

Fall 10-18-2017

## Teach-Back Methodology to Improve Patient Satisfaction in an Urgent Care Setting

Candi Payne  
candi.mcleod@yahoo.com

Follow this and additional works at: [https://digitalcommons.liberty.edu/nurse\\_grad\\_proj\\_schol](https://digitalcommons.liberty.edu/nurse_grad_proj_schol)



Part of the [Other Nursing Commons](#)

---

### Recommended Citation

Payne, Candi, "Teach-Back Methodology to Improve Patient Satisfaction in an Urgent Care Setting" (2017). *Graduate Student Projects and Scholarship*. 13.  
[https://digitalcommons.liberty.edu/nurse\\_grad\\_proj\\_schol/13](https://digitalcommons.liberty.edu/nurse_grad_proj_schol/13)

This Scholarly Project is brought to you for free and open access by the Graduate Program at Scholars Crossing. It has been accepted for inclusion in Graduate Student Projects and Scholarship by an authorized administrator of Scholars Crossing. For more information, please contact [scholarlycommunications@liberty.edu](mailto:scholarlycommunications@liberty.edu).

A Scholarly Project  
Submitted to the  
Faculty of Liberty University  
In partial fulfillment of  
The requirements for the degree  
Of Doctor of Nursing Practice

By

Candi Payne, DNP, MSN, CMSRN

Liberty University

Lynchburg, VA

October, 2017

Scholarly Project Committee Approval:

---

Dr. Cynthia Goodrich EdD, MSN, RN, CNE, Professor of Nursing, Chair, October 18, 2017

---

Dr. Dana Woody, DNP, RN, Assistant Professor of Nursing, Committee Member, October 18,  
2017

---

Dr. Kia Countess, DNP, RN, CNE, Nursing Instructor, Central Carolina Technical College,  
October 18, 2017

TEACH-BACK METHODOLOGY TO IMPROVE PATIENT SATISFACTION IN AN  
URGENT CARE CLINIC

A Scholarly Project

Presented to the

Faculty of Liberty University

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Nursing Practice

By

Candi Marie Payne, DNP, MSN, CMSRN

October 18, 2017

### Abstract

The project used teach-back methodology to provide an evidence-based approach to improve patient satisfaction scores in an urgent care clinic. The teaching plan should include evaluation of patient teaching to determine effectiveness and patient understanding per The Joint Commission (TJC) for Ambulatory Care Center standards. The project was developed to assist nurses (N=12) with an evidence-based method to improve patient understanding and provide an opportunity to ensure comprehension to increase patient satisfaction scores from a one or two to a level three at the end of 30 days following implementation of teach-back. The scores revealed an increase of patient satisfaction scores on the Bivarius Patient Survey System (BPSS) on one patient satisfaction score. The score regarding nurses providing an opportunity to evaluate patient understanding of instructions increased to a level three on the BPSS patient satisfaction survey system. The relevance of the study was to improve patient education and satisfaction scores for the patient. Future studies should include using teach-back methodology over a more extended timeframe for a longitudinal study to assess if teach-back methodology improves patient satisfaction scores.

*Keywords:* patient education, nurse education, patient satisfaction, and quality education

©2017

Candi Marie Payne

ALL RIGHTS RESERVED

### **Acknowledgements**

I would like to thank my faculty chair, Dr. Cynthia Goodrich, EdD., MSN, RN, CNE and the members of my committee Dr. Dana Woody, DNP, RN, at Liberty University and Dr. Kia Countess, DNP, RN, CNE at Central Carolina Technical College for their mentoring support. This project first and foremost goes to the glory of my Lord and Savior Jesus Christ. A special thank you to Ms. Wilma Sims. Ms. Sims is an expert in the statistical laboratory at the University of South Carolina. I thank Ms. Sims for her assistance in statistics and statistical analysis. A thank you to my editor, Christine Chichester, MA at Liberty University for providing editorial support and edits leading to a professional manuscript. I would also like to thank my preceptor, Mary Cox, MSN, APRN, who provided support and leadership in her already tight schedule to help me gain practicum hours. To Mary Jo Ardis, MSN, RN, Dean of Health Sciences at Central Carolina Technical College, thank you. Thank you, Ms. Ardis, for allowing me time off and adjusting schedules to allow me to finish this program. You will never know what that means to me. To my colleagues at Central Carolina Technical College who supported me and encouraged me, thank you. To my dear friend Stephanie Sherwood, we did it! Stephanie, you were my sounding board and a massive support to me during this process. I will always remember you, and you will forever remain one of my dearest lifelong friends. Most importantly, I would like to thank my husband, Mark, and son, Christian, for dealing with me for the past two and a half years and for their sacrifice as I worked many long hard hours on this manuscript. To my family and patients who have suffered from misinformation and lack of quality patient education, you are the reason I chose teach-back methodology as my scholarly project. Thank you for being my inspiration. Here is to the future of nursing and making patient care even better!

**List of Tables**

Table 1. Frequency and Percentage of Educational Characteristics of Participants.....	36
Table 2. Teach-Back Use Prior to Intervention Statistics.....	37
Table 3. Paired Samples Test.....	38
Table 4. Nurse Perception Survey Results Statistics.....	41
Table 5. Patient Satisfaction Scores (PSS) prior to Teach-Back Use.....	45
Table 6. Patient Satisfaction Scores (PSS) 30 Days after Teach-Back Use.....	46

## Table of Contents

Abstract.....	3
Acknowledgements.....	5
List of Tables.....	6
List of Abbreviations.....	10
Introduction.....	11
Background.....	12
Problem Statement.....	15
Project Purpose.....	17
Clinical Questions and Framework.....	17
DNP Essentials.....	18
Literature Review.....	20
Patient Education in Healthcare.....	21
Benefits of Patient Education.....	22
Health Literature Barriers in Patient Education.....	23
Communication and Cultural Competence.....	23
Teach-Back Methodology for Patient Education.....	25
Conceptual Model.....	26
Methodology.....	27
Measurable Outcomes.....	27
The Settings and Subjects.....	27
Informed Consent.....	28

The Intervention and Data Collection.....	28
The Timeframe for the Project.....	30
Feasibility and Budget Analysis.....	31
Evaluation Analysis.....	32
Design and Methodology.....	32
Sampling.....	33
Instrumentation.....	33
Data Collection.....	34
Analysis.....	34
Results.....	35
Limitations of Study.....	47
Dissemination Plan.....	47
End Users.....	48
Communication.....	49
Significance and Implications.....	49
Conclusions.....	50
References.....	52
Appendix A: Literature Review Matrix.....	57
Appendix B: Scholarly Project Goals and Objectives.....	71
Appendix C: Permission to use the Iowa Model.....	73
Appendix D: Letter of Permission .....	74
Appendix E: Urgent Care Patient Survey Questionnaire.....	75
Appendix F: CITI Training.....	77

Appendix G: Liberty Institutional Review Board Exemption.....78

Appendix H: Teach-Back Methodology.....79

Appendix I: Teach-Back Education Outline.....80

Appendix J: Teach-Back Pretest/Posttest.....82

Appendix K: Nurse Role Play Scenario.....84

Appendix L: Nurse Perception Evaluation.....86

### **List of Abbreviations**

Agency for Research and Quality (AHRQ)

American Association of Colleges of Nursing (AACN)

Bivariate Patient Survey System (BPSS)

Cumulative Index to Nursing and Allied Health Literature (CINAHL)

Doctor of Nursing Practice (DNP)

Heart Failure (HF)

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Institutional Review Board (IRB)

Patient Satisfaction Scores (PSS)

Population, Interventions, Comparison, Outcome, and Time (PICOT)

Statistical Product and Service Solutions (SPSS)

The Joint Commission (TJC)

## TEACH-BACK METHODOLOGY TO IMPROVE PATIENT SATISFACTION IN AN URGENT CARE SETTING

### **Introduction**

The lack of patient education in healthcare leads to altered patient outcomes, increased patient anxiety, increased healthcare costs, decreased the quality of care, and decreased patient satisfaction. It is estimated 51% of the population has difficulty comprehending education the nurses and practitioners provide (Kornburger et al., 2012; Mata et al., 2015). Patients become overwhelmed with information or do not understand instructions. Patient education should follow the nursing process, use common language, and evaluate patient comprehension (Bastable, 2017).

The Joint Commission (TJC) for Ambulatory Care developed standards for urgent care centers that include providing education in a manner that the patient and family can understand. The Joint Commission visits the urgent care clinic every three years for accreditation. The standards respect and recognize the rights of patients to include being involved with and informed about care received. Patients' values, beliefs, cultural needs, and preferences are to be respected during each patient education interaction. Patients are to be made aware of responsibilities regarding care, treatment, and services received. Standard (PC.04.01.05 EP1) from TJC states, "The organization should tailor instructions to the patient's age, language, and ability to understand"(TJC, 2014).

Miller et al. (2016) researched how patients were provided instructions in a clinic setting. Thirty patients were evaluated for perspective regarding education for medications after a cardiac procedure. The study revealed 12 of 30 patients (40%) understood instructions before discharge related to the indications, adverse reactions, and timing of medications. Three of four

patients were not able to verbalize understanding of medications at discharge. Patients verbalized being unsatisfied with instructions given because there was not an opportunity to repeat back information on instructions provided.

The purpose of this evidence-based practice project was to use the teach-back methodology in a local urgent care clinic effectively. The goal was to improve patient satisfaction scores related to the patient understanding of the information provided. The project's aim was to meet TJC standards regarding patient education and increase patient satisfaction rates.

### **Background**

Patient education in healthcare follows the nursing process in assessing the patient's educational needs, determining what needs to be taught, determining a plan, and initiating interventions to meet the needs of the patient and evaluate if the teaching was effective. Nursing staff should understand the process of patient education, how it relates to TJC standards, and how to provide patient education that supports patient satisfaction in the healthcare setting. If nurses are not aware of TJC standards and how to address patient comprehension, it often leads to patient dissatisfaction related to lack of awareness and not meeting patient-specific needs (Kornburger et al., 2012; Shipman, 2016).

Patients that understand education and are provided a time to verbalize the information given have greater than 30% chance of being compliant with the instruction offered, which leads to increased patient satisfaction. (Bergh et al., 2013). Upon discharge, the nurse should document the education provided, verbalization of patient understanding, and follow-up plans for the patient (Bergh et al., 2013; Kralewski et al., 2016; Koh et al., 2013).

Patient education is defined as a systematic and continuous method. Providing information to the patient includes implementation of educational interventions to meet the individual and cultural needs of the patients (Tamura-Lis, 2013). A study by Pearson et al., (2013) observed that interaction and time at the bedside are imperative for patient-centered care and provide a method for meeting the individual needs of the patient and family. The Joint Commission includes an expectation for patient education focused on the needs of the individual. Patient education should include appropriate education for patient understanding and should include family members (TJC, 2014).

The purpose of patient education and the role of nurses are to increase competence and confidence of patients for self-management of care and enhance independence of patients and families. Nursing actions that promote preparation for patients to improve health status and reach potentials are relevant roles of the nurse. Patients and families must handle many health needs and problems upon discharge and must be educated on how to provide self care (Centrella-Nigro et al., 2017). Patients are more likely to comply with medical treatment plans and find innovative ways to cope with illness when patient education is understood (Mahramus et al., 2014). Adequate patient education requires the nurse to assess the needs of the patient, use common terminology when teaching the patient, and engage the learner. Assessment of the learner includes: patient education level, reading ability of the patient, learning style of the patient, English comprehension, and hearing or visual difficulties that may affect learning (Slatore et al., 2016).

Patient education improves safety, reduces expenses for healthcare services, increases patient adherence to treatments, increases satisfaction, and enhances the quality of life. Healthcare facilities not adhering to TJC standards are at risk of poor patient outcomes, patient

self-care deficits, patient dissatisfaction, and poor public perception. This often leads to patients shopping for healthcare elsewhere (Koh et al., 2013; Shipman et al., 2016). The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) mandates the use of patient education to encourage self-care upon discharge and increase patient safety and satisfaction (Mata et al., 2015).

Patient education should include an opportunity for a patient to teach-back or verbalize learning to increase patient comprehension. Patients not understanding discharge instructions are at risk for complications related to self-care and dissatisfaction of services rendered. The goal of patient education is to close the loop of patient misunderstanding by assisting the patient in teaching back or verbalizing what the nurse explained so the nurse can further explain instructions to increase patient comprehension. The use of teach-back and closing the loop of misunderstanding assist the patient in the ability to care for themselves at home upon discharge (Miller et al., 2016; Pearson et al., 2013).

### **Local Urgent Care Information and Patient Demographics**

██████████ Family Practice Urgent Care evaluates and treats 70-100 patients daily over the age of 18. Urgent care clinics have become an attractive option for adults and are readily available to provide care for a variety of illnesses. The clinics are an option for patients to fill gaps between emergency care and primary care. Urgent care patients typically wait less than 20 minutes for care compared to emergency room waits over 30 minutes (Howard-Anderson et al., 2016). Urgent care settings in the United States have over 20,000 providers and see over three million patients a week. The local urgent care clinic provides x-rays, computed tomography (CT) scans, testing for a variety of illnesses, and infusion rooms for patients to receive a variety of intravenous (IV) medications (Paterick et al., 2017; Slatore et al., 2016). The city of Sumter,

South Carolina has a total census of 40,524 people with an African American population totaling 19,889, a Caucasian population of 18,359, an Asian population of 859, and a Hispanic population of 1,417 (Census Viewer, 2017). The total female population of the city is 21,453 and male population of 19,071. The urgent care clinic treats adult patients over 18 years and older treating African American patients, Caucasian patients, Asian patients, and Hispanic patients. The common reasons for patient visits to urgent care settings are blood work, urinalysis, streptococcal testing, foreign body removals, abscesses, common colds, sinus infections, abdominal issues, and multiple other non-emergent issues (Census Viewer, 2017).

### **Urgent Care Mission, Vision, and Values**

The vision of [REDACTED] Healthcare Urgent Care Clinic is to incorporate new and innovative ideas for advancement in medicine while keeping a foundation of family values and offering of caring provider relationships. The motto “Sick today, seen today” was developed for patients to be able to see a physician in the urgent care clinic without having to have an appointment ([REDACTED] Healthcare, 2017). [REDACTED] Healthcare has several urgent care offices located in Sumter, Columbia, Bamberg, Charleston, and Manning, South Carolina. An Illinois firm recently bought the company in 2016 and has since expanded urgent care clinics to include an additional 10 clinics in South and North Carolina. Due to changes in leadership and organizational structure from the recent buyout there has been lackluster communication between all levels in the organization. [REDACTED] Healthcare is one of the largest healthcare providers in South Carolina with board-certified family physicians, nurse practitioners, and specialists. The clinic’s values include providing fast treatment of disease with a friendly and genuine interest in the family using patient-centered care ([REDACTED] Healthcare, 2017).

### **Problem Statement**

A decrease in patient satisfaction scores related to nursing staff in the urgent care setting has been noted in the past year based on the following questions: (1) nursing staff explained education in a way understood by the patient and (2) nursing staff provided an opportunity to ensure patient comprehension with clinical instructions. The urgent care clinic's survey is located in Appendix F. Patient satisfaction scores for the urgent care clinic are surveyed to patients based on a four-point Likert scale. A score of four equates to "strongly agree", and a score of one to "strongly disagree." Patient surveys are documented in the urgent care Bivarius Patient Survey System (BPSS) and have revealed 60% of scores equaling one and 40% equaling two, since the initiation of the system a year ago. BPSS scores for the clinic are available every three months and are reviewed by the regional manager. Patient surveys about the care received in the clinic are given to all adult patients over age 18 discharged from the urgent care clinic. The surveys are provided via text message and email. The survey response rate from January 3, 2017 through April 3, 2017 revealed that 35.9% of patients received the survey via text messaging and 42.2% received the survey via email patients receiving an email (Bivarius, 2017).

### **Survey Scores**

Survey scores provide patients the opportunity regionally and locally to choose where they want to receive healthcare. Scores are analyzed by administrators, the regional manager, and the clinical manager of the urgent care clinic. The scores determine patient perception of the quality of care and assist the administration in meeting the needs of the patient based on the scores provided. A comprehensive review of four hundred charts in the past three months revealed the clinic is not meeting the current standards for patient education according to TJC standards for urgent care centers. The local urgent care clinic is accredited by TJC for Ambulatory Care and follows the urgent care standards. Standard (PC.04.01.05 EP1) from TJC

states, “The organization provides instructions in a manner that the patient and the patient’s family or caregiver can understand and tailors instructions to the patient’s age, language, and ability to understand”(TJC, 2014). The local clinic does not have an educational process using an evidence-based approach to meet the standards. Patient satisfaction scores are a perception of whether the patient understands the information provided by the nursing staff.

### **Project Purpose**

The goal of the project was to identify an evidence-based patient education approach based on the teach-back method. This approach was used to support improvement in patient comprehension and improve patient satisfaction scores. Nursing staff members were educated on the teach-back methodology, the TJC standard, and when to initiate the teach-back method in the urgent care clinic setting. The urgent care clinic has 12 registered nurses. The evidence-based teach-back approach was taught by the project leader in two lunch and learn sessions. The aim of the project was to evaluate if education sessions on the teach-back method improved patient satisfaction in the urgent care clinic related to nursing staff and clinical instructions.

### **Clinical Questions and Framework**

The use of the population, intervention, comparison, outcome, and time (PICOT) framework provided a structured format to assist in the elements to help to develop the clinical questions for this project (Moran et al., 2014). The PICOT format supported the planning, implementation, and evaluation of the evidence-based practice project. Nursing staff that provide patient education were the population of interest (P). The teach-back method of patient education was the intervention (I), and a comparison of patient satisfaction scores three months before implementation of the teach-back method is included. An assumption (C) is that the teach-back method for patient education would improve patient satisfaction scores (O). The

intervention was used for 30 days by the nurses in the urgent care clinic setting (T). Teach-back methodology was taught by the nursing staff before utilization in the urgent care setting. The goals and objectives of the project were to appraise the current standards on patient education and teach an evidence-based practice teach-back method to improve patient satisfaction scores. The regional manager submitted a letter of support for the project (Appendix D). The regional manager for urgent care plans to sustain the project pending the outcome of the project.

### **DNP Essentials**

The Doctor of Nursing Practice (DNP) is a terminal degree with a focus on nursing practice versus research. The American Association of Colleges of Nursing's (AACN) *The Essentials of Doctoral Education for Advanced Nursing Practice* (American Association of Colleges of Nurses [AACN], 2006) are competencies that each DNP graduate must meet upon graduation. The AACN DNP competencies guide the goals and objectives of the scholarly project. The goals and objectives (Appendix B) support the purpose and aim of the project. The DNP Essentials guide the scientific underpinnings for the project which includes analyzing a need for change based on TJC for Ambulatory Care for urgent care standards regarding patient education.

Eight essentials were created as competencies that must be present in DNP programs. The DNP Essentials have a different focus based on what the DNP advanced nurse is practicing. The Essentials guide the professional nurse to develop practical expertise in leadership and, specialized nursing practice, and they guide organizational change through Interprofessional collaboration (AACN, 2006; Chism, 2013). The first DNP Essential is a competency-based on scientific underpinning for practice. The current project facility does not utilize evidence-based

practice and does not have a procedure in place for assuring basic understanding for patient education based on TJC standards for urgent care clinics. The teach-back methodology used an evidence-based approach employed in the facility to determine improvement in patient satisfaction scores after the teach-back method was utilized for a 30-day time-frame (AACN, 2006; Chism, 2013).

Organizational and systems leadership describes DNP Essential II which is based on quality improvement and systems thinking. As a system, the urgent care clinic utilizes paper charting methods that are outdated and do not provide consistency in documentation. Patient education is not documented. Patients are not recorded as understanding patient teaching leading to a decrease in patient satisfaction scores. In an analysis of organization and systems leadership, the project used communication strategies and evidence-based practice to make a change for the team (AACN, 2006; Chism, 2013).

The third DNP Essential is based on clinical scholarship and analytical methods for evidence-based practice. The use of best practice and patient-centered care is the focus of the third essential. The BPSS patient satisfaction survey collects data on how patients perceive the care they receive from the urgent care clinic. Interventions for the scholarly project and the leadership module analyze the questions pertinent within the survey to design an evidence-based intervention of teach-back methodology. Teach-back provides nurses with the opportunity to teach patients and restate concepts that need clarified before the patient is discharged (AACN, 2006).

The fourth DNP Essential is based on informatics and technology. The use of patient care technology for improvement and transformation of healthcare is needed for the urgent care clinic. The use of paper charting is outdated and does not follow standards for documentation.

The Greenway System is currently being utilized in the clinic setting, but it is an outdated version and is used for patient history and diagnostics. The system has a need to be updated and includes documentation features for better monitoring of patient documentation and outcomes. This is an issue the clinic plans to evaluate in the next year (AACN, 2006; Chism, 2013).

The DNP Essential V relates to policy for advocacy in health care. The ability to participate in committees for the local clinic and participate in the education of the nursing staff during the scholarly project provided the project leader with the ability to influence the delivery of safe, effective patient education in a way that patients understand to promote better outcomes and patient self-care when discharged. The use of quality and evidence-based education can provide increased patient satisfaction with their care (AACN, 2006).

The DNP Essential VIII is used during the scholarly project in the assessment of the patient. The assessment of the patient included cultural sensitivity and participation in the education of patients in a manner that uses an evidence-based approach to improve the optimal care of the patient. The scholarly project uses a mentorship approach to teaching staff teach-back methodology and providing reminders to nursing staff to utilize the method to improve the education of the patient (AACN, 2006; Chism, 2013).

### **Literature Review**

The literature review provides current evidence-based research about patient education, compliance of its use in healthcare, and an evidence-based method. The search engines utilized for the search included: EBSCO HOST, PubMed, Cochrane, Medline, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The following keywords were used: patient education, nursing education, patient satisfaction, and quality education. The following information was obtained regarding the search to include general information about the

importance of patient education. Patient education in healthcare, benefits of patient education, health literacy barriers, communication and cultural competence, and teach back methodology were found in the literature. The initial search included 1,002 articles. The number of articles was reduced to 30 articles that included research within the last five years. Melnyk's Level of Evidence (2015) was used to analyze the literature. The levels of evidence range from one to six for the project (Appendix A).

### **Patient Education in Healthcare**

Patient education is defined as educational activities that use a variety of methods to teach or provide modification of patient behavior to promote healthy outcomes. Patient education uses the nursing process to include assessing, planning, implementing and meeting the needs of patient and family, and evaluating if the method assisted the patient and family in comprehension according to their needs (Kornburger et al., 2013). Healthcare is continuing to evolve placing demands on nursing staff to provide patients with information that is vital to meet their needs (Centrella-Nigro & Alexander, 2017). Providers have the task of assessing patient knowledge, planning effective teaching strategies, and evaluating if the method was used and the patient understood the information provided to them (Dantic, 2014; Tamura-Lis, 2013).

Ozdalga et al. (2012) suggest the purpose of patient education is to develop self-management in patients in which they are providing for their care upon discharge based on their comprehension and ability to verbalize their understanding before discharge. Slatore et al. (2016) suggest that patients learn better if they are active participants in their patient education process and if they understand how to care for themselves. If patients leave the facility without comprehension of instructions the nursing staff failed to provide quality patient education. Failing to provide quality patient education can inadvertently decrease patient satisfaction with

care and decrease self-care of the patient on discharge (Centrella-Nigro & Alexander, 2017; Tamura-Lis, 2013).

### **Benefits of Patient Education**

Schoenthaler & Cuffee (2013) state the benefits of patient education include: patients developing the quality of life, increasing patient satisfaction, and becoming more actively involved in planning care. Patients are more likely to comply with medical treatment plans, find innovative ways to cope with illness and are less likely to experience complications if instructions are understood. Patients are satisfied with care when receiving adequate information about caring for them. The more frequently cited complaints by patients in litigation cases are that they are not adequately informed (White et al., 2013).

The healthcare professional presents patient education in a manner the patient understands and provides an improvement in patient satisfaction that can have an impact on patient safety and quality of care for the patient upon discharge. Patients are to be encouraged through education to meet the needs to improve patient satisfaction and patient safety (Miller et al., 2016). Teaching and learning are systematic, logical, planned, and scientifically based. The actions related to educating patients include teaching and learning and involves two interdependent players: the learner and the teacher. Educating patients can be compared to the nursing process because the steps of each process run parallel to the steps of the other (Martin et al., 2014). Like the nursing process, it consists of the essential elements of assessment, planning, implementation, and evaluation. The education of patients focuses on planning and implementing teaching based on assessment and prioritization of patient needs, readiness to learn, and learning styles. Outcomes based on teaching patients should include a change in knowledge, attitudes, and skills (Paterick et al., 2017). The process of teaching is ongoing with

assessment and evaluation redirecting the planning and implementation phase. If outcomes or understanding are not achieved as determined by the evaluation, the process should begin again through reassessment, replanning, and reimplementation until understanding is evaluated (Hyde & Katz, 2014; Iowa Healthcare Collaborative, 2013).

### **Health Literacy Barriers in Patient Education**

Health literacy is defined as the patient's ability to obtain information, process information, and understand basic health information and services (Kelly & Putney, 2015; Kornburger et al., 2013). The patients must be able to process and understand health information to be able to not only know how to care for themselves upon discharge but also make informed decisions about the type of care that is wanted (Iowa Healthcare Collaborative, 2013). The Agency for Research and Quality (AHRQ) notes that one-third of patients nationally struggle with health literacy (AHRQ, 2014). Nursing staff should promote education using plain language with open-ended questions to assess if patients can verbalize what was learned by the educational session with the patient. The teach-back method closes the gap of patient understanding using open-ended questions so nursing staff can assess whether further teaching is necessary during their care to assist patient comprehension (Callaham et al., 2013; Martin et al., 2014).

### **Communication and Cultural Competence**

Patient education and communication requirements include effective communication and cultural competence in the healthcare setting. Culture, language, and literacy are the variables needed to assess the learning needs of a patient. The responsibility of the healthcare institution includes understanding the cultural background of the patient, the language spoken by

the patient, the health literacy needs of the patient, and the spiritual beliefs of the patient (Haney & Shepard, 2014; Kornburger et al., 2013).

Cultural assessment and knowledge are imperative for the care of the patient and family before the initiation of patient education. The United States demographics include a variety of ethnicities, races, and cultures that require healthcare providers to understand the various needs of patients. Western civilization focuses on medical treatments, technology, and the natural sciences to care for the patient. Medications and a focus on how the body works and response are a part of traditional western civilization medication. Patients from other cultures may not understand traditional western civilization medication. Health care staff will need to be educated in cross-cultural information as one in three Americans is considered ethnically diverse (Dinh et al., 2013; Hyde & Katz, 2014).

Differences in healthcare needs of the patient are revealed by the various cultural needs of patients. Asian Americans honor extended family wishes when it relates to medical treatment and requires the staff to include the family in the healthcare requirements of the patient. They are reluctant to discuss medical treatments with providers and avoid disagreements, which leads them to often agreeing with providers when they may not necessarily agree. African American cultures value family and church in healthcare decisions. Patients of Indian decent do not discuss mental health issues with healthcare providers (Jarrin, 2012). Vietnamese patients will often not accept care from the healthcare provider as they believe in mystical health beliefs. Providers and other healthcare workers should be educated about the significance of cultural competence and its impact on understanding patient education. Cultural competence includes understanding the assumption of the cultural requirements of the patient, understanding the male and female role, and how the family fits into meeting the healthcare needs of the patient. It also includes an

assessment of what is known by the patient before developing patient and family-centered education (Jager & Wynia, 2012).

### **Teach-Back Method for Patient Education**

The definition of teach-back methodology provides an evidence-based approach for nurses to have patients repeat back information given to assess for understanding and validate concepts that are not understood. The patient restates the information so information can be re-taught until the concept is clear to the patient (AHRQ, 2014). Patients should have the ability to understand the diagnosis, the names and general information about the treatments, procedures, and services that are received (Tamura-Lis, 2013). Studies have shown that over 50% of patients forget the information that is given to them in the medical setting (Miller et al., 2016; White et al., 2013). To increase patient understanding and increase rates of retention, the teach-back method can be used to confirm what is being taught. The teach-back methodology can be used by nursing staff to eliminate gaps in communication between the patient and the nurse and increase patient satisfaction and patient understanding of the education being given (Centrella-Nigro & Alexander, 2017; Dantic, 2014; Dinh et al., 2013; Mahramus et al., 2014).

Patients benefit from receiving explicit instruction in the healthcare setting that increases the safety of care, improvement in the quality of care, and improved patient satisfaction (Tamura-Lis, 2013). The teach-back method was used by White et al., (2013) for assessing the comprehension of teaching used with heart failure (HF) patients. It was noted that the sample of patients studied was able to correctly answer questions related to HF 84% of the time compared to 50% of the time without teach-back methodology. Patients had increased satisfaction with discharge instructions regarding lifestyle changes, medication usage, and improved adherence to treatment upon discharge from the healthcare setting. The teach-back method is endorsed by

TJC as a preferred method to address patient understanding. Teach-back is a way to correct the misunderstanding of patient education and use “common language” while limiting education to three to four concepts to assure patient understanding and can be used in any healthcare setting (Dantic, 2014; Kornburger et al., 2012).

### **Conceptual Model**

The conceptual model that was utilized for the scholarly project is based on the 2015 Iowa model. Permission to use the Iowa model for the project was obtained (Appendix C). The model provides a step by step approach to support the process of evidence-based patient education interventions to improve patient satisfaction. Using the Iowa model, triggers were identified. The noted triggers are low patient satisfaction scores related to the patient understanding of patient education. Standards related to TJC were also assessed with the clinic not meeting the needs of the standard for providing patient education in a manner patients understand. The Iowa model also focuses on a knowledge-focused trigger. Assessment of nurses’ knowledge of TJC standards for patient education indicates a need for education of staff on the standards and an evidence-based education approach to improve patient satisfaction scores in the urgent care clinic (Steelman, 2016).

The Iowa model has a variety of evaluation points which allow a team to reevaluate, provide further research, revise, and redesign a plan during the process that will be completed by the regional manager, the clinical manager, and the project manager. The Iowa model provides stages that are defined to allow the project to move through a step by step approach. The use of the team to include the regional manager, clinical manager, and project leader provided an opportunity for input from the organizational system to support the evidence-based project need further (Steelman, 2016). A pilot study used the registered nurses from the urgent care clinic,

and they were educated about TJC standards for patient education, the urgent care clinic survey, and what the scores mean for the clinic. The evidence-based approach using teach-back methodology was taught to the nursing staff. The evaluation of patient satisfaction scores was assessed in a 30-day timeframe to assess if the scores improved.

### **Methodology**

The scholarly project used an evidence-based practice approach using a quasi-experimental approach to collect and analyze data using the nursing staff in the local urgent care clinic. The project followed the steps of the 2015 Iowa model with the utilization of an interprofessional team to include the regional manager, clinical manager, and project manager. Measurement of success included if patient satisfaction scores related to patient education by the nurses, and these were positively affected in the BPSS.

### **Measurable Outcomes**

The desired results of the project were to increase patient satisfaction scores from a one or two to a score of three for the following urgent care clinic survey questions: 1) nursing staff explained education in a way understood by the patient and (2) nursing staff provided an opportunity to ensure patient comprehension with clinical instructions.

### **The Setting and the Subjects**

The setting for the scholarly project was an urgent care clinic. The pilot study included the 12 registered nurses in urgent care to participate by completing the educational lunch and learn sessions to learn about teach-back methodology to be used in the urgent care clinic. The methodology and design were chosen to implement teaching sessions on teach-back method to increase patient satisfaction related to patient education. The project design was a quasi-experimental, pilot study to collect data as indicated in the Iowa model. The 12 registered nurses

were divided into two groups of six nurses, with each group attending one of two lunch and learn sessions to learn about TJC standards for patient education and how to use teach-back methodology.

### **Informed Consent**

The project leader sought approval from the Liberty University Institutional Review Board (IRB) to begin the scholarly project (Appendix G). A letter of support (Appendix D) is included in the local urgent care regional manager for support of the scholarly project. The 12 registered nurses were divided into two groups of six nurses to attend one of two lunch and learn sessions in a two-day timeframe. The project leader discussed the purpose and aim of the scholarly project and gave the registered nurses an informed consent before beginning the educational session on teach-back methodology. The nurses participating in the educational sessions of the project were assured anonymity and confidentiality. Each nurse received a cover letter explaining the project and inviting them to participate.

### **The Intervention and Data Collection**

The nursing staff was educated on TJC standards and teach-back methodology during the lunch and learns sessions. The inclusion criteria included eligible participants with any gender, ethnic background, and health status who were 18 years of age or older and functioned with a current, non-encumbered South Carolina nursing license (RN). The nurses were currently employed as registered nurses at [REDACTED] Family Practice Urgent Care Clinic. The 12 nurses were educated during regular work hours during lunch time in a 30-minute session in the break room. There were six nurses at the first lunch and learn education session and six nurses at the second session. Participants were recruited via email by the regional manager one week prior to the lunch and learn sessions. The nursing staff was given a laminated teach-back method badge

reminder located in Appendix E as a learning aid and reference tool. A pen with “teach-back” written on it was given to each nurse during the lunch and learn session as a reminder to use teach-back during each teaching with each patient. The eight patient rooms had a laminated poster in each room with the teach-back method located in Appendix H to offer an opportunity for patients to ask the nursing staff about the teach-back method to remind them use it. The official start date was three days after the lunch and learn sessions were completed. The computers and the nurses’ station had reminder stickers to trigger nurses to use teach-back with every patient.

The nurses were given a pre-test located in Appendix J to evaluate participants and their knowledge of the teach-back methodology. The pre and posttest questions were developed from the Iowa Healthcare Collaborative website (Iowa Healthcare Collaborative, 2017). The educational lunch and learn session located in Appendix I were used to teach about patient education, TJC standards, and the teach-back method. An interactive learning module entitled, “Interactive Teach-Back Learning Module” (Iowa Healthcare Collaborative, 2017) was the main teaching modality. The objectives of the module were to (a) Define teach-back methodology; (b) Define the key elements of teach-back methodology; (c) Provide research for teach-back in improving patient understanding; (d) Apply how to use teach-back. The interactive modules provided examples of how teach-back should be delivered, research to support the use of teach-back, and tips on how to use teach-back successfully. The use of role-playing helped assist in nurse knowledge of how to use teach-back methodology (Appendix K). The educational session was designed to last 30 minutes with 20 minutes for content delivery and 10 minutes for completion of a post-test (Appendix J). A nurse perception evaluation was also given for nurses to complete at the end of the session to evaluate if they understood and would use the teach-back

method after the teaching session (Appendix L). The post-test evaluation will include demographic factors such as age and years of experience to ascertain common themes among particular groups of nurses. After the content portion participants were asked to leave their pre-test, post-test, and perception evaluation forms in a box near the door before leaving. The nurses were given the laminated card for their badge and the “teach-back” pen when they completed the session.

Data collection from the BPSS was obtained by the project leader one month after the initiation of the teach-back method. The data collected during the scholarly project was analyzed by the project leader to assess patient satisfaction scores in the BPSS and how they were affected 30 days after teach-back methodology. After the scholarly project was completed, the results were shared with the regional and clinical manager to evaluate sustainability.

### **The Timeframe for the Project**

April 2017	Data collection and assessment of the BPSS and patient satisfaction scores.  Met with the regional manager and clinical manager about the purpose and plan of the scholarly project.
May 2017	Continued working with the regional manager and clinical manager while seeking committee approval from Liberty University to initiate IRB approval.
June 2017	Committee approval occurred and sought IRB approval from Liberty University.
July 2017	Liberty IRB approval occurred and initiation of the two-day educational sessions to the 12 nurses in the urgent care clinic began. The nurses initiated the teach-back method in the urgent care setting three days after the teaching session.

August 2017	Patient satisfaction scores were analyzed by the project leader using BPSS 30 days after initiation of the teach-back method.
September 2017	Created a follow-up with the regional manager and clinical manager on the effect of patient satisfaction scores using the BPSS system. Began writing the results and analysis to conclude the project and get ready for defense.
September 2017	Assessed and analyzed if the clinic would sustain the project beyond the scholarly project to affect patient education documentation compliance for the clinic. Data collection concluded and was presented to administrative staff in October 2017 at project conclusion.
October 2017	The project ended. The regional manager and clinical manager in the clinic took over the project and disseminated the data results to the clinic.  Disseminated findings with regional manager, clinical manager, and nursing staff. Submitted manuscript with results to a journal and plan to disseminate findings in local conferences and local clinics.

### **Feasibility and Budget Analysis**

The following were considered to address the feasibility of the proposed project: resources, personnel, technology, budget, and cost/benefit analysis. Resources included the project leader educating teach-back at two educational sessions to educate the 12 nurses at the urgent care clinic. The training and education on the teach back, and TJC standards used in the urgent care clinic occurred during regular working hours. The BPSS survey system was monitored by the project leader to analyze patient satisfaction scores three months prior and 30 days after the initiation of the proposed scholarly project. The cost of the project was minimal.

The cost included paper supplies for staff, reminder pens labeled with “teach-back,” education packets used during the education sessions for the nursing staff, and lunch and learn food for two sessions. A laminated teach-back methodology guide for the nurses was given to the nurses as a reminder to use teach-back with each patient session.

The cost of laminated reminder nurse badge cards from Staples was \$25 for 12 nurses. The cost of printing including the pre-test, post-test, patient room reminders, and nurse perception evaluations was \$15. The cost of boxed lunches from Subway with drinks for the nurses totaled \$128. The total cost for the project leader totaled \$168. Limited monetary needs are outweighed by the decrease in patient satisfaction scores related to patient education in the urgent care clinic. The benefit of the evidence-based teach back method outweighs the cost of the proposed scholarly project.

### **Evaluation Analysis**

The evaluation of the data analysis focused on patient satisfaction scores using BPSS data as outlined in Appendix E. The scores related to the following questions: (1) the nursing staff explained education in a way understood by the patient and (2) the nursing staff provided an opportunity to ensure patient comprehension with clinical instructions. The scores for the urgent care clinic survey are based on a four-point Likert scale. A score of four equates to “strongly agree”, and a score of one equates to “strongly disagree.” The scores were reevaluated 30 days after initiation of the teach-back method to compare the patient satisfaction scores before and after introduction of teach-back methodology. An evaluation of the validity and reliability of teach-back methodology, the nursing sample, the BPSS survey system, and statistical data feedback were analyzed after completion of the scholarly project.

### **Design and Methodology**

The scholarly project was designed using a quasi-experimental approach to collect and analyze data using the nursing staff in the local urgent care clinic. Nursing staff in an urgent care setting were educated about teach-back methodology using lunch and learn sessions to learn about TJC standards for patient education for urgent care settings and how to use teach-back methodology. The lunch and learn presentation included a one-group pretest and posttest on teach-back methodology to determine knowledge before and after the educational intervention was given. An interactive teach-back learning online PowerPoint presentation was given to the staff that addressed an overview of teach-back, review of research on teach-back, definitions and concepts of teach-back, health literacy, and how teach-back is used. The nurses were divided into pairs to use a role-play scenario to use teach-back methodology. The nurses were then given a nursing perception evaluation on teach-back methodology to address perceptions and comfort level with the use of teach-back methodology.

### **Sampling**

The population included nursing staff in an urgent care clinic. Every member of the nursing staff (N=12) volunteered to be a part of the pilot study. Two of the nurses were age 20-29, five nurses were age 30-39, four nurses were 40-49, and one nurse was 50-59. The 12 nurses completed the educational lunch and learn sessions, pre and posttests, and nursing perception evaluations.

### **Instrumentation**

Statistical Product and Service Solutions (SPSS) software was used to run the statistical data. Data were inputted into the software data to analyze the pretest and posttest teach-back questionnaire and analyze nursing perceptions after the lunch and learn session. The BPSS survey system for the urgent care clinic analyzed the patient satisfaction scores three months

before using teach-back methodology in the urgent care clinic and one month after using teach-back methodology.

### **Data Collection**

The nurses were asked to complete a pretest and posttest if they attended a lunch and learn session. Six of the nurses worked and attended one lunch and learn session while the other six nurses worked and attended the second lunch and learn session. The pretest questionnaire was distributed before the educational intervention began. The nursing staff received a posttest questionnaire immediately after the educational session was completed. The nursing staff received a perception questionnaire to turn into the project leader after the posttest was completed. Data analysis occurred after all data was collected.

### **Analysis**

Statistical analysis included the use of frequency tables, descriptive data, and inferential statistics of data collection from the pre and posttests. The pretest and posttest results were compared noting any differences among the genders with the answers specifically selected for each question (scale) on the questionnaire. Descriptive statistics were used to discuss answers for each question on the questionnaire. The use of the descriptive data allowed the project leader to understand the scores for each level of the scale. Data were also analyzed inferentially to determine if there was a significant change in teach-back pre and posttest scores. The nurse perception questionnaire used descriptive data to determine nurse knowledge, perception, and likelihood for using teach-back methodology. The BPSS patient survey system used descriptive statistics to discuss the numerical scores for patient satisfaction in the urgent care setting after the use of teach-back methodology.

**Variables.** The independent variable for the project was the teach-back educational intervention. The dependent variables were the patient satisfaction scores in the urgent care setting.

## **Results**

**Characteristics of participants' data.** Descriptive statistical analysis explored the demographics, gender, and years the nurse has been a nursing professional from the nurse perception evaluation of teach-back methodology (see Table 1). There was no significance found in scores or feedback based on demographics, gender, and years of the nurse participants.

Table 1

*Frequency and Percentage of Educational Characteristics of Participants*

Age	Frequency	Percent	Cumulative Percent
20-29	2	16.7	16.7
30-39	5	41.7	58.3
40-49	4	33.3	91.7
50-59	1	8.3	100.0
Total	12	100.0	

Gender	Frequency	Percent	Cumulative Percent
Female	10	83.3	83.3
Male	2	16.7	100.0
Total	12	100.0	

Years working as a Nurse	Frequency	Percent	Cumulative Percent
0-5	2	16.7	16.7
6-10	5	41.7	58.4
11-20	4	33.3	91.7
21-30	1	8.3	100.0
Total	12	100.0	

The frequency tables for the variables (demographic questions and survey items) from the nurse perception evaluation of teach-back methodology are included. The tables provide the frequency (count) of nurses that belong to each level of the specific variable, along with the percentage for each level, and the cumulative percentage. The largest age group is 30-39, with five of the 12 nurses (or 41.7% of the 12 nurses). The largest gender group is female, with 10 of the 12 nurses (or 83.3% of the 12 nurses). The largest number of years the nurse has been in the profession of nursing is 6-10 years, with five of the 12 nurses being in their profession for this amount of time (or 41.7% of the 12 nurses).

**Teach-back use prior to intervention.** Descriptive statistical analysis explored the percentage of nurses who had ever used teach-back methodology prior to the lunch and learn session. The data collected revealed that 100 percent of the nursing staff had never used teach-back methodology prior to the lunch and learn sessions (see Table 2).

Table 2

*Teach-back Use Prior to Intervention Statistics*

Previous experience with Teach-back methodology	Frequency	Percent	Cumulative Percent
Yes	00.0	00.0	00.0
No	100.0	100.0	100.0

**Teach-back score analysis.** Descriptive statistics were used to analyze results of the teach-back pretest scores before the lunch and learn educational intervention and posttest scores after the lunch and learn educational intervention using paired samples statistics. The mean

(average) posttest score is 100. Since all nurses had a posttest score of 100, there is no variability in the scores hence the zero (0) standard deviation (and standard error of the mean).

The mean for the pretest score is 28.33, with a standard deviation of 28.868 (see Table 3).

Table 3

*Paired Samples Test*

		Paired Differences			
		Mean	N	Standard Deviation	Standard Error Mean
Pair	Teach- 1 Back Pre- Test Score (Percentage Correct)	28.33	12	28.868	8.33
	Teach- Back Post- Test Score (Percentage Correct)	100.0	12	0.000	0.000

**Inferential statistics.** Inferential statistics were completed using the paired samples t-test. The paired samples t-test was utilized because there was no identifier used to match pre and posttest scores to maintain confidentiality. The value of the mean column is the mean

difference between the two scores  $(100.00-28.33= 71.67)$ . The standard deviation and standard error of the mean difference are given as well. The confidence interval limits are given in the columns labeled Lower and Upper. The confidence interval for the mean difference is (53.325, 90.008). The interval can be interpreted as such: the true mean difference between pretest and posttest scores falls between 53.325 and 90.008, with 95% confidence.

The test statistic is given in the column labeled “t”, which is equal to 8.600 with 11 degrees of freedom (df). The p-value (given in the column labeled Sig.) is 0.000. Since the p-value is less than a 0.05 level of significance (a commonly used level of significance), the conclusion is that the posttest scores are significantly different (higher) than the pretest scores.

**Nurse perception survey results.** The nurse perception survey was analyzed using descriptive data for each question in the survey. The frequency tables for the variables (survey items from the nurse perception evaluation of teach-back and level of understanding were evaluated using a scale based on understanding and confidence levels of the nurse after the lunch and learn sessions were completed. The nurse indicated by a numeric scale with one representing strongly disagree and five representing strongly agree based on the perception questions (Table 4).

The first question was on the definition of teach-back methodology and the key components to use teach-back during patient education. The largest group is the nurses who answered 5 (strongly agree), with 11 of the 12 nurses (or 91.7% of the 12 nurses). The remaining 8.3% of the nurses (N=1) answered 4 (agree). The second question on the nurse perception survey analyzed nurse understanding and the perception of the value of teach-back to improve patient understanding and satisfaction. The largest group is the nurses who answered 5 (strongly agree), with 11 of the 12 nurses (or 91.7% of the 12 nurses). One nurse answered a

score of 4 (agree) (or 8.3% of the 12 nurses). The remaining three questions had a rate of 5 with 12 nurses (or 100% of the 12 nurses) based on confidence with applying knowledge and skills associated with teach-back, confidence in using teach-back methodology, and using teach-back

Table 4

*Nurse Perception Survey Result Statistics*

Can define the teach-back method and during patient education	Frequency	Percent	Cumulative Percent
Agree	1	8.3	8.3
Strongly Agree	11	91.7	100.0
Total	12	100.0	
Can explain the value of teach-back to improve patient understanding & satisfaction	Frequency	Percent	Cumulative Percent
Agree	1	8.3	8.3
Strongly Agree	11	91.7	100.0
Total	12	100.0	
Can apply knowledge and skills to increase comfort levels	Frequency	Percent	Cumulative Percent
Strongly Agree	12	100.0	100.0
Total	12	100.0	
Confidence using teach-back has increased after training	Frequency	Percent	Cumulative Percent

Strongly Agree	12	100.0	100.0
Total	12	100.0	
Will use teach-back routinely after this session	Frequency	Percent	Cumulative Percent
Strongly Agree	12	100.0	100.0
Total	12	100.0	

**Patient satisfaction scores before teach-back.** Descriptive statistics were used to analyze patient satisfaction scores three months prior to using teach-back methodology in the urgent care clinic and 30 days after using teach-back methodology. The data were analyzed using the BPSS patient satisfaction survey system. Analysis includes two questions in the patient satisfaction survey: question one, “Nursing staff explained education in a way understood by the patient”, and question two: “Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions”. Patient satisfaction scores for (April 18-May 18), (May 18-June 18), and (June 18-July 18) are included for three months prior to teach-back methodology use in the clinic (Table 5).

Three months prior to teach-back methodology (April 18-May 18, 2017) 2,589 patients were sent a patient satisfaction survey (or 100% of 2,589 patients). Patients were provided a survey by email and text message. The number of patients who emailed the survey to the urgent care clinic was 942 patients (or 36.3% of 2,589 patients). The number of patients who responded to the patient satisfaction survey by text was 1456 patients (or 56.2% of 2,589 patients). The total number of patients who responded either by email or by text was 2,398 patients (or 92.6%

of 2,589 patients). Scores for question one, “Nursing staff explained education in a way understood by the patient” had a score of “2” for April 18-May 18, 2017. The score for question two, “Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions” was a score of “1” prior to teach-back methodology use in the clinic.

Two months prior to teach-back methodology (May 18-June 18, 2017) 2,413 patients were sent a patient satisfaction survey (or 100% of 2,413 patients). Patients were provided a survey by email and text message. The number of patients who emailed the survey to the urgent care clinic was 772 patients (or 31.9% of 2,413 patients). The number of patients who responded to the patient satisfaction survey by text was 1,439 patients (or 59.6% of 2,413 patients). The total number of patients who responded either by email or by text was 2,211 patients (or 91.6% of 2,413 patients). Scores for question one, “Nursing staff explained education in a way understood by the patient” had a score of “2” for May 18-June 18, 2017. The score for question two, “Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions” was a score of “2” prior to teach-back methodology use in the clinic.

One month prior to teach-back methodology (June 18-July 18, 2017) 3,090 patients were sent a patient satisfaction survey (or 100% of 3,090 patients). Patients were provided a survey by email and text message. The number of patients who emailed the survey to the urgent care clinic was 1,266 patients (or 40.9% of 3,090 patients). The number of patients who responded to the patient satisfaction survey by text was 1,668 patients (or 53.9% of 3,090 patients). The total number of patients who responded either by email or by text was 2,934 patients (or 94.9% of 3,090 patients). Scores for question one, “Nursing staff explained education in a way understood by the patient” had a score of “1” for June 18-July 18, 2017. The score for question two,

“Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions” was a score of “1” prior to teach-back methodology use in the clinic.

Table 5

*Patient Satisfaction Scores (PSS) Prior to Teach-Back Use*

PSS April-May 2017 Questions	Email Response Rate	Text Response Rate	No Patient Response Rate	Question Response Rate (based on 4-point Likert Scale)
Question 1	942	1456	191	2
Question 2	942	1456	191	1
PSS May-June 2017 Questions	Email Response Rate	Text Response Rate	No Patient Response Rate	Question Response Rate (based on 4-point Likert Scale)
Question 1	772	1439	202	2
Question 2	772	1439	202	2
PSS June-July 2017 Questions	Email Response Rate	Text Response Rate	No Patient Response Rate	Question Response Rate (based on 4-point Likert Scale)
Question 1	1266	1668	156	1
Question 2	1266	1668	156	1

**Patient satisfaction scores after teach-back use.** Descriptive statistics were used to analyze patient satisfaction scores 30 days after using teach-back methodology. The data was analyzed using the BPSS patient satisfaction survey system. Analysis includes two questions in the patient satisfaction survey: question one, “Nursing staff explained education in a way understood by the patient”, and question two “Nursing staff provided an opportunity to ensure

patient comprehension with clinical instructions”. Patient satisfaction scores for July 18-August 18, 2017 are included from the BPSS patient satisfaction survey system 30 days after nurses used teach-back methodology in the urgent care clinic (see Table 6).

Thirty days after nurse utilization of teach-back methodology (July 18-August 18, 2017) 3,142 patients were sent a patient satisfaction survey (or 100% of 3,142 patients). Patients were provided a survey by email and text message. The number of patients who emailed the survey to the urgent care clinic was 1,131 patients (or 35.9% of 3,142 patients). The number of patients who responded to the patient satisfaction survey by text was 1,790 patients (or 56.9% of 3,142 patients). The total number of patients who responded either by email or by text was 2,921 patients (or 92.9% of 3,142 patients). Scores for question one, “Nursing staff explained education in a way understood by the patient” had a score of “2” for July 18-August 18, 2017. The score for question two, “Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions” was a score of “3” after using teach-back methodology use in the clinic.

Table 6

*Patient Satisfaction Scores (PSS) 30 Days after Teach-Back Use*

PSS July-August 2017 Questions	Email Response Rate	Text Response Rate	No Patient Response Rate	Question Response Rate (based on 4-point Likert Scale)
Question 1	1131	1790	221	2
Question 2	942	1456	191	3

**Analysis of patient satisfaction scores.** The BPSS patient survey system provided data with scores for the month. The scores were an average of all patients responding to the survey. The results for question two, “Nursing staff provided an opportunity to ensure patient comprehension with clinical instructions” improved from a one or two on the patient satisfaction survey to a “3” indicating a clinical significance.

### **Limitations of the Study**

The limitations in the study include a small sample size so a statistical significance with the results should be used cautiously. The demographics of the nursing staff should have included cultural assessment of the staff to include how that affected the use of teach-back methodology. The study did not use nursing identifiers which provided an inability to match the pre and posttest scores for teach-back methodology. The limitations of the study also include the 30-day timeframe after the initiation of teach-back methodology. The small timeframe from initiation of teach-back does not provide clear analysis of the long-term effects of the use of teach-back use and improvement of patient satisfaction scores. A team member would be helpful as an observer with a clearly defined check-list that would have provided further data on the nurses’ use of teach-back methodology to evaluate if further teaching was needed about the intervention.

### **Dissemination Plan**

The dissemination plan is an important step to increase practice change among nursing staff, gain knowledge, and improve patient satisfaction. Dissemination will increase the time the project takes from completion to use in the urgent care setting. Communication must be effective and efficient in order to provide an increase in patient satisfaction scores in a timely manner. The findings from this project can help to develop a change in practice in the urgent

care setting and use an evidence-based teach-back approach to increase patient satisfaction scores and improve teaching in an understandable way to the patients. The educational intervention used from the lunch and learn sessions can be replicated to other healthcare facilities.

The scholarly project will serve as a pilot study for other clinics and healthcare settings throughout the state. Dissemination of the results occurred with the regional manager and clinical manager of the urgent care clinic. The regional manager is assessing the results to look for sustainability in the urgent care clinic. The results of the project will also be available on Liberty University's Digital Commons which will contain a link for the project for readers world-wide. Dissemination of the project will occur at state and national nursing conferences aimed at patient care using podium and poster presentations. Further dissemination of the project will occur in articles published in peer-reviewed journals.

### **End Users**

The target audience for the scholarly project included 12 nurses at the urgent care clinic. The nursing staff was between the ages of 20-45 and work full-time at the urgent care clinic sites. The nurses work five eight hour shifts per week. The nurses were educated in a two-day timeframe that reached six nurses with the first educational session and six nurses on the second educational session.

## **Communication**

Upon completion of the scholarly project, the results were communicated to the regional manager, clinical manager, and the nurses in the clinic with a completed research report. The results were then distributed throughout the entire clinic. The data can be communicated at nursing staff meetings in the clinic to promote exposure of the teach-back method and why patient education is important. Another format for how data can be communicated is at nursing conferences to assist other clinics with similar problems. Dissemination of the project will also be provided in a nursing journal to disseminate findings to other researchers about the use of evidence-based methods for practice.

## **Significance and Implications for Practice**

The project allowed the nursing staff to understand the importance of evidence-based research and how the use of patient education provides the patient an opportunity to teach-back education given. According to research evidence-based practice outcomes and the use of the education methodology is assumed to increase patient satisfaction scores. The urgent care clinic has had decreased patient satisfaction scores based on patient education and understanding the instructions given by the nursing staff. The implications for using teach-back methodology in the local care clinic provided the local urgent care clinic with an evidence-based approach to improve patient satisfaction scores while meeting TJC standards. The data collected from the project will provide sustainability for the clinic to develop annual competencies for nursing staff currently working and provide an opportunity for new hires. Urgent care clinics in the state or nation may replicate the study based on the results and assist in improving patient satisfaction scores related to patient education. Additionally, teach-back methodology may be potentially replicated in a variety of other healthcare settings to improve patient satisfaction scores.

## Conclusion

The scholarly project provided an opportunity for nursing staff in a local urgent care clinic to learn about TJC Ambulatory Care standards for urgent care clinics, learn about the BPSS survey system for patient satisfaction, learn about an evidence-based teach-back approach for patient education, learn cultural needs of patients, and learn how to use teach-back in the urgent care setting. A comparison of the BPSS scores used to measure patient satisfaction for the urgent care clinic was evaluated three months prior to teach-back methodology use by nursing staff and one month after teach-back started. The two scores that were analyzed after the use of teach-back included explaining education in a way that patients can understand and providing an opportunity to ensure patient comprehension with instructions. The second BPSS survey score reached the score of “3” related to ensuring patient comprehension with instruction.

The teach-back methodology used in the scholarly project increased patient comprehension with instruction. Further studies are needed to check how patients are affected with compliance with the instructions once they are discharged from urgent care. Other studies could assess if the use of teach-back methodology prevents patients from additional urgent care visits. Further studies should include incorporation of cultural sensitivity and the use of teach-back methodology. Patient satisfaction scores could also be evaluated long-term for the impact the scores have on the financial status of the urgent care clinic and if the increased score based on providing the patients the opportunity to ensure patient comprehension with instructions impacted reimbursement for the urgent care clinic.

Kornburger (2012) stated that 51% of patients have difficulty comprehending instructions. The Joint Commission for Ambulatory Care standards include that the urgent care clinic should provide information to family and patients tailored to meet needs in an easy to

understand manner (TJC, 2014). The role of the nurse is to use the nursing process when providing discharge instructions to the patient with an evaluation if the patient understood instructions given. Teach-back methodology is a step by step procedure that assesses the patient's educational needs, uses common language for the patient to understand instructions given, and provides an opportunity for the patient to verbalize the information given. The nurse will assess if the patient learned the information correctly or if re-teaching is needed. Teach-back methodology will need to be studied further to see if patient satisfaction scores will be improved over time.

## References

- Agency for Healthcare Research and Quality. (2014). Dissemination planning tool: Exhibit A from volume 4: Programs, tools, and products. Retrieved from <http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-patient-safety/vol14/planningtoo..html>
- American Association of Colleges of Nursing. (2006). *The Essentials of Doctoral Education for Advanced Nursing Practice*. Washington, D.C. AACN.
- Bastable, S. (2017). *Essentials of patient education* (2<sup>nd</sup> ed.). Burlington, MA: Jones & Bartlett Learning.
- Bergh, A., Persson, E., Karlsson, J., & Friber, F. (2013). Registered nurses' perceptions of conditions for patient education: Focusing on aspects of competence. *Journal of Nursing*, 2(11), 2-22. doi: 10.1111/scs.12077
- Bivarus (2017). Bivarus patient-centered analytics. Retrieved from <https://portal.bivarus.com/surveys/1089-colonial-healthcare/cycles/2270/reports>.
- Callahan, L., Hawk, V., Rudd, R., Hackney, B., Bhandari, S., Prizer, L., & DeWalt, D. (2013). Adaptation of the health literacy universal precautions toolkit for rheumatology and cardiology-Applications for pharmacy professionals to improve self-management and outcomes in patients with chronic disease. *Research in Social and Administrative Pharmacy*, 9(5), 597-608. doi: 10/1016/j.sapharm.2013.04.016
- Census Viewer (2017). Sumter South Carolina Census. Retrieved from <https://www.census.gov/sumtersouthcarolina/>.

- Centrella-Nigro, A., & Alexander, C. (2017). Using the Teach-Back Method in patient education to improve patient satisfaction. *The Journal of Continuing Education in Nursing, 48*(1), 47-52. doi: 10.3928/00220124-20170110-10
- Chism, L.A. (2013). *The doctor of nursing practice: A guidebook for role development and professional issues*. Burlington, MA: Jones & Bartlett.
- ██████████ (2017). ██████████ website. Retrieved from <https://www.██████████.com>.
- Dantic, D. (2014). A critical review of the effectiveness of 'teach-back' techniques in teaching COPD patients self-management using respiratory inhalers. *Health Education Journal, 73*(1), 41-50. doi: 10.1177/0017896912469575.
- Dinh, T., Clark, R., Bonner, A., & Hines, S. (2013). The effectiveness of health education using the teach-back method on adherence and self-management in chronic disease: A systematic review protocol. *JBI Database of Systematic Reviews and Implementation, 11*(10), 30-41. doi: 10.11124/jbisrir-2016-2296.
- Haney, M., & Shepard, J. (2014). Can teach-back reduce hospital readmissions? *American Nurse Today, 9*(3), 50-52.
- Howard-Anderson, J., Amerson, A., Jameson, E. (2016). Urgent care innovation. *Journal of Urgent Care Medicine, 4*(1), 2-13.
- Hyde, Y. M., & Katz, D. D. (2014). Enhancing health promotion during rehabilitation through information-giving, partnership-building, and teach-back. *Rehabilitation Nursing, 39*(4), 178-182. doi: 10.1002.rnj.124
- Iowa Healthcare Collaborative (2017). A health literacy tool to ensure patient understanding. Retrieved from

<http://www.ihs.org/documents/literacy/Iowa%20Health%20system%20Health%20Literacy%2009.pdf>

- Jager, A., & Wynia, M. (2012). Who gets teach-back? Patient-reported incidence of experiencing a teach-back. *Journal of Health Communication, 17*(1), 294-302. doi: 10.1080/10810730.2012.712624
- Jarrin, O.F. (2012). The integrality of situated caring in nursing and the environment. *Advances in Nursing Science, 35*(1), 2-12.
- Kelly, A., & Putney, L. (2015). Teach-back technique improves patient satisfaction in heart failure patients. *Heart and Lung: The Journal of Acute and Critical Care 44*(6), 556-557. doi: 10.1016/j.hrtlung.2015.10.033.
- Koh, H., Brach, C., Harris, L., & Parchman, M. (2013). A proposed 'Health Literate Care Model' would constitute a systems approach to improving patients' engagement in care. *Health Affairs, 32*(2), 357-367.
- Kornburger, C., Gibson, C., Sadowski, S., Maletta, K., & Klingbeil, C. (2013). Using "Teach-back" to promote a safe transition from hospital to home: An evidence-based approach to improving the discharge process. *Journal of Pediatric Nursing, 28*(3), 282-291. doi: 10.1016/j.pedn.2012.10.007
- Kralewski, J., Therese, Z., Bryan, D., & Tong, J. (2016). A tale of two family practice clinics: How they adopt patient-centered care, but couldn't sustain it. *Physical Leadership Journal, 3*(2), 2-15. doi: 01.03.2016
- Mahramus, T., Penover, D., Frewin, S., Chamberlain, L., Wilson, D., & Sole, M. (2014). Assessment of an educational intervention on nurses' knowledge and retention of heart

- failure self-care principles and the Teach-Back Method. *Heart and Lung: The Journal of Critical Care*, 43(3), 204-212. doi: 10.1016/j.hrtlng.2013.11.012
- Martin, P., Ching, K., Yin, H., & Kessler, D. (2014). Seven practice principles for increased patient education: Evidence-based ideas from cognitive science. *Pediatrics and Child Health*, 19(3), 119-122.
- Mata, P., Chamney, A., & Viner, G. (2015). A development framework for mobile healthcare monitoring apps. *Personal and Ubiquitous Computing*, 19(3), 622-633. doi: 10.1007/s0077-9-015-0849-9
- Miller, S., Lattanzio, M., & Cohen, S. (2016). "Teach-back from a patient's perspective." *Nursing* 46(2), 63-64. doi: 10.1097/01.NURSE.0000476249.18503.f5
- Moran, K., Burson, R., & Conrad, D. (2014). *The doctor of nursing practice scholarly project: A framework for success*. Burlington, MA: Jones and Bartlett.
- Ozdalga, E., Ozdalga, A., & Ahuja, N. (2012). The smartphone in medicine: A review of current and potential use among physicians and students. *Journal of Medicine Research*, 14(5), 128-130. doi: 10.2196/Jmjr.1994
- Paterick, T., Patel, N., Tajik, J., & Chandras, K. (2017). Improving health outcomes through patient education and partnerships with patients. *Baylor University Medical Center Proceedings*, 30(1), 112-113.
- Pearson, W. S., King, D. E., Richards, C. (2013). Capitated payments to primary care providers and the delivery of patient education. *Journal of the American Board of Family Medicine*, 26(4), 350-355. doi: 10.3122/jabfm.2013.04.120301.

- Schoenthaler, A., & Cuffee, Y. (2013). A systematic review of interventions to improve adherence to diabetes medications within the patient-practitioner interaction. *Journal of Clinical Outcomes Management*, 20(11), 494-506.
- Shipman, J. P., Lake, E. W., VanDer Volgen, J., & Doman, D. (2016). Provider document of a patient education: A lean investigation. *Journal of Medical Library Association*, 104(2), 154-159. doi: 10.3163/1536-5050.104.2.012
- Slatore, C., Kulkarni, H., Corn, J., & Sockrider, M. (2016). Improving health literacy: New American Thoracic guidelines for patient education materials. *Annals of the American Thoracic Society*, 13(8), 1208-1211. doi: 10.1513/AnnalsATS.201605-337OT
- Steelman, V. (2016). The Iowa Model. *Association of Perioperative Registered Nurses Journal*, 103(1), 5-7. doi: 10.1016/j.aom.2015.11.020
- Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urological nursing*, 33(6), 267-271. doi: 10.7257/1053-816x.2013.33.6.267
- The Joint Commission (2014). Standards Sampler Urgent Care Joint Commission. Retrieved from [https://www.jointcommission.org/standards\\_sampler\\_urgent\\_care](https://www.jointcommission.org/standards_sampler_urgent_care).
- White, M., Garbez, R., Maureen, C., & Brinker, E. (2013). Is Teach-Back associated with knowledge retention and hospital readmission in hospitalized heart failure patients? *Journal of Cardiovascular Nursing*, 28(2), 137-142 doi: 10.1097/JCN.ob013c31824987bd

## Appendix A: Literature Review Matrix

Title of Article	Authors	Journal, Year, Volume Number	Summary of Article	Significance	Levels of Evidence
<i>Essentials of patient education</i> (2 <sup>nd</sup> ed.).	Bastable, S.	Burlington, MA: Jones & Bartlett Learning. (2017).	The text addresses patient education and the documentation requirements of patient education. The text addresses barriers in healthcare to perform excellence in patient education.	The text is significant as it addresses barriers and potential barriers and methods to overcome them related to patient education.	VII
Registered nurses' perceptions of conditions for patient education: Focusing on aspects of competence.	Bergh, A., Persson, E., Karlsson, J., & Friber, F.	<i>Journal of Nursing</i> , (2013). 2(11), 2-22. doi:10.1111/scs.12077	This qualitative study focuses on questionnaires given to nurses related to perceptions and attitudes on patient education.	The significance of the study aimed at analyzing various nursing perceptions and knowledge of patient education in a variety of settings. The study noted that administrative support is	V

				necessary in the healthcare setting to support nurses and patient education.	
Adaptation of the health literacy universal precautions toolkit for rheumatology and cardiology-Applications for pharmacy professionals to improve self-management and outcomes in patients with chronic disease.	Callahan, L., Hawk, V., Rudd, R., Hackney, B., Bhandari, S., Prizer, L., & DeWalt, D.	<i>Research in Social and Administrative Pharmacy</i> , (2013). 9(5), 597-608. <i>doi: 10/1016/j.sapharm.2013.04.016</i>	This study is a systematic review of patient education toolkits available to assist in managing chronic disease and medication administration in patients.	The review focused on brown bag teaching methods and the teach-back methodology for patient education. The reviews suggested the link in communication and establishing education to patients in an understandable way was imperative to positive outcomes.	I
Using the teach-back method in patient education to improve patient satisfaction.	Centrella-Nigro, A., & Alexander, C.	<i>The Journal of Continuing Education in Nursing</i> , (2017). 48(1), 47-52. <i>doi: 10.3928/00220124-20170110-10</i>	The study used a pretest/posttest design to assess how teach-back affects HCAHPS scores in a hospital. A pretest posttest design evaluated nurses' attitudes and beliefs about	The significance of the study showed an improvement in the knowledge and beliefs of nurses using teach-back methodology. HCAHPS scores were improved, but more study is	III

			teach-back methodology.	needed. Teach-back was discovered as an effective tool to evaluate patient understanding.	
A critical review of the effectiveness of ‘teach-back’ techniques in teaching COPD patients self-management using respiratory inhalers.	Dantic, D.	<i>Health Education Journal</i> , (2014). 73(1), 41-50. <i>doi: 10.1177/0017896912469575</i>	This systematic review assessed teach-back and the evidence on the intervention with patient education and patient self-management.	The systematic review revealed nine studies that provided evidence in management of inhaler use with a patient after using the teach-back methodology. Long-term benefits are recommended for further study.	I
The effectiveness of health education using the teach-back method on adherence and self-management in chronic disease: A systematic review protocol.	Dinh, T., Clark, R., Bonner, A., & Hines, S.	<i>JBHI Database of Systematic Reviews and Implementation</i> , (2013). 11(10), 30-41. <i>doi: 10.11124/jbisrir-2016-2296</i>	This systematic review assesses teach-back methodology patient self-management related to a variety of chronic illnesses.	The systematic review is significant as it analyzed studies that used teach-back methodology and how it affected the self-care of the patient with chronic illness. The significance revealed the effective	I

				evaluation and having patients teach-back education leads to increase in patient self-care.	
Can teach-back reduce hospital readmissions?	Haney, M., & Shepard, J.	<i>American Nurse Today</i> , (2014). 9(3), 50-52.	The study analyzed heart failure patients in a healthcare setting and the use of teach-back methodology to assess if the methodology would decrease readmissions.	The study is significant as it identified those heart failure patients in the healthcare setting decreased readmission rates significantly with the use of the teach-back methodology. The emphasis of teach-back was on concepts the patient did not understand. The use of open-ended questions was also utilized in the study.	IV
Urgent care innovation.	Howard-Anderson, J., Amerson, A., Jameson, E.	<i>Journal of Urgent Care Medicine</i> , (2016). 4(1), 2-13.	The study addressed the needs of urgent care clinics for patients in the community	The significance of the study included the study of urgent care clinics and the needs of the	VI

			setting.	clinics in the community setting.	
Enhancing health promotion during rehabilitation through information-giving, partnership-building, and teach-back.	Hyde, Y. M., & Katz, D. D.	<i>Rehabilitation Nursing</i> , (2014). 39(4), 178-182. <i>doi: 10.1002.rnj.124</i>	The study was aimed at assessing teach-back and developing a prompt sheet to improve patient education and communication at the bedside to see if patient satisfaction was increased.	The significance of the study included patients that became actively involved in their care after the use of the prompt sheet in the healthcare setting. The patient's subjective perception on the tool was that it improved communication between the provider and the patient.	VI
Who gets teach-back? Patient-reported incidence of experiencing a teach-back.	Jager, A., & Wynia, M.	<i>Journal of Health Communication</i> , (2012). 17(1), 294-302. <i>doi: 10.1080/10810730.2012.712624</i>	This study was aimed at assessing patient satisfaction and perception related to communication and time spent at the bedside using the teach-back method.	The significance of the study included an increase in patient satisfaction related to increased communication. The limitation of the study included physicians picking mainly patients	III

				with low income rather than using all patients as a universal approach.	
The integrality of situated caring in nursing and the environment.	Jarrin, O.F.	<i>Advances in Nursing Science</i> , (2012). 35(1), 2-12.	The aim of this study was to assess patient satisfaction related to the holistic care of the patient with patient education.	The significance of the study evaluated the needs of the patient in patient education including the health paradigm that focuses on environment, health, nursing, and spiritual needs of the patient.	VI
Teach-back technique improves patient satisfaction in heart failure patients.	Kelly, A., & Putney, L.	<i>Heart and Lung: The Journal of Acute and Critical Care</i> , (2015). 44(6), 556-557. <i>doi: 10.1016/j.hrtlung.2015.10.033</i>	The review assessed patient satisfaction scores and the use of teach-back methodology use.	The significance of the review indicates an improvement in overall satisfaction of patients with the use of teach-back methodology.	I
A proposed 'Health Literate Care Model' would constitute a systems	Koh, H., Brach, C., Harris, L., & Parchman, M.	<i>Health Affairs</i> , (2013). 32(2), 357-367.	The study aimed at assessing a literacy model that focused on patients at risk for health	The significance of the study includes prevention and decision making of the patient were	VI

approach to improving patients' engagement in care.			literacy and not understanding instructions given by providers.	positively affected when a focus on those at risk for health literacy were assessed in the healthcare setting.	
Using "Teach-Back" to promote a safe transition from hospital to home: An evidence-based approach to improving the discharge process.	Kornburger, C., Gibson, C., Sadowski, S., Maletta, K., & Klingbeil, C.	<i>Journal of Pediatric Nursing</i> , (2013). 28(3), 282-291. <i>doi: 10.1016/j.pedn.2012.10.007</i>	The study analyzed patient and caregiver understanding of instructions given using teach-back methodology. The study also surveyed nursing staff to analyze perception of the teach-back method.	The significance of the study included positive patient understanding using teach-back methodology to reinforce teaching for patients and caregivers. Nursing surveys analyzed positive results from the use of teach-back method in the healthcare setting.	IV
A tale of two family practice clinics: How they adopt patient-centered care, but couldn't sustain it.	Kralewski, J., Therese, Z., Bryan, D., & Tong, J.	<i>Physical Leadership Journal</i> , (2016). 3(2), 2-15. <i>doi: 01.03.2016</i>	The article described providers in two clinics that adopted patient-centered care and if patient-centered care was sustained.	The significance of the article relates to providers not using a technique to achieve patient centered care including patient education and how it was not	IV

				sustained due to low patient satisfaction scores.	
Assessment of an educational intervention on nurses' knowledge and retention of heart failure self-care principles and the teach-back method.	Mahramus, T., Penover, D., Frewin, S., Chamberlain, L., Wilson, D., & Sole, M.	<i>Heart and Lung: The Journal of Critical Care</i> , (2014). 43(3), 204-212. <i>doi: 10.1016/j.hrtlng.2013.11.012</i>	The article described a qualitative descriptive design of a small sample of nurses in a healthcare setting that surveyed nurses' knowledge and beliefs on teach-back methodology.	The significance of the article is that nurse perceptions significantly improved when they understood teach-back methodology and used it in the healthcare setting and increased the likelihood of its use.	IV
Seven practice principles for increased patient education: Evidence-based ideas from cognitive science.	Martin, P., Ching, K., Yin, H., & Kessler, D.	<i>Pediatrics and Child Health</i> , (2014). 19(3), 119-122.	This article describes how patient education is transferred in the patient. There were seven strategies that were discussed that included a discussion on evaluation of learning by asking the patient in their words what was	The significance of this study used qualitative data that monitored the most effective way patients learn. The study stated that the use of dual methods with teach-back methodology increase multiple senses to improve information transfer for better memory.	V

A development framework for mobile healthcare monitoring apps.	Mata, P., Chamney, A., & Viner, G.	<i>Personal and Ubiquitous Computing</i> , (2015). 19(3), 622-633. <i>doi: 10.1007/s0077-9-015-0849-9</i>	learned. The article describes a study that uses a mobile app to develop teaching to meet the needs of the patient in the healthcare setting.	The significance of the study is that there was an increase in patient knowledge and memory of concepts taught with the use of the app. The app was noted to help patients receive education and be able to be evaluated in their learning.	IV
“Teach-back” from a patient’s perspective.	Miller, S., Lattanzio, M., & Cohen, S.	<i>Nursing</i> , (2016). 46(2), 63-64. <i>doi: 10.1097/01.NURSE.0000476249.18503.f5</i>	This study was a single qualitative study that surveyed patients about their understanding and perception of self-care upon discharge.	The significance of the study revealed an increase in understanding for patient education after the use of teach-back methodology. The perception of the patients was that they were able to care for themselves after teach-back methodology upon discharge home.	VI

<p>The smartphone in medicine: A review of current and potential use among physicians and students.</p>	<p>Ozdalga, E., Ozdalga, A., &amp; Ahuja, N.</p>	<p><i>Journal of Medicine Research</i>, (2012). 14(5), 128-130. doi: 10.2196/Jmjr.1994</p>	<p>This study evaluated the use of the smartphone in education and communicating with the patient in a hospital setting. Communication and evaluation of what was learned was evaluated in the study.</p>	<p>The significance of the study revealed that the use of smartphones assist the patient in receiving patient education through a variety of means that include communication, internet use, and technology in patient education. The use of teach-back methodology will need to be evaluated further to determine if the tool could be used with the Smartphone.</p>	<p>IV</p>
<p>Improving health outcomes through patient education and partnerships with patients.</p>	<p>Paterick, T., Patel, N., Tajik, J., &amp; Chandras, K.</p>	<p><i>Baylor University Medical Center Proceedings</i> (2017). 30(1), 112-113.</p>	<p>The article describes the provider/patient relationship as it relates to communication and patient education through the development of partnerships that</p>	<p>The significance of the article is the relation between bedside time, communication, and a reciprocal relationship for the patient to address misunderstanding. Patients that are given the</p>	<p>VI</p>

			evaluate health literacy and meet the needs of patients related to patient education needs.	opportunity to verbalize back patient education and communicate misunderstanding have better patient outcomes.	
Capitated payments to primary care providers and the delivery of patient education.	Pearson, W. S., King, D. E., & Richards, C.	<i>JABFM</i> , (2013). 26(4), 350-355. doi: 10.3122/jabfm.2013.04.120301.	This study analyzed the effects of patient education and readmission rates and the relationship with cost.	The significance of this study includes data on the effectiveness of patient education and the increase in readmission rates for providers if education is not completed. Patient education is known to create patient understanding and how to care for themselves at home including preventative care.	V
A systematic review of interventions to improve adherence to diabetes medications	Schoenthaler, A., & Cuffee, V.	<i>JCOM</i> , (2013). 20(11), 494-506.	The systematic review analyzed teach-back and its evaluation of the patient-practitioner interaction and if	The relevance of the review analyzed if adherence to diabetic medications was affected positively	I

within the patient-practitioner interaction.			it created adherence to diabetic medications.	in patients with the use of a teach-back methodology teaching method. It was noted that the method assisted with adherence.	
Provider document of a patient education: A lean investigation.	Shipman, J. P., Lake, E. W., VanDer Volgen, J., & Doman, D.	<i>Journal of Medical Library Association</i> , (2016). 104(2), 154-159. <i>doi: 10.3163/1536-5050.104.2.012</i>	This study evaluated patient documentation of the evaluation of patient knowledge in a healthcare setting.	The significance of the study indicated that documentation on patient understanding and the affect in the healthcare setting.	III
Improving health literacy: New American Thoracic guidelines for patient education materials.	Slatore, C., Kulkarni, H., Corn, J., & Sockrider, M.	<i>Annals of the American Thoracic Society</i> ,(2016). 13(8), 1208-1211. <i>doi: 10.1513/AnnalsATS.201605-337OT</i>	The review provides guidelines for patient education materials and the guidelines for improving patient comprehension and health literacy.	The review analyzed tailored communication methods to increase patient knowledge of instructions. The review studied health literacy and the teach-back method that improved patient health literacy.	I
The Iowa Model.	Steelman, V.	<i>AORN Journal</i> , (2016). 103(1), 5-7. <i>doi: 10.7257/1053-816x2013.33.6.267</i>	This article discusses the Iowa Model for providing an	The significance of this article is to discuss the steps of the Iowa Model	VII

			evidence-based method into a healthcare setting.	and its use to improve a need in the healthcare setting.	
Teach-back for quality education and patient safety.	Tamura-Lis, W.	<i>Urological Nursing</i> , (2013). 33(6), 267-271. <i>doi: 10.7257/1053-816x.2013.33.6.267</i>	This study assessed teach-back methodology in a urological clinic and how it is used to improve patient education.	The study is significant because it researches the teach-back methodology and teaches why the methodology should be used, how it should be used, and who should use teach-back. The article assesses positive patient knowledge in the clinic after teach-back is used.	IV
Is teach-back associated with knowledge retention and hospital readmission in hospitalized heart failure patients?	White, M., Garbez, R., Maureen, C., & Brinker, E.	<i>Journal of Cardiovascular Nursing</i> , (2013). 28(2), 137-142. <i>doi: 10.1097/JCN.ob013c31824987bd</i>	This study is a cohort study that assessed teach-back methodology for heart failure patients. Patients that were given teach-back were called seven days later to	The significance of the study includes patients that were able to recall up to 75% of the information after seven days after discharge.	IV

			recall what was taught to them prior to discharge.		
--	--	--	--	--	--

## Appendix B: Scholarly Project Goals and Objectives

### Goal:

1. Appraise The Joint Commission Standards (TJC) for Ambulatory Care related to urgent care clinics for patient education. (DNP Essential II & V).

### Objectives:

1.1 Compare patient education in the local urgent care clinic with TJC standards by the end of May 2017.

1.2 Distinguish one evidence-based strategy to assist in complying with TJC standards by the beginning of April 2017.

### Goal:

2. Appraise the organization for patient education methods (AONE domain 5, DNP Essential I, II, & VI).

2.1 Identify the process for patient education in the clinic by May 2017.

2.2 Determine how nurses provide education to the patient by assessing chart reviews to evaluate steps taken to assess patient understanding of patient education by May 2017.

### Goal:

3. Develop evidence-based practice educational model approach to improve patient education and improve patient satisfaction (AONE domain 2, 3 & 4, DNP Essential I, II, IV, VI, VII, VIII).

4.1 Schedule and attend an educational conference with a focus on leadership to develop leadership skills and strategies to educate providers in the practice educational model in the local clinic by June 2017.

4.2 Devise the education process model for volunteer nurses in the local clinic at various times

providing lunch and learn sessions by July 2017.

4.4 Evaluate patient satisfaction scores after initiation of the teach-back method using the BPSS patient satisfaction survey system one month after the initiation of the teach-back method.

4.5 Disseminate the comparison data of patient satisfaction scores prior to and after the initiation of the teach-back method.

## Appendix C: Permission to use the IOWA Model (2015)

Kimberly Jordan - University of Iowa Hospitals and Clinics <noreply@qualtrics-survey.com>

Reply all

Mon 2/6, 5:24 PM

Payne, Candi Marie

Action Items

**Liberty University**

You have permission, as requested today, to review/use *The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care (Iowa Model)*. Click the link below to open.

Copyright will be retained by The University of Iowa Hospitals and Clinics.

**Permission is not granted for placing the Iowa Model on the internet.**

**[The Iowa Model - 2015](#)**

Citation: The Iowa Model Collaborative. (In press). *The Iowa Model Revised: Development and validation. Worldviews on Evidence-Based Nursing.*

In written material, please add the following statement:

- *Used/Reprinted with permission from the University of Iowa Hospitals and Clinics. Copyright 2015. For permission to use or reproduce, please contact the University of Iowa Hospitals and Clinics at (319)384-9098.*

If you have questions, please contact Kimberly Jordan at 319-384-9098 or kimberly-jordan@uiowa.edu.

Appendix D: Letter of Permission



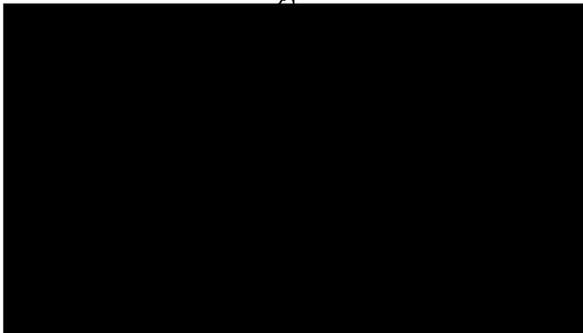
February 25, 2017

To whom it may concern:

I am the Regional Manager for [REDACTED] Healthcare. I am writing this letter on behalf of [REDACTED], the DNP candidate's preceptor. I understand that Candi M. Payne is a DNP candidate and is planning to complete her final requirements for the DNP degree at [REDACTED] Healthcare Urgent Care. Ms. Payne has explained that she will be designing, implementing, and evaluating an evidence-based intervention using the "Teach-Back Method" in the Urgent Care Clinic setting as a pilot study. I understand that this project is not a research study. Ms. Payne also explained that information and data usage from the clinic would remain confidential without naming patients or using identifiers in the scholarly project. Ms. Payne also told that she would keep [REDACTED] Healthcare and its employee's names confidential in the scholarly project. I am writing and signing this letter to support Candi Payne in her endeavor in the scholarly project for Liberty University.

Thank you in advance for allowing this student to complete the project in our facility. If you have any questions, please feel free to contact me at [REDACTED] or email [REDACTED]

Sincerely,



## Appendix E: Urgent Care Patient Survey Questionnaire

### **The 7 Categories in the Patient Survey:**

1. Provider Interpersonal Skills and Communication
2. Nursing Interpersonal Skills and Communication
3. Patient Safety
4. Patient-Centered Care
5. Comfort/Facility
6. Overall Patient Experience

### **Category 1- Provider Interpersonal Skills and Communication Patient Questions**

1. My provider explained education in a way that was easily understood
2. My provider provided an opportunity to ensure my comprehension with clinical instructions
3. My provider had a pleasant bedside manner
4. My provider included me in decisions about my treatment plan
5. My provider showed respect for what I had to say
6. My provider spent enough time with me

### **Category 2- Nursing Interpersonal Skills and Communication**

1. My nurse explained education in a way that was easily understood
2. My nurse provided an opportunity to ensure my comprehension with clinical instructions
3. My nurse had a pleasant bedside manner
4. My nurse included me in decisions about my treatment plan
5. My nurse showed respect for what I had to say
6. My provider spend enough time with me

### **Category 3- Patient Safety**

1. I felt safe in this facility
2. I was asked to list all my medications during my visit
3. I was asked to list my allergies to medications during my visit
4. My clinical care team cleaned their hands before touching me

#### **Category 4- Patient-Centered Care**

1. My care team informed me of my treatment options
2. My care team involved my family in decisions about my care
3. My care team listened to me

#### **Category 5- Comfort/Facility**

1. The waiting room was comfortable
2. My treatment area was comfortable
3. My treatment area was clean
4. The bathrooms were clean

#### **Category 6- Overall Patient Experience**

1. I was satisfied with my overall urgent care experience
2. I would recommend this facility to my family and friends
3. I would choose to come to this facility instead of others in the area
4. The urgent care clinic, as a whole, ran smoothly

## Appendix F: CITI Training

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Candi Payne (ID: 5136659)
- **Institution Affiliation:** Liberty University (ID: 2446)
- **Institution Email:** mcleod12@liberty.edu
- **Institution Unit:** Nursing
- **Phone:** 8034861272
  
- **Curriculum Group:** CITI Health Information Privacy and Security (HIPS)
- **Course Learner Group:** CITI Health Information Privacy and Security (HIPS) for Clinical Investigators
- **Stage:** Stage 1 - HIPS
- **Description:** This course for **Clinical Investigators** will satisfy the mandate for basic training in the HIPAA. In addition other modules on keeping your computers, passwords and electronic media safe and secure are included.
  
- **Record ID:** 17528092
- **Completion Date:** 05-Oct-2015
- **Expiration Date:** N/A
- **Minimum Passing:** 80
- **Reported Score\*:** 90

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Basics of Health Privacy (ID: 1417)	05-Oct-2015	14/16 (88%)
Health Privacy Issues for Researchers (ID: 1419)	05-Oct-2015	4/5 (80%)
Basics of Information Security, Part 1 (ID: 1423)	05-Oct-2015	No Quiz
Basics of Information Security, Part 2 (ID: 1424)	05-Oct-2015	5/5 (100%)
Protecting Your Computer (ID: 1425)	05-Oct-2015	8/8 (100%)
Picking and Protecting Passwords (ID: 1449)	05-Oct-2015	7/8 (88%)
Protecting Your Portable Devices (ID: 1427)	05-Oct-2015	5/6 (83%)
Protecting Your Identity (ID: 1428)	05-Oct-2015	7/7 (100%)
Safer Emailing and Messaging: Part 1 (ID: 1429)	05-Oct-2015	No Quiz
Safer Emailing and Messaging: Part 2 (ID: 1430)	05-Oct-2015	14/16 (88%)
Safer Web Surfing (ID: 1431)	05-Oct-2015	6/7 (86%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?kb04a9c33-dc31-4942-8951-591b6ca5f80e-17528092](http://www.citiprogram.org/verify/?kb04a9c33-dc31-4942-8951-591b6ca5f80e-17528092)

### Collaborative Institutional Training Initiative (CITI Program)

Email:

[support@citiprogram.org](mailto:support@citiprogram.org)

Phone:

888-529-5929

Web: <https://www.citiprogram.org>

## Appendix G: Liberty IRB Exemption

**LIBERTY UNIVERSITY**  
INSTITUTIONAL REVIEW BOARD

July 7, 2017

Candi Payne

IRB Application 2927: Teach-Back Methodology to Improve Patient Satisfaction in an Urgent Care Setting

Dear Candi Payne,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.

Your study does not classify as human subjects research because evidence-based practice projects are considered quality improvement activities, which are not considered “research” according to 45 CFR 46.102(d).

Please note that this decision only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination or need assistance in identifying whether possible changes to your protocol would change your application’s status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,



**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**The Graduate School**

**LIBERTY**  
UNIVERSITY.

*Liberty University | Training Champions for Christ since 1971*

## Appendix H: Teach-Back Methodology

### Instructions:

Teach-back should be used with all patients to ensure they understand instructions. Teach-back incorporates patients verbalizing back in their own words the information given to confirm their understanding.

- Use caring voice, attitude, and tone with the patient
- Assess culture and learning needs of the patient
- Use plain language during patient education without using medical terminology
- Implement a teaching plan to meet the needs of the patient
- Once teaching has occurred, state, “I have provided you a lot of information. Can you repeat back to me what I just said to be sure I covered everything?”
- If the patient can teach-back, document what the patient verbalizes
- If the patient is unable to teach back, restate and rephrase then monitor patient’s ability to teach-back
- Document patient understanding in nurses notes

## Appendix I: Teach-Back Educational Outline

- I. Provide Pre-Test on Teach-Back Methodology (3 minutes)
- II. Teach-Back Training
  - A. “Interactive Teach-Back Learning Module” (Iowa Healthcare Collaborative, 2017)
    - 1) Objectives
      - a) Define teach-back and key elements
      - b) Review research on teach-back and improvement in patient understanding
      - c) Apply skills and knowledge to conduct teach-back for patients
    - 2) What is teach-back? (2 minutes)
    - 3) Review teach-back definition and concepts (2 minutes)
    - 4) Teach-back support by research (2 minutes)
      - a) Endorsed by TJC and AHRQ
      - b) Studies demonstrate teach-back’s effectiveness (Iowa Healthcare Collaborative, 2017)
    - 5) When and why should teach-back be used? (2 minutes)
      - a) In any setting and in all situations where nurses want clarification for what is taught or said
      - b) teach-back actively engages patients
      - c) Many factors impact patient’s learning (health literacy, pain, fear ect...)
    - 6) How is teach-back used? (2 minutes)

7) Role play using teach-back with a heart failure scenario (12 minutes)

III. Nurse Teach-Back Session Post-Test and Nursing Perception Survey Evaluation (5 minutes)

- A. Distribute post-test on teach-back methodology
- B. Collect post-test on teach-back methodology
- C. Distribute nursing perception evaluation on teach-back methodology
- D. Collect nursing perception evaluation on teach-back methodology

## Appendix J: Teach-Back Pretest/Posttest

- 1) What percent of patients remember and understand information provided by healthcare employees?
  - a) 100%
  - b) 83%
  - c) 67%
  - d) 51%
- 2) Patients with low literacy have which of the following characteristics?
  - a) They feel no shame when given patient instructions
  - b) They have few barriers to affect their learning
  - c) Low literacy patients can easily be identified upon assessment
  - d) Low literacy patients commonly use coping techniques to hide behind
- 3) When the nurse teaches the patient is it important to do which of the following?
  - a) Use medical terminology
  - b) Talk at a normal pace
  - c) Cover as many concepts as possible during the session
  - d) Check for understanding during the session
- 4) What is the definition of teach-back?
  - a) It is a test of patient's knowledge
  - b) It asks simple "yes" and "no" questions of the patient to evaluate learning
  - c) It uses medical terminology to assure patient understanding
  - d) It checks for patient understanding of the information provided

5) What process does patient education follow?

- a) The Joint Commission process
- b) The nurse educator process
- c) The nursing process
- d) The student process

Answer Key

1) D

2) D

3) D

4) D

5) C

## Appendix K: Nurse Role-Play Scenario

### **Nurse Role Play Practice Using Teach Back**

This is a scenario to help you practice using teach-back methodology. Use this scenario to practice using language that a patient would understand in layman's terminology.

#### **Instructions:**

You will break into groups of two to practice

Each nurse will take turns being the nurse and the patient.

**Instructions for the nurse role:** Read the scenario. The scenario will include medical terminology that a patient may not understand. Try educating the patient using plain language. After you explain the situation using plain language evaluate patient understanding using teach-back.

Sample teach-back questions:

- “I have provided you a lot of information. Can you repeat back to me what I just said to be sure I covered everything?” (Use open-ended questions with the patient)
- Tell me about what you will do when you get home

#### **Scenario:**

The patient has just been diagnosed with hypertension (high blood pressure). The patient has an average blood pressure of 165/92 over the last six visits. To treat the condition, the patient needs to make changes to the diet (eating fewer high fat/high calorie foods and consuming less salt) and start taking medication to control blood pressure. Other steps to teach the patient are to increase physical activity, drink fluids in moderation, and cessation of smoking (if they currently smoke).

**Instructions for the patient role:**

- Did the nurse discuss the instructions in plain terminology for any patient to understand?
- Did the nurse provide an opportunity to teach-back what was learned?
- Were the instructions given teaching 2-3 concepts at a time with teach-back opportunity after chunking 2-3 concept teaching?
- Did the nurse use open-ended questions during the instructions?
- Did the nurse re-teach what was not understood with an opportunity for the patient to verbalize back what was learned?

### Appendix L: Nurse Perception Evaluation

This brief two part survey provides an opportunity for you to share your opinion regarding teach-back methodology. It will take approximately 3 minutes to complete. Your response will be kept confidential and will be used to improve patient satisfaction scores at Colonial Family Practice Urgent Care Clinic. Please complete each question with the best answer that represents you. Place the survey in the box near the door as you leave. Thank you for your participation.

#### **Section 1: About You**

1) Please indicate your age range:

- 20-29
- 30-39
- 40-49
- 50-59
- 60 or older

2) With which gender do you identify?

- Male
- Female

3) How many years have you been a nurse?

- 0-5 years
- 6-10 years
- 11-20 years
- 21-30 years
- 31 years or more

4) Prior to today's lunch and learn session, have you ever used teach-back methodology?

- Yes
- No

### Section 2: Teach-Back Methodology Lunch and Learn Survey

Please circle the number that indicates the extent you feel you have learned from the teach-back methodology lunch and learn session.

**1= Strongly disagree, 2= Disagree, 3= Undecided, 4= Agree, 5= Strongly agree**

1. I can define the teach-back method and key components to effectively use teach-back during patient education	1 2 3 4 5
2. I understand and can explain the value of teach-back to improve patient understanding and satisfaction	1 2 3 4 5
3. I can apply my knowledge and skills to increase my comfort levels when utilizing teach-back with each patient interaction	1 2 3 4 5
4. My confidence in using teach-back has increased after participating in this lunch and learn session	1 2 3 4 5
5. I will use teach-back routinely with my patient teaching after this teaching session	1 2 3 4 5