure used for this project. A total of 25 charts were reviewed before the educational intervention. This chart audit reviewed that only six out of 25 (24%) charts were compliant with documenting teach-back use in the IPOC. Only 17 post-implementation charts met discharge criteria within the desired time frame. The post-intervention chart audits showed that 14 out of 17 (82%) discharged records were compliant with documentation of HF education on the IPOC.

### **Significance**

The design and implementation of this DNP project assumed that proper utilization of the teach-back method would occur following the educational intervention provided to the nursing staff. The focus of this project was to reinforce the importance of the teach-back method and improve consistent documentation of education provided to patients on the IPOC. Numerous studies have been conducted that correlate the use of teach-back education about HF with fewer hospital readmissions. Although unplanned hospital readmissions for HF patients was not included in the outcomes, the significant improvement in the documentation with the use of the teach-back method and associated benefits for the patients and the facility is anticipated (Boyd et al., 2018; Qui et al., 2020; Tavlesvsky et al., 2020; Mesbahi et al., 2020). Promoting continued education strategies involving specific medications and therapies would positively impact the patient's quality of life regardless of the patient discharge disposition (Freedland et al., 2021).

### **Nursing Implications**

There was significant interest by the nursing staff in the documentation of the education on the IPOC. Some nurses did not know how to access the IPOC for education documentation.

One nurse stated that they are taught "lots of things in Cerner, most of which is forgotten as soon as you leave the classroom" (SG, personal communication, November 12, 2021). As a result of this project, the site facility's leadership can explore additional opportunities to improve documentation of patient education on other units and patient populations. An important part of this project was to raise staff awareness about the teach-back method of patient education and the documentation of the education on IPOC. Educating patients is vital to nursing care. The nurses acknowledged that they missed opportunities to provide education for patients discharged to other facilities because they assumed the patients would receive HF education there. Overall, there was an improvement in compliance with the documentation of using the teach-back method of education for HF on the IPOC. The improved documentation demonstrates increased compliance with established guidelines for the project site. This finding also shows that the nursing staff is focused on communicating patients met and unmet learning needs to other caregivers.

## **Limitations**

The data analysis indicates that the quality improvement project was successful. However, there were several limitations identified with this project, including a short implementation time frame, sample limitations, and analysis of data.

### **Time Frame**

Several weeks after the intervention, a significant improvement in compliance with the use of teach-back documentation in the IPOC was observed. However, a limitation of the project is the short-term period of post-intervention data collection. Auditing HF discharge records for an extended period would determine if the high level of compliance with documentation of the use of teach-back on the IPOC is maintained.

### **Sample Limitations**

This project focused on only one specific unit of the hospital. Although this unit has a higher percentage of HF patients, patients with a HF diagnosis are found throughout the hospital. Although the sample sizes for the self-perception surveys and the chart audits were adequate to determine if the implementation was effective, a greater number of participants from various units would be helpful to identify a more significant influence of the educational intervention on the nurse's self-perception on using the teach-back method of education.

The night shift nursing staff did not participate in the education. Education on self-care for HF patients and how to document the education provided to the patients should be provided for all staff. Omitting staff from other shifts also reduced the sample size. A simple solution would include providing the same education on HF and IPOC documentation to alternate shifts and other units.



## **Data Analysis**

The data obtained in the study successfully answered the PICOT question. However, long-term results are not available. Additional goals of improving quality of life and reducing health care costs cannot be determined until additional data are obtained. Correlating HF readmission rates and patient experience scores pre- and post-implementation would provide additional information on the effectiveness of the educational intervention.

## **Dissemination**

Dissemination of the information gathered from this project will be useful for future quality improvement processes at the project site. The results of this quality improvement project will be shared with hospital leadership, including members of nursing administration, education, quality improvement, and the clinical systems departments. The results of this project will be presented to faculty and fellow students in the Doctor of Nursing Practice Program at Touro University on February 15, 2022. The complete DNP project paper will be submitted to the Doctors of Nursing Practice Repository. An abstract was submitted for a poster presentation for the National Nurse Educator summit scheduled for April 10-13, 2022, in Seattle, Washington.

## **Project Sustainability**

This DNP project contributed to improving the education provided to patients with HF by using the teach-back method. Informal conversations held with nurses at all levels indicated that HF education using the teach-back method and documenting the education on the IPOC would continue and be part of their routine practice. Discussions are ongoing with nursing leadership, quality improvement, clinical systems, and the education department regarding implementing this project as part of new hire orientation and annual reorientation for all nursing staff.

### **Conclusion**

Optimizing the use of the teach-back method provides benefits to patients and their family members by improving their understanding of HF compliance with treatment regimens and self-management activities. Nurses should be taught to include teach back in all patient interactions. The correct and consistent use of the teach back method can contribute to positive health outcomes.

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### Appendix A: Donabedian Process Improvement Model

<u>Structure</u>	<u>Process</u>	<u>Outcome</u>
<p>Intermediate Care Unit</p> <p>Project lead, project mentor. Project team</p> <p>Intermediate Care unit Nurses, Heart failure patients and caregivers</p>	<p>Use of Teach-back method with discharge education</p> <p>Nurse education to promote use of teach-back</p>	<p>Evaluation of nurse confidence in using HF self- management activities by completing HF Education</p> <p>Evaluation Form. Improved compliance with documentation of teach- back method on IPOC</p>



## **Appendix B: Class Outline**

### **Class Outline**

- I. Introduction and Pretest - 5 minutes**
- II. Objectives**
- III. Presentation – 20 minutes**
  - i. What is the Teach-back Method?
  - ii. Barriers to Learning
  - iii. Benefits of Teach-back
  - iv. Don't Go In Without a Plan
  - vi. Chunk and Check
  - vii. Clarify and Reclarify
  - viii. Overview of Heart Failure
  - ix. Benefits for Heart Failure Patients
  - xi. Discharge Instructions for Self-Management
    1. Medications
    2. Dietary considerations
    3. Weight monitoring and activity
    4. Symptom management
  - xii. Documentation IPOC
  - xiii. Conclusion
- IV. Role Play Patient Scenarios - 20 minutes**
- V. Conclusion and Post-test – 5 minutes**

## Appendix C: Conviction and Confidence Scale



Always Use  
Teach-back!

### Conviction and Confidence Scale

Fill this out before you start using teach-back, and 1 and 3 months later.

Name: \_\_\_\_\_

Check one:  Before - Date: \_\_\_\_\_

1 month - Date: \_\_\_\_\_

3 months - Date: \_\_\_\_\_

1. On a scale from 1 to 10, how **convinced** are you that it is important to use teach-back (ask patients to explain key information back in their own words)?

Not at all important

Very Important

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

2. On a scale from 1 to 10, how **confident** are you in your ability to use teach-back (ask patients to explain key information back in their own words)?

Not at all confident

Very Confident

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

3. How often do you ask patients to explain back, in their own words, what they need to know or do to take care of themselves?

- I have been doing this for 6 months or more.
- I have been doing this for less than 6 months.
- I do not do it now, but plan to do this in the next month.
- I do not do it now, but plan to do this in the next 2 to 6 months.
- I do not do it now and do not plan to do this.

## Conviction and Confidence Scale continued

4. Check all the elements of effective teach-back you have used **more than half the time in the past work week.**
- Use a caring tone of voice and attitude.
  - Display comfortable body language, make eye contact, and sit down.
  - Use plain language.
  - Ask the patient to explain, in their own words, what they were told.
  - Use non-shaming, open-ended questions.
  - Avoid asking questions that can be answered with a yes or no.
  - Take responsibility for making sure you were clear.
  - Explain and check again if the patient is unable to teach back.
  - Use reader-friendly print materials to support learning.
  - Document use of and patient's response to teach-back.
  - Include family members/caregivers if they were present.

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Appendix D: Demographic Survey****Demographic Survey: (You may decline to answer any of these questions)****What is your age?**

- 
- 18-25
- 
- 26-35
- 
- 36-45
- 
- 46-55
- 
- 56-65

**Gender:**     Female     Male**What is your highest earned nursing degree?**

- 
- Associate's
- 
- Bachelor's
- 
- Masters or higher

**How many years have you been working as a registered nurse?**

- 
- 1-5
- 
- 6-9
- 
- 10-14
- 
- 15-20
- 
- >20 years

**Are you bilingual?**

- 
- Yes
- 
- No

**Appendix E: Pre-Intervention Chart Audit Tool**

<b>Teach Back Documented on IPOC</b>	<b>1= Yes    2= No</b>
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
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18	
19	
20	
21	
22	
23	
24	
25	

**Appendix F: Post-Intervention Chart Audit Tool**

<b>Teach Back Documented on IPOC</b>	<b>1= Yes    2= No</b>
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
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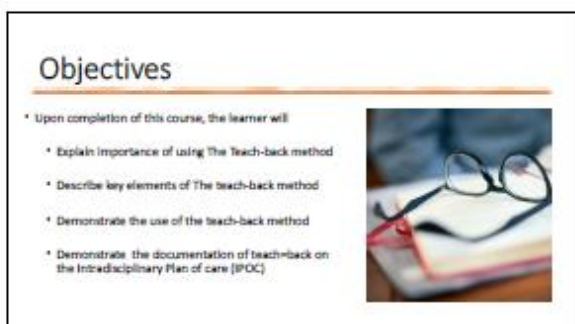
## Appendix G: PowerPoint



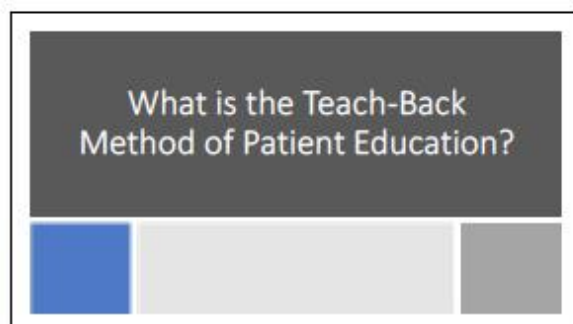
1



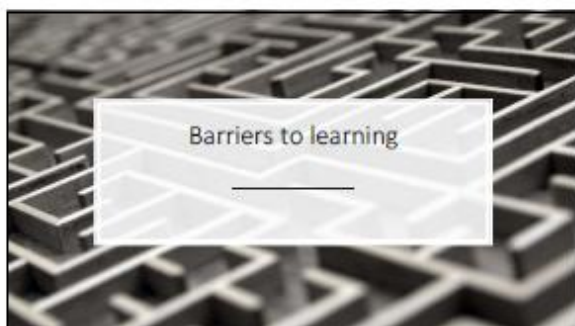
2



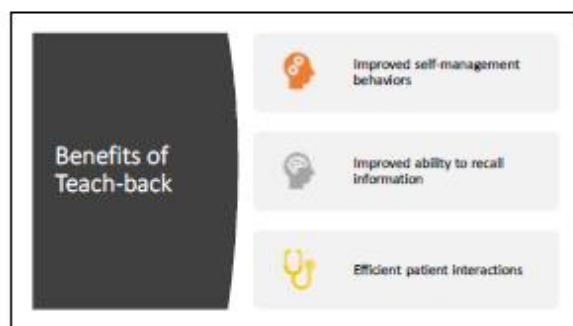
3



4



5



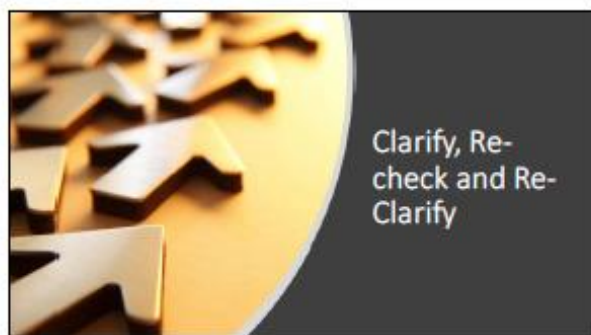
6



7



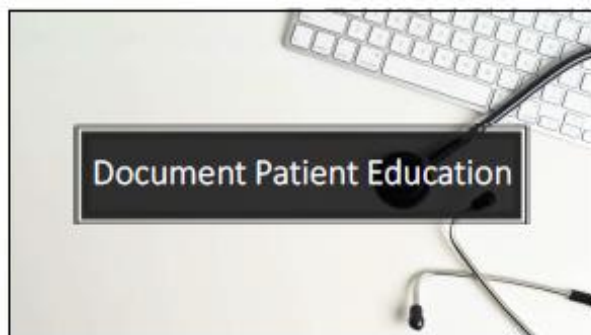
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### What is Heart Failure?

Heart failure (HF) is a progressive chronic illness that impairs the ventricles' ability to pump blood to the rest of the body.


- Left Heart Failure
- Right Heart Failure

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### Stats....

- Accounts for one-third of all deaths worldwide (Savarese, 2017).
- Over 6 million people have heart failure in the US (CDC, 2020).
- Costly to treat
- Leading cost of hospital admissions for patients 65 and older
- Leading cause of hospital readmissions

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### Medications

Typically consist of three different types of medications


- ACE
- ARB. For patients with LV dysfunction
- Diuretic
- Digitals

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### Self-management - diet



Sodium intake



Water intake

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### Symptom management

- Weights
- Cough, SOB, dyspnea
- Fatigue

17

### Patient Rights

It is neither just, nor fair, to expect a patient to make appropriate health decisions and safely manage his/her care without first understanding the information needed to do so.

Reducing the Risk by Designing a Safe, Patient-Centered Health Care Environment. AAAA, 2007

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## References

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Centers for Medicare & Medicaid Services (August 2020). Hospital Readmissions Reduction Program. <https://www.cms.gov/medicare/medicare-claims-operations/hospital-readmissions-reduction-program>

Health Resources & Services Administration (n.d.). Health Equity. <https://www.hrsa.gov/health-equity/index.html>

Journal of the American College of Cardiology (2017). <https://doi.org/10.1016/j.jacc.2017.07.011> Heart Failure: Cardiac Failure



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Thank you for your participation.

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## Appendix H: Case Studies

### Case Scenario 1

Millie Jones is a 62-year-old female. She is being discharged from the hospital. She was admitted three days ago with complaints of chest pain and difficulty breathing. She has a history of hypertension. She was diagnosed with left-sided heart failure. The physician prescribed a 2-gm per day sodium restriction along with a 2-liter daily fluid restriction. Using the teach-back method, provide the education to a classmate and assess the level of understanding. Document your education on

Which foods should Millie avoid?

What are some strategies Millie can use to maintain compliance with fluid restriction?

### Case Scenario 2

Hershel Davis is a 56-year-old male and has been hospitalized twice in the past month with exacerbations of L.H.F. He is compliant with his medications but doesn't weigh himself every and forgets to write it down. Using the teach-back method, provide the education to a classmate, and assess the level of understanding. Document the education provided on the IPOC.

How often should Hershel weigh himself? Explain how and when Hershel should weigh himself.

What are some strategies to help Herschel to monitor his weight consistently?

What are some other symptoms should Hershel monitor?

When should he seek additional help with his weight or symptoms?

## Appendix I: Handouts

# Teach-back Tidbits

- **Start with the most critical information**
- **Choose 2 points to cover at a time**
- **Rephrase message**

"Tell me.."

"Show me...."

"Just to be safe...."

"I have given you lots of information, and I want to make sure I explained it correctly. Can you tell me what I just told you, in your words?"

### Use Plain Language

Use This	Not This
salt	sodium
water pill	diuretic
high (low) blood pressure	hyper (hypo) tension
fats	lipids
blood thinner	anticoagulant
difficulty breathing	Dyspnea
walk	ambulate

# IPOC

## Select "orders"

### 1. Select "topic of education"

### 2. Click box

The screenshot displays the IPOC interface for a physician named ZZTEST. The patient information at the top includes DOB: 11/1/1958, Age: 38 y, Sex: Male, and various clinical data points like Ht: 162 cm, Dose Wt: 52 kg, and BMI: 19.81. The interface is divided into several sections:

- Navigation Sidebar (#1):** Contains 'Favorites' and 'All Links' sections. The 'Orders' link is highlighted, indicating the current view.
- Orders Table:** A table listing various orders. The order 'Education, Low-Sodium Diet' is selected and highlighted in blue. This order is part of the 'IPOC Heart Failure: Discharge Planning Heart Failure, Adult (Initiated) 1/28/2021 11:42 PST' topic.
- Order Details Panel (#3):** Shows the details for the selected 'Education, Low-Sodium Diet' order. It includes fields for 'Intervention Description', 'Evaluation Date & Time', and 'Outcome Variance'. The 'Intervention Description' field is highlighted with a blue box, and a blue arrow points to it from callout box #3.

Callout boxes are used to highlight key steps: #1 points to the 'Orders' link in the sidebar, #2 points to the 'Education, Low-Sodium Diet' order in the table, and #3 points to the 'Intervention Description' field in the order details panel.

## Appendix J: Facility Approval



### Letter of Authorization to Conduct Research at Facility

Elizabeth Solomon, MSN, MHA, RN  
 School of Nursing  
 Touro University Nevada  
 874 American Pacific Drive  
 Henderson, NV 89014

Subject: Letter of Authorization to Conduct Research at Valley Hospital Medical Center

Dear Ms. Solomon and School of Nursing – DNP Committee Members:

This letter will serve as authorization for Elizabeth Solomon (Researcher) to conduct the research project titled “Heart Failure Patient Discharge Using Teach-Back Method of Education: A Quality Improvement Project” at Valley Hospital Medical Center, 620 Shadow Lane, Las Vegas, NV 89106 (Facility).

The Facility acknowledges that it has reviewed the research protocol as well as the associated risks to the Facility and the research participants. The Facility accepts the protocol and associated risks, and authorizes the research project to proceed. The research project may be implemented at the Facility upon approval by the Touro University Institutional Review Board.

If anyone at the Facility has questions or concerns about the project or its implementation, we will contact the Researcher and/or Touro University for additional information.

Sincerely,

  
 Facility's Authorized Signatory

8-24-2021  
 Date

David Morrow, DNP, MHA, RN; Education Manager, Valley Hospital Medical Center  
 Printed Name and Title of Authorized Signatory