

2020

## Improving the Patient Experience with Communication

Pauline Adora Salmon  
*Walden University*

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# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Pauline Salmon

has been found to be complete and satisfactory in all respects,  
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Walden University  
2019

Abstract

Improving the Patient Experience with Communication

by

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MS, Walden University, 2011

BS, University of the District of Columbia, 1992

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2020

## Abstract

A quality patient experience is one of the highest priorities for hospitals as patients and families are looking to healthcare providers to meet their demands for quality service. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey measures the extent to which providers effectively communicate pertinent information such as communication about medications. On a 20-bed intermediate care unit, the HCAHPS item scores relating to nurse communication and communication about medicine were inconsistent and, on most occasions, were below the comparison benchmark of the 50th percentile when compared to other like hospitals. The purpose of this quality improvement project guided by the patient-centered care model, needs based theory, and adult learning theory, was to test the impact of an educational module for nurses on best practices for teaching patients about medications. Thirty nurses consented to participate in the teach-back sessions. Results of the pre- and posttest, evaluating the nurses' knowledge and attitude about teach-back, were analyzed using the Wilcoxon Signed Ranks test and findings showed an improvement in knowledge scores ( $z = -2.833$ ,  $p = .005$ ). However, no statistically significant changes occurred in nurse attitudes toward teach-back. A comparison of descriptive HCAHPS scores on communication about medications and nurse communication showed that scores improved from a low of 58% top box to 74% after the teach-back education. These findings indicated that using teach-back could enhance communication about medications. Effectively communicating pertinent health information using teach-back may have significant consequences for nurse-patient-family engagement contributing to positive social change.

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## Dedication

This project is dedicated to each and every nurse who is committed to leading the profession to a future of best practice and to my patients, mentors and colleagues who have taught me and helped me affirm my thinking about leadership and who, themselves, have taken on the challenge of providing leadership to enhance service quality for the populations we serve. I also dedicate this project to my husband, Worthnel, who continues to support me in all my professional pursuits and whose patience and understanding have meant the world to me. Additionally, I would like to thank my daughter Thrifine, grand-daughter Talor, my sisters, brothers, in-laws and church family who have inspired and supported my development as a leader across the professional and community environments. Finally, I dedicate this project to my parents who have passed on. Although neither of them is here to experience the completion of my terminal degree, they were influential in my development as a professional and a leader. For their prayers and unwavering faith in God, I am eternally grateful.

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## Section 1: The Nature of the Project

### **Introduction**

Healthcare organizations have made the patient experience a key organizational priority as an indicator of service quality and value-based care (Agency for Healthcare Research and Quality [AHRQ], 2018). Provider communication, including nurse communication, is an important element of the evidence-based measure of the patient experience according to Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey scores, which are used as measures in value-based care and Medicare reimbursement (AHRQ, 2018). The HCAHPS scores are widely recognized as drivers of performance improvement and are commonly used by healthcare organizations as a method for evaluating the patient's perspective of care during hospitalization. The patient experience is a domain of patient-centered care, one of the six recommendations of the Institute of Medicine (IOM) as the provision of quality care (AHRQ, 2018; IOM, 2001; Newell & Jordan, 2015). The IOM defined quality care as the delivery of care that is safe, effective, timely, efficient, equitable, and patient-centered (IOM, 2001). While the literature indicated that nurse communication is important in the delivery of quality care, the challenges that nurses face at the point of care can contribute to ineffective communication. The competing demands of the workload specifically when attending to complex, high acuity patients and families, technological requirements, protocols, and time constraints all lead to failure in communicating to patients in clear terms key information for safe transition of care and discharge (Weyant, Clukey, Roberts, & Henderson, 2017). When nurses do not take the time to engage patients in their care by

communicating pertinent information, especially about new medication, it may be one reason for the low patient experience scores on these elements of the HCAHPS survey. An aspect of patient-centered care is inviting patients to become involved in their care by communicating pertinent information about their condition and treatment, which includes new medications added to their treatment plan (Kohn, Corrigan & Donaldson, 2000).

Patients' perception of their experience of care is often hampered by communication processes. It is concerning that nurses at the point of care who are key in communicating about new medications prescribed during the patient's hospitalization do not always take the time to assure that the patient really understands all there is to know about that medication. The purpose of this doctoral project was to address this need by providing a structured process that involved educating the nurses on how to teach patients about medications and assuring that the patient truly understands clearly about new medications. A process called *teach-back*, wherein the patient provides the nurse with verbal feedback on the new medication (Klingbeil, & Gibson, 2018; Morony et al., 2018), was defined and implemented on a 20-bed intermediate care nursing unit in an urban community hospital. The idea was that this structured process would provide a means to improve nurse communication, particularly regarding new medications prescribed for patients while they were hospitalized. Thus, the DNP project was a quality improvement (QI) project designed to positively influence the patient's view of the hospital experience by improving the patient's understanding of medications through a teach-back process.

The HCAHPS elements relating to communication about medication have been cited to be problematic nationally with reports of only 35% of patients, when surveyed,

reporting that they knew the side effects of their medications (Association for Patient Experience, 2013). To ensure that patients have the information needed to safely make decisions about new medications they need to know about indications for use and side effects (Gillam, Gillam, Casler, & Cuccio, 2015; Prochnow, Meiers, & Scheckel, 2019). By improving the patient's experience of care during hospitalization, the doctoral project has positive implications for social change.

The idea of social change refers to any significant long-term changes in behavior patterns, value systems, or social organizations that occur over time within the culture and social structure (Dunfey, 2017). This project contributes to positive social change in two ways. The first change is the value of the scholarship that I brought to improving the gap in nursing practice by using evidence-based knowledge and skills. Secondly, a change process that supports nurse-patient-family engagement will have long-term positive consequences on the patient's experience of care, a significant contribution to social change. Recognizing the significance of nurse communication as a valuable element in the patient experience of care will contribute to a culture of patient-centered values and behaviors, which are evidences of quality care.

### **Problem Statement**

The focus of this doctoral project was to address the practice problem of low patient experience scores that are reflected in the nurse communication items on the HCAHPS survey in a 20-bed intermediate care unit (IMCU) of a community hospital in an urban area of Eastern United States. There was a need to address this problem because a retrospective review of the HCAHPS scores from 2017 to 2018 revealed that the

specific HCAHP item scores relating to *nurse communication* were inconsistent and, on most occasions, were below the comparison benchmark of the 50th percentile (90% score, top box) when compared to other like hospitals. Despite multiple interventions aimed at improving the patient experience, the HCAHPS scores on *communication about medications* continued to reflect a gap in practice that was seen in the unit scores, on most occasions at the 1st-3rd percentile rank (23%-44% top box). The top box score is indicated as the most positive response to HCAHPS survey items (HCAHPS, 2019). Furthermore, informal rounding by the charge nurses indicated that there were inconsistencies in the nurses' use of the current communication tools aimed at improving the patient experience.

The doctoral project holds significance in nursing practice as it relates to care provider communication. Ali (2017) pointed out the positive impact of effective communication by care providers that when care providers maintain effective communication, the patient experience is enhanced, complaints are reduced, and nurses' self-confidence is increased. Additionally, effective communication by care providers enhances professional standing, career prospects, job satisfaction, and contributes to stress reduction. Furthermore, effective communication protects patients from potential harm that may arise from misunderstandings, and it can also have a positive effect on staff satisfaction (Ali, 2017; Ryan et al., 2015). Studies have suggested that patients are less likely to remember technological interventions than the communication and human interactions from health professionals and that they judge the quality of their care by these markers (Ali, 2017; Christensen, 2017).

### **Purpose**

The purpose of this project was to address the gap in practice relating to nurse communication and communication about medication as evidenced by low HCAHPS scores well below the comparison benchmark. The need to improve nurse communication and communication about medications, which are important elements of patient-centered care, was to implement effective strategies to improve nurse communication. One evidence-based strategy is the use of the teach-back approach. The teach-back method was demonstrated to be an effective strategy for improving staff-patient-family communication in a study by Klingbeil and Gibson (2018) that involved 300 multidisciplinary staff at a 290-bed magnet designated Midwest healthcare organization. The staff participated in a brief educational intervention on the impact of low health literacy and the use of teach-back for patient education. The purpose of the study was to examine the impact of the educational intervention on the staff's knowledge of health literacy and the use of teach-back during patient education. The findings indicated that both nurses and nonnurses demonstrated increased knowledge of the teach-back process, and also reported high rates of using the teach-back process to clarify information and misunderstandings during patient and family education. The study further indicated that the clarifications were often about medications and skill-based treatments.

The intended setting for the doctoral project was a 20-bed IMCU in a community hospital in an urban area of Eastern United States. Bedside nurses are at the point of care and serve in primary roles of communicating information about the patient's disease process and treatment such as medications, as well as pertinent information that patients



report as being important to them. Nurses also work in a high acuity, dynamic setting with multiple competing tasks that create barriers to effective communication and negatively impact the current initiatives aimed at improving the patient experience. A difficulty in the study setting was the lack of nurse-patient engagement noted in the fragmented way information was delivered to the patient that did not reflect safe, efficient, cost effective care, which are evidences of patient-centered care. The gap-in-practice the setting was experiencing became evident when the nurses performed required tasks like completing the discharge checklist or administering medications. They dutifully made sure that the form was completed without assuring that the patient truly understood the discharge instructions or the medications they were administering. The nurses assured the patient identification was checked and the bar code scanned but may not have confirmed the patient's understanding of medication side effects or what to expect from the medication. Thus, the practice-focused question was: On a 20-bed IMCU, will there be an increase in nurse communication and communication about medication scores on the HCAHPS survey by implementing an intervention that standardizes the teach-back method for medication administration?

In order to best address and improve the scores on the nurse communication and communication about medications domains of the HCAHPS survey, close the practice gap, and best meet patients' needs, one strategy was to standardize the use of teach-back, an evidence-based practice for patient education (Association for Patient Experience, 2019; Baduczewski et al., 2017; Centrella-Nigro & Alexander, 2017). Informal rounding by the charge nurses indicated inconsistencies in the deliveries of the current initiatives

aimed at improving patient experience. To ensure patient safety, it was important to engage nurses in a new way to provide medication education. It was essential for patients to know about the indications and side effects of each new medication. To reiterate, the guiding practice-focused question for this QI project was: On a 20-bed IMCU, will there be an increase in nurse communication and communication about medications scores on the HCAHPS survey by implementing an intervention that standardizes the teach-back method for medication administration?

### **Nature of the Doctoral Project**

The focus of this QI doctoral project was to address the practice problem of low patient experience scores that were reflected in the nurse communication elements of the HCAHPS survey in a 20-bed IMCU of a community hospital in an urban area of Eastern United States. There was a need to address this problem because a retrospective review of the HCAHPS scores from 2017 to 2018 revealed that the scores relating to nurse communication were inconsistent and, on most occasions, were below the hospital benchmark of the 50th percentile (90% score, top box). The top box score is indicated as the most positive response to HCAHPS survey items (HCAHPS, 2019). Furthermore, informal rounding by the charge nurses indicated that there were irregularities in the staff use of the current communication tools aimed at improving the patient experience

A key intervention of the QI project included an educational program for the nursing staff members on how to properly conduct a teach-back process as this deficit was already identified as a root cause of the communication problem. Nurses may provide information about new medications, but they were not assuring that the patient

actually understood the medication and its key side effects. The source of evidence that was used to determine the effectiveness of the educational intervention was by analysis of the hospital HCAHPS scores as well as the patient experience feedback obtained during the charge nurse rounding documented on the rounding sheet. The DNP project was a QI project with an educational intervention to address an overall goal of improving the patient's experience with nurse communication strategies. A quantitative approach was applied for data collection and analysis. Data generated from educational intervention, that is, pre- and posttests on nurses' knowledge, beliefs, and attitude about the teach-back process, provided some insight that the educational intervention created a change in knowledge, beliefs, and attitudes among the nurses towards communication about medications. The data collected by the charge nurses in routine rounding and data from the HCAHPS survey was tabulated by the QI team, de-identified, and provided to me in the aggregate as the DNP QI project team facilitator for secondary analyses. The charge nurse log data was helpful in determining if the teach-back process was actually being used in daily practice. Accessing the HCAHPS scores on a monthly basis was required. The primary drivers of the project that were monitored were nurse education and patient education. The process measure was 100% of the nurses on the IMCU would receive education on the teach-back package. The goal was that 100% of the nurses would complete the teach-back education by demonstrating one teach-back interchange with a patient while being observed by the patient education coordinator. Secondly, the patient education aspect was monitored by reviewing the charge nurse's documentation on the

charge nurse log that the patient received teach-back education and printed material on new medications.

### **Significance**

Addressing the gap in practice regarding nurse communication and communication about medications presented an opportunity to improve the patient experience through a nurse's connectedness to the patient and family. In the nurse's role, nurse-patient communication is a two-way, interactive process that may occur through a variety of methods. For the patient to make sense of the hospital experience and become engaged in their care, effective communication between the nurse and patient occurs when the sender of the message communicates in a way that conveys the intent of the message, resulting in the creation of a shared meaning between both the parties (Newell & Jordan, 2015; Boykins, 2014). When nurses engage in caring, patient-centered communication, the care is provided in a respectful manner that assures open and ongoing sharing of useful information as well as supports and encourages the participation of patients and their families (Newell & Jordan, 2015; George, Rahmatinick & Ramos, 2018).

This doctoral project has potential contributions to nursing practice involving stakeholders such as the bedside nursing staff, patients, and patient families. The implications resulting from this project impact other stakeholders such as nurse leaders and persons from other disciplines who are involved in patient care directly or indirectly. An opportunity exists for the focus on patient-centered care, which is a component of quality care. The Joint Commission (2018), in their standards for accrediting hospitals,

address the importance of hospitals integrating concepts from the field of communication, cultural competence, and patient- and family-centered care as essential components of safe quality care. A key concept in understating the patient-centered care model requires that patients become involved in their own care. Caregivers follow this mandate by communicating information about their condition, treatment, and technologies used in their care (Kohn et al., 2000; Wolf, Bailey, & Keeley, 2014). Current evidence continues to support the guidelines for patient engagement. For example, it is widely known that patient engagement provides a method to meeting the Triple Aim which is to improve health outcomes, to provide better patient care, and to lower healthcare cost (White, Dudley-Brown, & Terhaar, 2016). The concept of therapeutic reciprocity can be applied to patient-centered care, which informs that therapeutic reciprocity involves sharing of thoughts and feelings between nurse and patient where learning and shared meaning occurs (Marino, 2017). The teach-back approach has been used as an effective method of assessing patients' understanding and is also useful in checking nurses' capacity to communicate (Ali, 2018).

The idea of social change refers to any significant long-term changes in behavior patterns, value systems, or social organizations that occur over time within the culture and social structure (Dunfey, 2017). This project contributes to positive social change in two ways. The first change is the value of the scholarship that I brought to improving the gap in practice in the use of evidence-based knowledge and skills. Secondly, a change process that supports nurse-patient-family engagement will have long-term positive

consequences on the patient's experience of care, a significant contribution to social change.

To be effective in meeting the challenges of changes to provide quality, cost-effective care in the practice setting and to prepare and empower future nurses to meet the challenges, DNP nurses must be prepared with the scholarship to be leaders in advancing and sustaining change in various practice settings. The concept of scholarship as defined by the American Association of College of Nursing (AACN, 2018) is enabling best practice in research, teaching, and practice of nursing through evidence-based guidelines that supports the value of the profession, has social relevance, and represents scientific advancement. Incorporating evidence-based guidance for clinical decisions in the practice setting is important in providing safe quality care and best outcomes for patients (Jeffs, Beswick, Lo, Campbell, Ferris, & Sidani, 2013).

Improving patient engagement in care is an important aspect in creating positive social change. Studies have indicated that patients who are engaged in their care have better health outcomes and decrease healthcare cost, an indicator of quality healthcare (White et al., 2016). According to White et al. (2016), the American Institute for Research framework for enhancing patient engagement presents evidence-based interventions to increase patient engagement. For example, the first level of the framework focuses on direct patient care and informs the evidence-based interventions (Irizarry, Dabbs, & Curran, 2015).

## Summary

The patient experience is significant to the provision of patient-centered care, a component of safe, quality care (IOM, 2001). Nursing communication is an essential element of the HCAHPS score, which is an evidenced-based measure of the patient experience (AHRQ, 2018). An analysis of the HCAHPS scores identified a gap in nursing practice relating to the nurse communication and communication about medication elements. Utilizing teach-back as an intervention may be an effective communication strategy to engage the nurse, patient, and patient's family. The ability of the nurse to engage in caring, respectful, patient-centered communication assures open and ongoing communication and sharing of useful information (George et al., 2018; Newell, & Jordan, 2015). The successful implementation of the project may have potential implications for social change by improving patient engagement in care. Studies have indicated that patients who are engaged in their care have better health outcomes and decreased healthcare cost an indicator of quality healthcare (White et al., 2016). In the next section of the project I discuss the background of the problem, concepts, models and theories applied, relevance to nursing practice, local background and context, role of the DNP student, and role of the project team.

## Section 2: Background and Context

### **Introduction**

The focus of this doctoral project was on addressing the practice problem of low patient experience scores that were reflected in the nurse communication items on the HCAHPS survey in a 20-bed IMCU of a community hospital in an urban area of Eastern United States. Because the patient experience is important as a measure of the quality and value of care provided to patients, I performed a retrospective review of the HCAHPS scores from 2017 to 2018. The result revealed that there was a gap in practice regarding specific HCAHP item scores relating to nurse communication, which were inconsistent and on most occasions fell below the comparison benchmark of the 50th percentile (90% score, top box) when compared to other like hospitals. Despite multiple interventions aimed at improving the patient experience, the HCAHPS scores on communication about medications continued to reflect a gap in practice that was seen in the unit scores, on most occasions at the 1st-3rd percentile rank (23%-44% top box). The top box score is indicated as the most positive response to HCAHPS survey items (HCAHPS, 2019). Furthermore, informal rounding by the charge nurses indicated that there were variabilities in the way nurses communicated important information to patients, including when performing the education about their new medications. Nurses did not take the time to explain the pertinent information about patients' new medications nor seek to determine if the patients understood what was taught. Hence, in this paper I sought to address the following practice-focused question: On a 20-bed IMCU, will there be an increase in nurse communication and communication about medications scores on the



HCAHPS survey by implementing an intervention that standardizes the teach-back process for medication administration?

The purpose of this project was to address the gap-in-practice relating to nurse communication and communication about medications as evidenced by HCAHPS scores well below the comparison benchmark. The need to improve nurse communication and communication about medications, which are important elements of patient-centered care, was addressed by implementing effective strategies to improve nurse communication. One evidence-based strategy was the use of the teach-back approach. The setting for the doctoral project was a 20-bed IMCU in a community hospital in an urban area of Eastern United States. Bedside nurses are at the point of care and serve in primary roles of communicating information about the patient's disease process and treatment such as medications, as well as pertinent information that patients report as being important to them. Nurses also work in a high acuity, dynamic setting with multiple competing tasks that created barriers to effective communication and negatively impacted the current initiatives aimed at improving the patient experience. Furthermore, another difficulty in such a setting was the lack of nurse-patient engagement as noted in the fragmented way information was delivered to the patient, which did not reflect safe, efficient, cost effective care that are evidences of patient-centered care.

In this section I outline and describe the concepts, models, and theories related to nurse communication, the teach-back method, patient engagement, and patient-centered care. Additionally, I discuss the relevance of these concepts and the local background and

context. Furthermore, I explain my role as DNP student as well as the role of the project team, followed by a summary of the section.

### **Concepts, Models, and Theories**

The importance of theories in nursing research is well documented in the literature (Algase, 2009; Gray, Grove & Sutherland, 2017; McEwen & Wills, 2014). Theories and models are derived from concepts that can be empirical or concrete ideas of an object, property, or event. Theories, concepts, and models are beneficial and useful in nursing in offering structure and organization to nursing knowledge and providing a systematic means of collecting data to describe, explain, and predict nursing practice (McEwen & Wills, 2014). Furthermore, theories and models facilitate more overtly purposeful nursing practice by stating not only the focus of practice, but also specific goals and outcomes leading to coordinated and less fragmented care (Gray et al., 2017). In guiding the development of the project, various concepts, theories, and models provided a systematic descriptive, explanatory, and predictive view of improving the patient experience with communication. I explore nurse communication, teach-back, patient engagement and patient centered care, and the Define, Measure, Analyze, Improve, and Control (DMAIC) process improvement model.

### **Nurse Communication**

McEwen, and Wills (2014) described the nursing theorist Henderson's explanation that nursing uses a logical scientific approach to problem solving that results in individualized care. They further explain that the model is holistic, serving 14 needs of the person as a biopsychosocial and spiritual being, and assisting the patient with

essential activities to maintain health, recover from illness to full independence, or achieve a peaceful death (Henderson, 1978, 1991). Using the theorist's description of nursing to provide a wider definitional perspective, nurse communication is viewed as all aspects of the problem-solving (nursing) process, which involves not only skills of verbal communication but also interpersonal dialogic exchanges in which the patient is viewed holistically to achieve the desired health goals (Heath, 2017; Kourkouta & Papathanasiou, 2014).

Nurse-patient communication is described as a two-way, interactive process that may occur through a variety of verbal and nonverbal methods involving the sharing of information in non-technical terms, feedback, listening, asking questions with kindness, demonstrating interest, and promoting a feeling of acceptance, trust, and harmonious relationship (Kourkouta & Papathanasiou, 2014). For the patient to make sense of their hospital experience and become engaged in their own care, effective communication between the nurse and patient occurs when the sender of the message communicates in a way that conveys the intent of their message, resulting in the creation of a shared meaning between both the parties (Newell & Jordan, 2015; Boykins, 2014). When nurses engage in caring, patient-centered communication, the care is provided in a respectful manner that assures open and ongoing sharing of useful information as well as supports and encourages the participation of patients and their families (Newell & Jordan, 2015; George et al., 2018).

George et al. (2018) performed a study that was aimed at improving the nurse-patient communication component on the patient satisfaction score. The initiative was

conducted on a 30-bed IMCU and involved educating all levels of staff on a best practice recommendation for improving nurse communication. These researchers launched a campaign with nursing staff named *Commit to sit* that involved 3-5 minutes of uninterrupted time sitting at the bedside with the patient at the beginning of the shift and engaging them by reviewing their plan of care and escalating any concerns for leadership to address. The result of the study indicated that nurses sitting instead of standing when communicating with patients increased the patient's perception of how well nurses communicate. The impact of the improved patient satisfaction was reflected by improvement in the HCAHPS scores from the preintervention 67.6 (4th percentile) to 87 (90th percentile) postintervention.

As part of a Maryland statewide oral health literacy assessment, Koo, Horowitz, Radice, Wang, and Kleinman (2016) examined nurse practitioner use of communication techniques for the promotion of oral health. The researchers found that using recommended health-literate and patient-centered communication techniques have demonstrated improved health outcomes. The assessment entailed a 27-item self-report survey containing 17 communication technique items that was mailed to 1,410 licensed nurse practitioners. The use of communication techniques and their effectiveness were analyzed using descriptive statistics and the result indicated that 80% of the nurse practitioners routinely use three of the seven basic communication techniques namely *using simple language, limiting teaching to two to three concepts, and speaking slowly*. Two other techniques, *assessing the office for patient-friendliness* and *additional communication training* were found to be effective techniques to increase patient

understanding. The conclusion demonstrated relevance of the need for continuing nursing education to increase emphasis on health-literacy and patient-centered communication techniques for patients' increased understanding. These findings are of value in their application to improving the patient's experience relating to communication using the teach-back approach.

### **Teach-Back Method**

The transfer of clear information is important in the healthcare setting where patients are faced with complex medical conditions and treatment that they need to learn on short notice to safely provide self-care when they are discharged home (AHRQ, 2019; Tamura-Lis, 2013). It is important that nurses ensure that patients understand the important medical information that they are given regarding their diagnosis, treatment, medications, potential problems to watch for, and what to do if problems occur (AHRQ, 2019). One effective strategy for patient education is the teach-back approach. The teach-back method has been described as an effective, evidence-based, patient-centered approach for checking understanding and confirming that the health information was explained in a manner that the patient understood (Tamura-Lis, 2013). Teach-back considers the literacy level of the person being taught and places the responsibility of the education on the health professional to ensure that the patient's learning needs are understood (AHRQ, 2015; Institute of Healthcare Improvement [IHI], 2019b).

The teach-back method for patient education is beneficial for several reasons. When patients seek care for a medical condition, it is important that patients are able to explain in their words the diagnosis or health condition for which they need care; the

name, type and general nature of the treatment, service or procedure; potential problems to watch for and what to do if they occur. Additionally, studies have indicated that one of 11 top patient safety practices is asking patients to recall and restate what they have been told (Tamura-Lis, 2013). Furthermore, teach-back minimizes the risk of patients misunderstanding critical information in the clinical setting (APS, 2013; Tamura-Lis, 2013 ). The following three studies support the use of teach-back to promote patient-centered communication, effectiveness in improving HCAHPS scores, and also demonstrates a broad spectrum of positive healthcare outcomes.

Baduczewski et al. (2017) utilized the teach-back method in a pediatric setting to determine the relationship between teach-back and patient-centered communication in primary pediatric encounters and found that standardizing teach-back use may strengthen patient-centered communication. The objective of the project was to propose and test a theoretical framework for how use of teach-back could influence communication during the pediatric clinical encounter. The Roter Interaction Analysis System was used to measure patient-centered communication and affective engagement of the patient. A newly created teach-back loop score measured the extent to which teach-back occurred during the clinical encounter. Additionally, parental health literacy was measured using the Newest Vital Sign health literacy instrument. Logistic regression was used to test the relationship between teach-back and features of communication. Focus groups held separately with clinicians and parents elicited perceptions of teach-back usefulness. The result indicated that teach-back was used in 39% of encounters and the visits with teach-back had more patient-centered communication ( $p = 0.01$ ). When adjusting for parent

health literacy, parent age, and child age, teach-back was found to increase the odds of both patient-centered communication and parent engagement. That is, teach-back was associated with more patient-centered communication and increased affective engagement of parents. Furthermore, the conclusion indicated that standardizing teach-back use may strengthen patient centered communication.

To address the *communication about medications* domain of the HCAHPS survey to better meet the patient's needs, the Santa Barbara Cottage Hospital, California introduced the use of teach-back for patient education (Association for Patient Experience, 2014). The program was piloted on their cardiac telemetry unit to determine the efficacy and practicality prior to the implementation hospital-wide. The aim was to create a program that would guarantee consistent and effective communication of new medications and side effects to all the patients. An additional goal was to assure that 100% of the nursing staff were educated on the teach-back program. The overall outcome was the assurance that the patients were knowledgeable about their new medications and two to three side effects associated with the medication. With the emphasis on medication education another expected outcome was the impact on the HCAHPS scores to demonstrate a greater than 65% percentile rank for the medication domain. The result of the study demonstrated that there was a positive impact on the HCAHPS scores of the cardiac telemetry unit with an improvement from 11<sup>th</sup> percentile (56% top box), as indicated by data in July 2012, to the 82<sup>nd</sup> percentile (69% top box) in the fourth quarter of 2013. The Medical-Surgical units also demonstrated improvement indicated by data

increasing from the 47<sup>th</sup> percentile in the first quarter of 2013 (62% top box) to a 62<sup>nd</sup> percentile in the fourth quarter of 2013 (65% top box).

A systematic review was performed examining the effectiveness of the teach-back method on adherence and self-management in health education for people with chronic diseases (Ha Dinh, Bonner, Clark, Ramsbotham & Hines, 2016). Using a quality appraisal methodology and meta-analysis, 21 articles were reviewed. Of these, 12 papers met the inclusion criteria. There were four studies which confirmed improved disease-specific knowledge in the intervention participants and one study showed a statistically significant improvement in adherence to medication and diet among type 2 diabetes patients in the intervention group compared to the control group ( $p < 0.001$ ). There were two studies which demonstrated statistically significant improvement in self-efficacy ( $p = 0.0026$  and  $p < 0,001$ ) in the intervention group. One study examined quality of life in the heart failure patients, but the result did not improve from the intervention ( $p = 0.59$ ). Also, there were five studies that found a reduction in readmission rates and hospitalizations, but these were not always statistically significant. Two studies showed improvement in daily weighing among heart failure participants, and in adherence to diet, exercise, and foot care among those with type 2 diabetes. The conclusion of the meta-analysis indicated that the teach-back method had an overall positive impact on a wide range of healthcare outcomes although noted not to be always statistically significant.

### **Patient Engagement and Patient-Centered Care**

The idea of patient engagement is focused on involving patients and family in their care. Newell and Jordan (2015) indicated that patient-centered care has the



following characteristics: being respectful and responsive to individual patient preferences, needs and values, and allowing patients' input in decision making by ensuring that patients' values guide all decision making.

Patient-centered care has been introduced as one of the six recommendations of the IOM as the provision of quality care (AHRQ, 2018; IOM, 2001; Newell & Jordan, 2015). The IOM defines quality care as care that is safe, effective, timely, efficient, equitable and patient-centered (IOM, 2001). An aspect of patient-centered care is inviting patients to become involved in their care by communicating pertinent information about their condition and treatment which includes new medications added to their treatment plan (Kohn et al., 2000).

Nurse -patient relationships perceived as being positive along with other organizational factors contribute to quality patient care. In a qualitative study using a hermeneutic phenomenological approach, McCabe (2004) aimed to explore and produce statements relating to patients' experience of how nurses communicate. Using purposeful sampling in the selection of eight patients in a general teaching hospital in the Republic of Ireland, data were collected using unstructured interviews. Data analysis occurred as a reflective process, and findings presented through the description and interpretation of themes and sub-themes. The data analysis presented four themes which included "lack of communication," "attending," "empathy" and "friendly nurses." The findings of the study indicated that in contrast to the literature which suggests that nurses were not good at communicating with patients, nurses can communicate well with patients when they use a patient-centered approach. Additional findings revealed that more focus is required by

healthcare organizations to recognize the value of nurses using a patient-centered approach when communicating with patients to ensure the delivery of quality patient care. The study further conveyed the relevance to clinical practice with the findings that task-centered approach to patient care associated with nursing in the past is still active in the workplace today. Hence to ensure that patients receive quality nursing care, it is imperative that the healthcare management team members consider patient-centered communication to be of high priority and support nurses to communicate in this manner.

The emphasis on patient engagement and patient-centered care is evident in the interactions between nurses and patients during medication activities in the acute care hospital setting. In a qualitative observational and interview study, Bolster and Manias (2010) with an underlying philosophy of patient-centered care aimed to examine how nurses and patients interact with each other during medication activities in an acute care environment. In the study, 11 nurses with varying levels of experience were recruited to participate in observations and interviews. The inclusion criteria for the participating nurses were that they were employed on the study ward in a role that incorporated direct patient care, including medication activities. A stratified sampling technique ensured that nurses with a range of years of clinical experience were represented. Patients who were being cared for by participating nurses during the observation period were recruited to participate unless they met the following exclusion criteria which were those less than 18 years of age, non-English speaking patients, and those who were unable to give informed consent. There were 25 patients who were observed and 16 of those agreed to be interviewed. The findings demonstrated three major themes which revealed the nature of

person-centered care which included: provision of individualized care, patient participation, and contextual barriers to providing person centered care. While the participating nurses valued a person-centered approach and perceived that they were conducting medication activities in a person-centered way, some nurse-patient interactions during medication activities were centered on routines rather than individualized patient assessment and management. These interactions were based on nurses' perceptions of what was important for the patient and did not provide opportunities for patient participation. There were two main contextual barriers in relation to a person-centered approach to medication activities which were identified as multidisciplinary communication and time constraints. The conclusion indicated that while some nurse-patient interactions during medication activities were consistent with the principles of person-centered care, the study results highlighted factors that influence the nature of these interactions and identified opportunities to improve nursing practice. To ensure person-centered care is applied to medication activities, nurses should undertake ongoing assessment of patients' needs in relation to their medications and encourage opportunities for increased patient participation.

### **The Six Sigma Design, Measure, Analyze, Improve, and Control Process**

#### **Improvement Model**

The Six Sigma DMAIC Process Improvement Model is an evidence-based model for QI. The data-driven improvement cycle Define, Measure, Analyze, Improve and Control (DMAIC) model involves the use of statistics and data collection for improving, optimizing and stabilizing business processes and designs to enhance quality of care in

organizations (Yu & Ueng, 2012; Joshi, Ransom, Nash, & Ransom, 2014). The DMAIC QI model has been used successfully by industries such as General Electric, Boeing, Toshiba, and others aimed at reducing defects (White et al., 2016). The DMAIC model has also been used in the healthcare setting successfully in reducing falls, medication errors, cycle time through radiology, ED waiting times as well as many other areas of improvement (White et al., 2016).

Yu and Ueng (2012) as well as American Society for Quality (ASQ) (2019) provided further insight into the five phases of the DMAIC model. The first phase of the process is the Define phase where the problem is identified and defined, the project goals are delineated, the project charter defining the project focus, scope and direction and motivation for the improvement team will be outlined. Following the define phase is the Measure phase, where process performance is measured using tools such as a process map for recording the activities performed as part of a process, capability analysis to assess the ability of the process to meet specifications and Pareto Charts to further explore the problem. The third phase is Analyze, involves analysis of the root cause or causes of the problem or variations in the process which may contribute to poor performance. Tools which are employed in this phase may, include root cause analysis to expose causes, failure mode and effects analysis to identify possible products, service and process failure, various tools and charts to detect different types of variations within a process. The Improve phase follows the process described in the Analyze phase has been completed. The related elements will then be identified more clearly so that concrete performance improvement initiatives may be instituted to address the variance. In the

final phase the Control, there is an evaluation of whether the improvements had the intended effectiveness. If the interventions did not achieve the intended goal the design of new countermeasures would be considered. Conversely, if the performance improvement was achieved, revisions of standard operating processes and related documents to keep the improved process at the improved level would be employed.

The DMAIC methodology describes a process of improving quality of care by reducing defects such as variations in practice that have been found to impact negatively on performance and subsequently the patient experience (White et al., 2016). In considering the various translation methodologies and ways to approach the DNP project the DMAIC framework has demonstrated characteristics fitting for solving the variations in practice relating to the *nurse communication* and *communication about medications* HCAHPS survey. The DMAIC methodology will be of value in solving the HCAHPS problem by providing a framework for problem solving and process improvement, that is defining the problem, scope of the project, formulating objectives, identifying team members and to determine key process indicators for measurement. Additionally, the focus on the use of statistical tools to identify and correct gap in practice or the root cause of variations in practice will be beneficial in supporting the quantitative design of my project.

In applying the DMAIC process improvement to the project, the DNP student will collaborate with the QI team through the 5 phases. In the Define phase the focus will be on identifying and clearly defining the problem, establishing project goals, creating the focus, scope, direction and motivation for the improvement team. Since this is a process

improvement project it is important to first understand the patients' needs and transferring the needs into specific services that are critical to quality care. The DMAIC methodology is data driven, hence, quantitative data in the form of the HCAHPS scores and the charge nurse rounding log depict the voice of the patients relating to the domains of *nurse communication* and *communication about medication*. The voice of the patient offers feedback which is important to value-based care. It is the expectation that nurses on the IMCU will always meet or exceed the hospital benchmark of 50<sup>th</sup> percentile score on the HCAHPS survey. The second phase will entail measuring the patient experience scores and using graphs to track performance. In the Analyze phase, the QI team will consider a Root Cause Analysis (RCA) with the goal of reducing variation in practice by addressing the root causes. Inadequate communication about new medications has been identified as one root cause of the low HCAHPS scores. Facilitating the teach-back nurses professional improvement intervention is an attempt to close the gap in practice regarding nurse communication. Thus, in the Improve phase, I expect to see a measurable improvement in the HCAHPS scores as a result of the teach-back education and implementation. In the Control phase the QI team will assure that the improvement noted in the Improve phase is sustained over time. This may occur outside of the scope of the DNP project. Additionally, to determine formative and summative evaluation of the intervention effectiveness on the patient experience, continuing performance will be monitored using the HCAHPS score and data from the charge nurse rounding log.

### **Relevance to Nursing Practice**

The emphasis on the patient experience, a domain of patient-centered care, commenced in the 1990s with the IOM's mandate to improve healthcare quality in America (IOM, 2000). In 1999 with the release of the IOM recommendations for a safer healthcare, patient-centered care was delineated one of the six recommendations of providing quality care (AHRQ, 2018; IOM, 2001; Newell & Jordan, 2015). The efforts to improve patient outcomes and control healthcare costs have led to the expansion of the patient centered care movement which has been accepted by all levels of the healthcare system including government, healthcare leaders and major healthcare plans (Capko, 2014). With a focus on patient-centered care, new payment models have been designed for physician and hospital reimbursement based on clinical outcomes and patient satisfaction (Capko, 2014). In order to achieve the outcomes, great importance has been placed on the patient and provider communication during their visit. Capko (2014) specifically emphasized the aspects of how well providers communicate and engage patients, whether patients are given choices and are allowed in decision making, as well as focusing on the building of good provider-patient relationship.

The movement for enhancing the patient experience commenced in 1992 when the Institute of Patient and Family Centered Care established four guiding principles for Patient and Family Centered Care (PFCC) which are dignity and respect, information sharing, participation, and collaboration. Furthermore, the IOM defined patient and family engagement as "Providing care that is respectful of, and responsive to, individual patient preferences, needs, and values; and ensuring that patient values guide all

decisions” (Christensen, 2017). These principles affirm the patient’s need for care that makes them feel the human connectedness of patient and provider (Christensen, 2017).

Advocates of the patient-centered care movement such as the Robert Wood Johnson Foundation (RWJF) and the IHI have conducted national initiatives to transform work processes at the bedside with a goal to enhance direct care and value-added care (Dearmon et al., 2013). Dearmon et al. (2013) designed a study aimed at examining the effectiveness of the transforming care initiative over traditional care in improving staff engagement, direct care and value-added care. The assumption of the study was that contemporary healthcare is complex and dynamic, hence, the traditional problem-solving approaches, such as leaders identifying the problem and staff complying with the solution, are no longer effective for the complex problems encountered. Therefore, the hypothesis was that new approaches engaging staff and patient at the point of care were required to resolve the contemporary healthcare problems. The researchers utilized innovative interventions such as hourly rounding, bedside reporting and devices such as the pain board as strategies to promote nurse engagement at the point of care, to change culture, and to transform how nurses care for patients. The results indicated that the control unit which utilized transforming care at the bedside (TCAB) demonstrated positive effects such as a decrease in incremental overtime, and gained in direct care, and value-added care.

The plethora of literature available on the patient experience indicates that the patient experience is an important aspect of today’s healthcare environment. The IHI (2011) identified five primary drivers and secondary drivers that can be implemented



which may lead to improved outcomes in patient-family experiences. Leadership as a primary driver means that governance and executive leaders assure that patient- and family centered care is practiced throughout the organization. Another primary driver is Hearts and Minds, the idea that staff and all providers are fully engaged through respectful partnership with everyone in the organization and all are committed to patient and family centered care. Respectful Partnership informs that every care interaction is anchored in a respectful partnership, anticipating and responding to patient and family needs, for example, physical comfort, emotional, informational, cultural, spiritual, and learning; Reliable Care – the hospital always delivers reliable and quality care; Evidenced-Based Care – the care team instills confidence by providing collaborative, evidence-based care. Communication is significant as secondary drivers in improving patient and family experience of care. Compassionate communication and teamwork are essential competencies indicating that the hearts and minds of staff and providers are fully engaged. Additionally, respectful partnership is reflected in staff and provider communication that uses words and phrases that the patient understands and are effective in meeting their emotional needs. Furthermore, in reliable, the secondary driver indicating patient and family centered care is met when patients state that staff was available to give needed care. Promoting patient-family engagement in their care and the decision-making process through caring communication processes, verbal and interpersonal communication skills have been demonstrated to be effective in improving patient's perspective of care with positive patient experience scores (Baduczewski, et al., 2017; George et al., 2018).

### **Local Background and Context**

Achieving top quartile patient experience is one of the strategic goals in attaining performance excellence for the healthcare institution where the 20-bed Intermediate care is located. The HCHAPS scores are monitored quarterly and are used as performance measurements for QI. Scores are posted on individual units in a visible location and discussed during unit meetings. The reported scores on the *nurse communication* and *communication about medications* elements, depicted performance much lower than the hospital benchmark of 90%. To explore the situation in more detail, frontline nursing staff and unit leadership engaged in discussion on the HCAHPS problem. With the assistance of the unit director who was supportive in the initiative, a unit-based patient experience committee was formed. A needs assessment through staff brainstorming sessions, retrospective review of the HCAHPS scores over a 12-month period, informal review of the charge nurse rounding sheets indicated that there was a gap in nurse communication especially relating to effective communication about new medications. Hence, the patient experience committee launched a QI initiative to improve patients' perceptions of the organization and their experience of care. In response to guidelines by the Joint Commission (TJC) and the Centers for Medicare and Medicaid Services (CMS), for several years the hospital has included medication folders at the patient's bedside and has encouraged the teach-back approach to educate the patients about their new medications, however, there was no standardized tool that would guarantee consistent and effective communication of new medications and side effects.

The strong interest in the assessment of the patient experience of care places the quality and value of care as a priority (AHRQ, 2018; Price et al., 2014; Wang, Zhao, Zeng, 2016). Results of the measures of patient experience are publicly reported and used to drive QI initiatives aimed at improving the patient experience (Price et al. 2014). The publicly reported scores also help consumers to choose among providers and health insurance plans (Price et al., 2014), Furthermore, the HCAHPS survey scores measure of the patient experience is used to determine Medicare reimbursement based on the quality of care provided (AHRQ, 2018). The HCAHPS scores are widely recognized as a drivers of performance improvement and are commonly used by healthcare organizations as a method for evaluating the patient's perspective of care during hospitalization (AHRQ, 2019). Nurse communication and communication about medications are included as two measures of the patient experience on the HCAHPS survey.

### **Role of the Doctor of Nursing Practice Student**

To be effective in meeting the challenges to provide quality, cost effective care in the practice setting, and to prepare and empower future nurses to meet the challenges, DNP nurses as scholar practitioners must be prepared with the scholarship needed to be leaders in advancing and sustaining change in various settings. As a DNP leader with the goal of closing the gap-in-practice relating to *nurse communication* and specifically in relation to *communication about medications*, my role was to present the scholarship required for effective change in practice. According to Boyer (1992) and supported by the AACN (1999) scholarship includes discovery, integration, application and teaching, which involves the communication of unique knowledge generated through multiple

forms of inquiry that informs clinical practice, nursing education, policy, further research and healthcare delivery.

I have worked as a nurse leader in many settings. As a staff nurse and then as manager, and in various other nursing roles over the years, I have noted many patients who did not receive essential education about their medication to safely care for themselves. My role as a DNP student involved implementing a change process using teach-back within an existing evidence-based QI project. This patient-centered method has been found to be effective in improving nurse-patient engagement in communication about medications (Association for Patient Experience, 2013; Association for Patient Experience, 2014; Prochnow et al., 2019; Xu, 2012). Additionally, providing mentoring and educational opportunities for the nurses was an additional role. Furthermore, I collaborated with the project team for data collection, analysis and synthesis of the data. Finally, facilitating dissemination of the results, making recommendations and assisting with planning for the next step are other important roles of the DNP Student.

### **Role of the Project Team**

The DNP QI project team consisted of a subset of members from the patient experience committee (PEC). As the DNP student, I had responsibility for facilitating the meetings of the QI team, conducting the teach-back training for the nursing staff and for collecting the pre and posttest data. Team members included the director, assistant nurse manager, four charge nurses, and a patient education coordinator. The director of the project unit is a key team member whose additional role is Coordinator of Patient Experience for the hospital. As the Coordinator of Patient Experience, she could facilitate

access to the HCAHPS data for use in the project and provide permission for staff education. The assistant nurse manager's role involved compiling the data from the charge nurses rounding tool to be provided to me for secondary analysis. The Charge nurse champions were responsible for overseeing that all the teach-back competencies had been completed and provided de-identified data to the DNP student for analyses.

### **Summary**

In summary, this section addressed the concepts, models and theories which were selected to inform the development of the project. A brief description of the relevance to nursing practice including the history of the broader problem in nursing practice, existing scholarship and research, as well as strategies that have been used to address the gap in practice were explored. Additionally, a concise summary of the local background and context relating to the relevance of the problem which justified the practice-focused question, the role of the DNP student and the project team were discussed. The next section will outline the sources of evidence, and the methodology applied for collection of data with specific attention to the participants, procedures and protection. Finally, a description of the analysis and synthesis procedures used to address the practice focused question will be provided.

### Section 3: Collection and Analysis of Evidence

#### **Introduction**

Nurse communication and communication about medications are established integral elements of the HCAHPS patients' experience of care survey (HCAHPS, 2019). The focus of this doctoral project was to address the practice problem of low patient experience scores that were reflected in the nurse communication items on the HCAHPS survey in a 20-bed IMCU of a community hospital in an urban area of Eastern United States. The purpose of this project was to address the gap in practice relating to nurse communication and communication about medications by implementing a standardized teach-back approach on an inpatient, acute IMCU.

In this section I outline the background and context of the practice problem. This is followed by the practice-focused question and operational definitions of key aspects of the doctoral project. Additionally, I present sources of evidence that I used to address the practice-focused question and clarify the relationship of the evidence to the project purpose and how collection and analysis of the evidence provided the appropriate way to address the practice-focused question. Furthermore, I describe the systems used for recording, tracking, organizing, and analyzing the evidence; provide an outline of the procedures used to assure the integrity of the evidence was maintained; and present analytic procedures used to address the practice focused question. The section concludes with a summary and transition to Section 4.

### **Practice-Focused Question**

Paramount in today's healthcare setting is quality of care, with patient-centered care as an essential component (IOM, 2001). Two patient-centered nurse-sensitive outcomes that are relevant to quality of care are patient satisfaction and patient's knowledge and understanding of health-related information. Patient satisfaction with the experience of care and patients' knowledge and understanding of health-related information are outcomes of concern to nursing as factors that impact the long-term outcome of the patient's quality of life (White et al., 2016). Nurse communication and communication about medications are established integral elements of the HCAHPS patients' experience of care survey (HCAHPS, 2019). The focus of this doctoral project was to address the practice problem of low patient experience scores that were reflected in the nurse communication items on the HCAHPS survey in a 20-bed IMCU of a community hospital in an urban area of Eastern United States. The purpose of this project was to address the gap in practice relating to nurse communication and communication about medications by implementing a standardized teach-back tool on an inpatient, acute IMCU. The gap-in-practice that the setting was experiencing became evident when the nurses performed required tasks like completing the discharge checklist or administering medications. They dutifully made sure that the form was completed without assuring that the patient truly understood the discharge instructions or the medications being administered. Hence, this doctoral project addressed the following practice-focused question: On a 20-bed IMCU, will there be an increase in nurse communication and

communication about medications scores on the HCAHPS survey by implementing an intervention that standardizes the teach-back method for medication administration?

### **Sources of Evidence**

In this section I describe the nature of the data, justify the relevance of the data to the practice problem, describe how the data were originally collected by the organization focusing on overall validity as a source of evidence, and describe the procedure for gaining access to the evidence including permission to access operational data. I applied a quantitative approach for data collection and analysis. I selected the quantitative approach to employ statistical data for descriptions and analysis, which saves time and resources (Daniel, 2016). Because the project was a pilot with a strong case for generalization hospital wide, it was advantageous to collect and analyze data using a scientific method that makes generalization possible (Daniel, 2016). Furthermore, focusing on quantitative data provided the opportunity for me to observe trends in the scores that could be used for QI purposes. This project was a QI project with a continuing education component for nurses' professional development. The overall goal was to improve the patient's experience with nurse communication strategies. Data were collected from nursing staff on the patient experience, de-identified, and provided to me as the DNP QI project team facilitator for secondary analyses.

### **Published Outcomes and Research**

To best inform the educational intervention and develop the content of the DNP project on the impact of nurse communication using the teach-back approach on patient engagement and patient experience of care, I conducted an extensive review of the



literature. I used several databases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and MEDLINE combined search, ERIC and Education source combined, Pubmed, Ovid Journals, Psychology databases, and Google Scholar. Search terms included *patient-centered* or *client -centered* or *person-centered* and *patient satisfaction* and *patient experience*; *patient experience* and *nurse communication*; *patient experience* and *patient engagement*, *patient engagement* and *nurse communication*, *teach-back* and *nurse communication* and *patient experience*, and *HCAHPS* or *Hospital Consumer Assessment of Healthcare Providers and Systems survey*; *teach-back*, *teach back method* and *patient education* and *nurse communication*. To enable a broader scope for the search, I used Boolean operators to connect the variables. The inclusion criteria were peer-reviewed scholarly journals, all publication dates, and all languages. This is not an exhaustive list, but the review provided an indication of the components of best practice communication strategies and their characteristics to inform the content of the education intervention to improve nurse communication about medications and subsequently improve the patient experience.

A systematic review of the literature revealed that the teach-back approach has been applied in a variety of settings, has been ranked the number one health literacy practice by experts, and is of benefit in improving patient satisfaction and the patient experience (Morony et al., 2018). It has been shown to be an effective method of patient teaching for better understanding of the information they have been given, aiding in the patients' recall of information taught, gaining patients' trust through shared decision making, and being time efficient (AHRQ, 2019; Centrella-Nigro, & Alexander, 2019).

### **Archival and Operational Evidence**

The source of evidence that was collected for the purpose of the doctoral project was the hospital's HCAHPS scores for analysis of the long-term outcome of nurse communication on the patient experience survey. This occurred outside the scope of the DNP project. Additional data for assessment of the day to day outcome came from the charge nurse rounding tool.

After a patient is discharged from the hospital, the patient is contacted for a telephone survey of their hospital experience by a representative independent of the hospital (Press Ganey Associates, a healthcare company widely known for distributing patient satisfaction surveys). The patient experience feedback is reported quarterly and was obtained with the assistance of the IMCU director. An additional data source was the charge nurse rounding tool, which reflected specific questions related to the patient experience of care including the question "Did your nurse explain your medication to you and explain the side effects?" Since this question required a yes or no response and did not seek to illicit the patient's understanding of the information taught, this afforded me the opportunity to recommend an adjustment in the wording to include a standardized script for teach-back: to repeat back the name of the medication, the indication for use, and two to three side effects.

The HCAHPS patient perspective of care survey is a national standardized publicly reported evidenced-based patient satisfaction survey instrument and data collection method for measuring patients' perceptions of their hospital experience (Cleary, 2016; CMS, 2019). The scores are collected by hospitals and are reported to the

CMS and allow for valid comparison of hospitals (regionally and nationally) on topics that are important to the consumers (CMS, 2019). Furthermore, the scores are publicly reported, which creates incentives for hospitals to improve quality of care and also serves to enhance accountability by increasing transparency of the quality of care (CMS, 2019). The survey consists of 18 core questions about critical aspects of their hospital experience: communication with nurses and doctors, the responsiveness of hospital staff, the cleanliness and quietness of the hospital environment, pain management, communication about medications, discharge information, overall rating of the hospital, and would they recommend the hospital (CMS, 2019). The HCAHPS survey was originally implemented by CMS in partnership with the AHRQ and prior to its implementation has undergone rigorous scientific testing and endorsement to ensure its validity in measuring the patient experience of care (CMS, 2019). I obtained a retrospective review of the HCAHPS scores for 6 months prior to the teach-back intervention, and I obtained the charge nurse log 6 weeks prior to the educational intervention for comparison with 6 weeks postintervention scores to determine the trends and impact of the intervention. In addition, I secured HCAHPS data was secured for the same 6-week periods of time before and after the education with the intent of capturing actual HCAHPS scores (albeit not yet reported to CMS and without percentile ranking comparisons). Using these data, I was able to infer what future scores may be and to determine if the teach-back process was having an impact on the patient's experience.

The data collected from the HCAHPS survey was of relevance to my doctoral project in terms of the patients' perspective and their responses on the scale of never,

sometimes, usually, or always on the nurse communication and communication about medications domains. The nurse communication domain explores the patient's view regarding how often nurses treated the patient with courtesy and respect and how often the nurses listened carefully to the patient. The communication about medication domain explores the patient's perspective with regard to how often hospital staff provided information about new medications including indication for use and side effects. The analysis of the scores over a 6 month period prior to the start of the project served to further validate the gap in practice and also provided a baseline for comparison of the scores 6 months after the teach-back professional development educational intervention. This longer term comparison was outside the scope of the DNP project.

At the project organization, the HCAHPS survey is applied by an independent organization, Press Ganey Associates. Press Ganey Associates is a healthcare company widely known for distributing patient satisfaction surveys. The patients are contacted by representatives from Press Ganey Associates after they are discharged home.

### **Evidence Generated for the Doctoral Project**

This section will include a step-by step description of evidence and data that was primarily generated for the purpose of the doctoral project. A description of the participants, procedures and procedures used to ensure ethical protection of the participants will be discussed.

**Participants.** The participants who contributed evidence to address the practice focused question consisted of registered staff nurses (RN) who regularly provide care to the patients at the bedside within the IMCU. All the 36 staff RN participants were

selected because they are at the point of care with primary responsibility for educating patients about medication, communicating with the patient and providing education about new medications throughout the transition of care. Additionally, the importance of the nursing educational level and years in nursing practice was a key aspect of care in the focus on knowledge, attitudes and beliefs toward communicating with patients.

**Procedures.** The educational aspect of the DNP project included an educational teach-back module for the IMCU nurses. The module was based on adult learning theory which guided the content needed to educate the nurses in use of the teach-back method when teaching patients and evaluating their understanding of the information taught (Aucoin-Gallant, 1994; Candela, Piacentine, Bobay, & Weiss, 2018). There were six teaching sessions to capture all the participants on the various shifts. As the DNP student, I facilitated with the assistance of the DNP QI team to ensure consistency in the presentation of contents. The six educational sessions were delivered over a period of four-week to accommodate all direct care staff. Each session was one hour with 30 minutes of theory and 30 minutes of practice. Modalities that were used to engage the learners included a power point presentation, case studies, lecture, discussion, questions, answers and role play.

A key source of evidence was the data from the pretest-posttest results of the nursing teach-back educational session analyzing the nurses' knowledge, attitude and beliefs about teach-back. The result may provide insights regarding the ineffective communication among the nurses. The educational module is evidence-based (see Appendix A).

The teach-back module included a pretest/posttest with questions directed to evaluate the nurses' knowledge, attitude and beliefs about teach-back (see Appendix B). The test consisted of 10 questions which the RNs completed immediately prior to and after the educational intervention and was approved for face and content validity by members of an expert panel at the site consisting of the Nurse Manager on the pilot nursing unit, the Clinical Specialist of the pilot unit, and the Patient Education Coordinator. The DNP student with the assistance of the DNP QI project team facilitated education of 36 registered nurses, all staff of the IMCU; however, consent to complete the pre and posttests were secured from 30 members of the staff. The process measure was 100% of the nurses on the IMCU will receive education on teach-back in a 60-minute session with power point presentation and role playing of the proper technique for providing teach-back. To provide opportunities to evaluate the consistency of patient education using teach-back the charge nurse champions used a competency checklist (see Appendix C) for evaluation of staff's competency with the teach-back process. Staff were encouraged to offer feedback during the daily huddle, while patients' feedback will be captured during the routine charge nurse rounding indicating that nurses provided medication education using the teach-back approach. Adjustments were made to the process as needed based on staff and patient input as reported by the staff and charge nurse. Since application of the teach-back process in practice was the intent of the education, the goal was that 100% of the nurses would complete the teach-back education by demonstrating one teach-back interchange with a patient while being observed. The DNP student facilitated the competency evaluation using the competency checklist (see

Appendix C). The intended use of the charge nurse champions as part of the QI team for competency evaluations during the project was aborted since a requirement of the organization's IRB was to complete human subject protection training which was outside the scope of the DNP project timeline. Finally, compliance with the teach-back process in daily practice was monitored by observing the charge nurse's documentation on the rounding log that patient received teach-back education and printed material on new medications.

Additional to the primary outcome of improvement in the *nurse communication* and *communication about medication* elements reflected on the HCAHPS scores, secondary outcomes that will be measured for this project will be the bedside nurses' knowledge, attitude and beliefs about patient-centered care, elements of effective communication, and teach-back. Changes in the attitude, beliefs and knowledge about the concepts will be measured using a pretest-posttest. The pretest-posttest will consist of 20 questions focusing on nurses' knowledge, attitude and beliefs about patient-centered care, communication, and teach-back. Secondly, a tool for assessing staff competency in the delivery of the teach-back method will be designed (See appendix C).

Content for the development of the educational module will be informed by the AHRQ Communicating to Improve Quality training, AHRQ SHARE approach using the teach-back technique, The Picker Institute and IHI Teach-back "Always Event" implementation as well as other evidence-based articles within this project. As the DNP student, I will develop a basic pretest/posttest, competency checklist and role play scenario for use in the education module and competency evaluation. I will collaborate

with two expert clinical specialist and the hospital Coordinator of Patient Experience to establish validity and reliability of the pretest-posttest and teach-back competency checklist for addressing the practice issue of inadequate nurse communication about medications.

**Protections.** The DNP QI project has a staff education component as a key intervention, hence the guidelines from the Walden University Manual for Quality Improvement Evaluation Projects, and also the Manual for Staff Education Projects were consulted to determine the Institutional Review Board (IRB) guidelines. The organization will require the IMCU staff members to attend the education, complete the pretest-posttest, and have their competency with teach-back validated by the charge nurses. However, all nurses will be advised that the data collected from the pretest-posttest, and competency checklists will be anonymous and confidential and will be advised that they can withdraw consent for their results to be included in the DNP project (see Appendix D). No data were collected until after IRB approval from the hospital organization as well as Walden University. The project organization has an IRB board where I have secured exempt status and therefore deferred to the Walden IRB as the IRB of record. The Walden University IRB approval number was 07-19-19-0075690.

### **Analysis and Synthesis**

A quantitative methodology was used to design the pre-posttest. The pre-posttests consisted of seven questions based on knowledge of *patient-centered care*, *communication* and *teach-back*. An additional four questions requesting demographic data (age range, level of nursing education, and gender) were included. Nominal level



coding was used for seven of the questions on the pre and posttests that have a right or wrong answer (seven questions correct equals a 100% score). There were three questions that are attitudinally based, and these were measured on a score of 1 to 10. A score of 30 represents a high level of self-confidence on the use of the teach back. The pre-posttest will be applied using pen and paper. The forms were collected by the Patient Education Coordinator de-identified using a numbering system, and given to me, the DNP student, for analysis. The data will be transferred to a spreadsheet for recording, organizing and analysis. The computer is password-protected to ensure confidentiality. For data analysis, descriptive and non-parametric inferential statistics were used to evaluate these data.

During the project, data from the charge nurse rounding log was tracked, summarized and provided to me for secondary analysis. The log addresses key points and reminders regarding customer service, as well as questions relating to staff responsiveness and communication. For example, the questions of interest for this project are: “Did the nurse review the plan of care with you (on the white board) at the beginning of the shift?” “Did the nurse explain your medication to you and explain the side effects?” The patients will respond with a “yes” or “no” to the questions. The data from the charge nurse rounding log and the HCAHPS patient experience scores will be compiled by the QI team and given to the DNP student. This data will be used to analyze the impact of the teach-back educational intervention on the patient experience. The Charge nurse log data collection process extended 4 weeks before and 4 weeks after the intervention to facilitate analysis and comparison. Descriptive and inferential statistics will be observed to summarize and evaluate the results. To evaluate if there is a change in

the patient experience the HCAHPS scores 8 weeks pre and post teach-back educational intervention were analyzed. A score above the preintervention score consistently trending to and above the hospital benchmark of 90% top box or 50th percentile was considered a change.

### **Summary**

This section provided information detailing a plan for collecting and analyzing evidence relating to the practice problem of low patient experience scores that are reflected in the nurse communication items on the HCAHPS survey in a 20-bed IMCU of a community hospital in an urban area of Eastern United States. The educational session entailed an outline of a one-hour evidence-based module, on improving communication with teach-back. The next section will outline the findings and implications resulting from the synthesis of the evidence that was collected. Limitations of the study as well as implications of the study, and also potential implications to positive change will be discussed. Finally, an opportunity for recommendations that will potentially address the gap in practice will be emphasized.

## Section 4: Findings and Recommendations

### **Introduction**

Enhancing the patient experience is one of the highest priorities for healthcare organizations as they adopt the value-based care model and take accountability for the health of the populations they serve. The HCAHPS survey conveys the value of nurse communication and communication about medications to patients and families when they seek care. Nurses play a pivotal role in communicating pertinent health information such as new medications that is important to patient safety and positive patient experiences. However, communication processes are often hampered when nurses do not always take the time to assure patients truly understood what was taught. On a 20-bed IMCU, the HCAHPS survey scores depicted performance much lower than the hospital benchmark of 90% on the nurse communication and communication about medication elements. Hence, the purpose of this QI project guided by the patient-centered care model (IOM, 2001), needs based theory (Henderson, 1991), and adult learning theory (Aucoin-Gallant, 1994) was to address the gap in practice by providing a structured process that involved educating the nurses on how to teach patients about medications and assuring that the patient fully understood what was taught.

Of the 36 eligible RNs on the unit, there were 30 nurses who participated in the teach-back educational intervention and gave consent for their data to be used in the project. Six educational sessions were delivered over a period of 4 weeks to accommodate all direct care staff nurses. Each session was 1 hour with 30 minutes of theory and 30 minutes of practice. The teach-back module included a pretest/posttest with

seven questions directed to evaluate the nurses' knowledge about patient-centered care, communication, and teach-back and three questions relating to the nurses' attitude and beliefs about teach-back (see Appendix B). A pre/posttest design was applied to determine nurses' knowledge about patient-centered care, communication, and teach-back and their attitudes and beliefs about teach-back. Results were analyzed using descriptive and inferential statistics.

The primary sources of evidence collected to meet the purpose of the doctoral project were obtained from a retrospective and prospective analysis of the hospital's HCAHPS survey scores for the IMCU on the elements nurse communication and communication about medication. Additionally, the assessment of the immediate day to day outcome was assessed using data from the charge nurse rounding log, which addressed communication about medications. Additional sources of evidence were gathered from analysis of the pre/posttest results and competency evaluation of the staff nurses.

### **Findings and Implications**

In this section of the project I present the data collected in order to answer the project question. The 10 questions pretest/posttest assessed the nurses' knowledge about patient-centered care, communication barriers, and teach-back as well as the nurses' attitude and beliefs about teach-back. The demographic data included in the test aimed to determine if there were differences in the nurses' knowledge about patient-centered care, communication barriers, and teach-back and their confidence in using teach-back based on the educational intervention. Additionally, the nurses' age, tenure in the profession,

and educational background were examined to determine if there was a correlation between the nurses' knowledge and confidence based on these variables.

Statistical analysis of the pretest/posttest data indicated that there were 30 ( $N = 30$ ) nurses who participated in the educational intervention and gave consent for their data to be used in the project. In assessing the distribution of the data there was indication that the data were not normally distributed and also that the sample size was too small to warrant parametric testing, and therefore a nonparametric inferential statistic was used to make comparisons. The mean score of all nurses on the pretest was 83.5% and the average posttest score was 92.033%. The nonparametric Wilcoxon Signed Ranks test was applied to derive further insight into whether there were differences in the pretest and posttest results. The test resulted in a  $z$  score of -2.833 and the  $p$  value was .005. The results were compared by demographic groups, however, due to the very small groups in which there were no meaningful differences on age, educational background, or years as a nurse that were demonstrated. Furthermore, there were no statistically significant differences in the attitude questions when they were taken together and when they were analyzed separately, largely because the change was so small, from 26.60 out of 30 on the pretest to 27.67 out of 30 on the posttest.

The findings related to the significant improvement in the knowledge. The change in scores from the pretest to the posttest may be that overall the nurses found value in the information they gained during the educational session, which provided further insight into the correct process in using teach-back. Furthermore, based on debriefing discussions with the nurses postintervention, the education exposed the gap in practice,

and with their intuitive experience as adult learners, they were ready to apply the best practice in educating their patients. In terms of the nurses' attitudes, the analysis revealed that there was not a statistically significant change in the attitude in the attitudinal questions. This may be because the nurses were experienced nurses performing teach-back in their daily practice, and they felt confident about their teach-back skills before the presentation. In order to evaluate the clinical application of teach-back, the competency evaluations were also analyzed noting the number of nurses who required a second attempt to demonstrate effective teach-back process. Of the 30 nurses, five (16.6%) required a second attempt to receive the full points attributed to the competency. A score greater than 80% indicated that the educational intervention was effective in improving the nurses' awareness and skills on effective communication.

Visually analyzing the individual pretest scores for knowledge of effective teach-back elements and nurses' attitudes regarding teach-back, however, indicated that nurses could be more intentional in applying the knowledge correctly in using teach-back. Further analysis also indicated the belief that asking, "Do you understand?" and the patient answering "yes" after educating the patient about the health condition or treatment denoted understanding. This was noted by over half of the staff in the pretest by selecting the answer that reflected effective as well as ineffective questioning rather than selecting the answer indicating effective questioning.

Of the 30 nurses, 23 answered the demographic data relating to age range, years as RN, and educational background. There were some nurses who omitted the demographic questions, so the missing data accounts for the differences in the

demographic analysis. Most of the nurses reported to be 31-40 years old (43.5%) followed by the age group 25-30 years old (21.7%), then 51-60 years old (17.4%), and the age group 41-50 years (13.0%; Table 1).

Table 1

*Age Range*

Valid	Frequency	Percent	Valid percent	Cumulative percent
25-30	5	16.7	21.7	21.7
31-40	10	33.3	43.5	65.2
41-50	3	10.0	13.0	78.3
51-60	4	13.3	17.4	95.7
>60	1	3.3	4.3	100.0
Total	23	76.7	100.0	

Table 2 provides an indication of the years of the participants' tenure in nursing. The largest percentage of the nurses (65%) reported between 1-5 (34.8%) and 6-10 (30.4%) years as an RN.

Table 2

*Years as Registered Nurse*

Valid	Frequency	Percent	Valid Percent	Cumulative percent
1-5	8	26.7	34.8	34.8
6-10	7	23.3	30.4	65.2
11-15	4	13.3	17.4	82.6
21-25	2	6.7	8.7	91.3
26-30	1	3.3	4.3	95.7
31-35	1	3.3	4.3	100
Total	23	76.7	100	

Further insight into the participant's educational preparation revealed that the majority of the nurses reported having a BSN degree (68%), whereas 10% reported having an MSN, 10% an associate degree, and two (6.7%) a diploma (Table 3).

Table 3

*Educational Background*

Valid	Frequency	Percent	Valid percent	Cumulative percent
Diploma	2	6.7	8	8.0
Ass. Degree	3	10.0	12	20.0
BSN	17	56.7	68	88.0
MSN	3	10.0	12.0	100
Total	25	83.3	100	

Charge nurse rounding is important in evaluating patients' responses to care and to validate if the nurses are truly compliant with communicating the pertinent information about medications, particularly new medications. The charge nurse rounding data did not afford detailed analysis of the patient responses preintervention as anticipated because some of these data were lost in the hospital relocation move during the preintervention timeframe. Summary descriptive data from the charge nurse rounding log provided by the IMCU assistant nurse manager responsible for aggregating and summarizing the responses from patients who were eligible for rounds (awake and alert, not confused) revealed an average percentage of yes responses. Prior to the teach-back educational intervention, when patients were asked the questions "Did your nurse review the plan of care?" or "Did the nurse explain your medications including side effects?" the summary descriptive data revealed that the patients answered "yes" approximately 78% of the time. In comparison, the posteducational intervention analysis between September 1, 2019 and



October 8, 2019 with patients who were eligible for rounds showed an improvement for both questions to 95.67% ( $n = 23$ ). This score is in keeping with the expected target to achieve or surpass the benchmark for the nurse communication and the communication about medication elements on the patient experience scores.

The findings of the HCAHPS scores relating to nurse communication and communication about medications were reviewed to provide insight into the impact of the teach-back intervention on the patient experience. The Press Ganey preliminary monthly last reported top box scores for the entire hospital on communication with medications during June and July, 2019, were 58.3% and 65.8% respectively. The preliminary scores 1-month postintervention (September) for the entire hospital indicated an increase in communication about medications scores to 68.7%. The June and July scores for communication with nurses were 73.8% ( $n = 48$ ) and 71.2% ( $n = 37$ ) respectively; similarly, there was a slight increase in September and after the educational pilot to 73% ( $n = 47$ ). An increase in scores on communication with medications may indicate that there was improvement in the patient experience by standardizing teach-back for communication about medication; however, sample size on the monthly reports are typically quite low. However, the communication with nursing scores show no substantive change.

The hospital HCAHPS comparative benchmark for the communication items were 87.36% for the element communication with nurses and 74.75% for the communication about medication element, indicating that the organization's goals for the two HCAHPS items were not met. However, although the scores were trending toward

the target range for the most part, the true impact of the project will be realized in the future when the final aggregate reports become available from all HCAHPS sources (mailed in and telephone surveys) and as the teach-back program is extended beyond the pilot.

The data analysis in this project demonstrated interesting findings with implications in terms of the patient experience with impact on the organization, communities, institutions, and healthcare systems. Although the data from the charge nurse rounding log and the HCAHPS scores revealed possible improvement in the patient experience the findings brought awareness of the small patient population and the limited documentation of pertinent data which were not adequate to produce reliable results to inform excellence in care. More extensive data collection may serve to provide further insight into understanding why patients may not always say yes to the questions pertaining to communication about medications and nurse communication. Evidence-based interventions with implementation based on reliable data affect the quality and safety of organizations and furthermore reimbursement by state and federal funding agencies such as the CMS. A better view of the long- term impact of the teach-back educational intervention on the HCAHPS patient experience scores at the unit level and may be at the organization level will require continued vigilance in educating the staff and evaluating the outcomes on the patient experience. In addition, more diligence in documenting and evaluating the charge nurse rounding data on patient responses could provide larger samples for more comprehensive analysis to impact and promote a culture of awareness of the ongoing drive for excellence in the patient experience.

## Recommendations

The project described a strategy to address a gap in practice related to nurse communication particularly communication about medications. The findings are promising to warrant further emphasis on standardizing the evidence-based, patient-centered teach-back methodology throughout the organization. Although the HCAHPS scores are still preliminary, they are promising. The evidence-based teach-back education for nurses, identified an improvement in the knowledge scores ( $z = -2.833, p = .005$ ) which could assist in transformative behavioral changes in nurse communication about medications important to improving the patient experience in the short term and sustaining positive patient experiences in the long term. However, in order to assure that sustained change is realized in both communication with medications and in overall nursing communication, education may need to be repeated, and the charge nurse log process may be revised; these recommendations have been made to the organization.

There is strong support from the project participants for the QI educational module and the belief that the project can be expanded to include other hospital staff. Although this was a pilot, the findings indicate that translating the teach-back intervention systemwide would serve to educate stakeholders including staff, providers, patients and families in supporting evidence-based practice creating a cultural awareness of the drive for excellent patient experience. Extending the education institution-wide would entail collaborating with leadership and the Professional Practice Council to determine approval and further progress in translating the teach-back module into practice systemwide. Additionally, since not only nurses have contributions to

communicating to patients about their medications particularly new medications, but also physicians and pharmacists, in order to enhance communication about medication it is fitting for all providers associated with the medication treatment plan be educated in the teach-back technique. Advancing the teach-back module to the learning management platform whereby staff may access the module at their own convenience and where staff education can be easily tracked and managed would be beneficial. In terms of documentation of teach-back after patient education, it would be worthwhile to create a process for documentation in the electronic health record whereby data demonstrating compliance in using the process can be aggregated, tracked and reported to staff and leadership for further decision making.

Furthermore, since the data from the charge nurse log and HCAHPS scores were limited, to gain better insight into the patient experience responses increased vigilance in educating staff should consist of assessment and evaluation, teaching and active learning. Furthermore, it is also important to be diligent in achieving a better understanding as to why patients say “no” when asked about their experience. This requires more consistent capturing of data and monitoring at the level of the microsystem during the inpatient stay and follow-up post discharge to achieve more extensive data and to draw more reliable conclusions. The telephone feedback facilitated at the unit level where the secretaries reach out to the patients post discharge could be a forum for greater enhancement of the patient perspective of care. This would be especially beneficial if the nursing leadership spoke with patients directly to resolve any concerns which the patients may have voiced. Because of the time limitations, this project was limited to the small teach-back

educational pilot. A full implementation across the organization may provide more extensive data deepening the answer to the project question.

### **Limitations and Strengths of the Project**

Whereas the IMCU leadership supported the project, the constraint in appropriating dedicated time for education of the staff for such an important process of care was a significant limitation. Although the nurses were willing to participate, the project was delivered during the huddle at the change of shift. The nurses were highly pressured, on the oncoming shift with the task of the work, and the offgoing shift with the need to be off duty. In considering the translation of the teach-back educational intervention to other nursing units and possibly systemwide to other hospital staff involved in care of the patient, there may be barriers from other leadership in supporting the project by allocating time for staff education probably considering cost effectiveness.

A strength of the project was the design, as the evidence from pretest and posttest comparisons, the HCAHPS survey results, and the charge log indicating improvement in actual practice. The demonstrated improvement can serve as a compelling argument to convince the leadership on the value of the teach-back method as HCAHPS affect reimbursement in a value-based environment (CMS, 2019). There is currently heightened focus on the patient experience with the recent system-wide innovations, as well as the recent relocation of the hospital with state-of-the-art amenities. Thus, even though the project was small and focused on one nursing unit, the results reinforce the value of the teach-back strategy in daily nursing practice. The impact on the patient is another important outcome of the project. As patients leave the inpatient setting with a clearer

view of their care management plan, and a better understanding of how to manage medication issues, the result is care that is clearly patient-centered, indicating a positive social change.

### **Summary**

In summary, this section describes findings that resulted from analysis and synthesis of evidence that was collected for a QI project with a professional development intervention incorporating teach-back as a standardized, evidenced-based, patient-centered way of communicating information about medications particularly new medications. Unanticipated outcomes were discussed and potential impact on the findings. Additionally, implications from the findings and to positive social change were provided. Furthermore, recommended solutions that will improve the gap in practice informed by the findings were discussed. Finally, a discussion of the strengths and limitations of the doctoral project and recommendations for future projects were included. The next section will provide information on plans for dissemination of the project findings, and an analysis of self as a practitioner, scholar and a project manager.

## Section 5: Dissemination Plan

### **Introduction**

Dissemination of research results is a responsibility of scholar-practitioners and nurse leaders to improve nursing practice, patient outcomes, and health policy development. In this section I offer reflections on my plans to disseminate the DNP project findings to the project institution. I explain the nature of the product and explore the audience and venues that would be appropriate for dissemination of the project to the broader nursing profession in this section. I also provide an analysis of self relating to the role of practitioner, scholar, and project manager.

### **Dissemination Plan**

The forum I have selected for dissemination of my scholarly project is verbal presentation at a nursing grand round. I intend to reach nurses who work in various disciplines with a view to closing the gap in practice related to improving the patient experience with teach-back. While education of participants is the most important objective of grand rounds, other attributes include promotion of interdisciplinary collaboration, audience involvement, continuing education credits, providing updates in research, promoting collegiality, mentor and support professional development, all serving to highlight expertise in faculty and staff. When properly applied, the teach-back process will change healthcare provider behavior and improve patient outcomes (Matamoros & Cook, 2017; Sandal, Iannuzzi, & Knohl, 2013). Limitations of using the grand round approach for dissemination of scholarly projects may include limited staff involvement due to conflicting time with work schedule, limited resources to sustain

grand rounds such as qualified persons to coordinate the sessions and presenters, as well as limited funding resources (Smyth & Abbernethy, 2012).

Another forum that may be effective in disseminating the findings of my project would be an interactive workshop including small group discussions and scenarios. According to Ousley, Swarz, Milliken, and Ellis (2010), studies have found that the traditional didactic lectures and printed materials infrequently alter practitioner's outcomes in relation to evidence-based practice. The authors, however, indicated that improved approaches such as interactive and multifaceted programs like small group discussions and interactive workshops are more effective for initiating changes in provider behaviors (Ousley et al., 2010). When designing educational interventions for disseminating project findings to facilitate awareness and adoption of new practice, the scholar must take into consideration the context of the provider practice, social and cultural norms, practice environment, organizational factors, demographics, and other variables (Ousley et al., 2010).

### **Analysis of Self**

I am the second of 10 children my parents raised in a strong and supportive family of low socioeconomic means. During my developmental years and throughout my adulthood I have always wanted to achieve higher learning as an example for my younger siblings and also to satisfy my intellectual and professional needs. Self-directed in my own decisions to achieve the highest level of education, I am committed to lifelong learning. I believe lifelong learning is important for a person's professional development and to be able to efficiently and effectively apply knowledge and skills to impact changes



for the good of the complex and changing global societies, especially in the healthcare environment where I have worked as a nurse for over 40 years.

As a practitioner, most of my professional career has been spent working as a clinical nurse in critical care, including half of the time in the IMCU. Over the years, I have held positions in nursing leadership as an assistant nurse manager, and nurse manager within an intensive care unit and IMCU setting directing and coordinating care. Other work experiences include working as an adjunct clinical educator for 9 years in a baccalaureate nursing program. I have also taught in the RN-BSN program—advanced medical surgical nursing, pharmacology, and research. Recently over the past 4 years, I have focused on patient education as a patient education coordinator with responsibilities in supporting nurses and the collaborative disciplines in assessing, planning, implementing, and evaluating the education of patients at high risk for readmissions. The role also includes assessing the patient education process, implementing performance improvement, and creating, implementing, and evaluating processes and staff education programs in collaboration with inter- and intraprofessional groups to achieve the desired goal of reducing the readmission of high- risk patients. In my profession as a nurse, I am presented with the opportunity to expand my role within the broader community as a certified faith community nurse at my church. I have served my church community as a health educator and health counsellor, planning and implementing health fairs and participating in collaborative health outreach within the church community. Throughout my experiences as I advanced in my educational pursuits gaining knowledge, skills, and experience, I have appreciated the value of direct patient care experiences to inform and

enhance my practice. With consideration of the high value for direct patient care where the collaborative nurse-patient-family relationship is critical for optimum health outcome, I chose to pursue the DNP program where I could gain valuable tools to impact changes to improve healthcare at the individual, institutional, and community level.

When I commenced the DNP program, including my practicum experience, I began with the vision of gaining the necessary skills and knowledge to meet the (AACN DNP essentials. The goal of the DNP essentials is concerned with preparing graduates with eight essential competencies important for addressing the complex issues of modern healthcare. Gaining competency in the eight DNP essentials has empowered me with tools for practice and has strengthened my leadership skills as a practitioner, scholar, and project manager.

The DNP program and project experiences have helped me to deepen my knowledge and understanding of the patient perspective and the importance of practitioner communication in enhancing patient-centered care. Engaging the healthcare practitioner, patient, and family in care delivery is vital for value based and quality health outcomes, showing me how incorporating interprofessional collaboration in practice improves patient health outcomes.

As a scholar I have developed as a role model with the ability to advocate and influence social change among nurses and other practitioners utilizing clinical scholarship to advance evidence-based practice. I have an enhanced focus on identifying and analyzing issues pertinent to improving nursing practice and quality patient outcomes. This includes careful systematic exploration of the literature and analysis of aggregate

data to determine best practices for interventions and decision making. As a scholar practitioner, my goal is to continue to use the evidence to advance patient-centered care to achieve the best patient experience in all healthcare settings. The education of nurses and other practitioners is key to altering behaviors in the development of best practice. I have formal education as a nurse educator in the general setting and several years of experience teaching nursing to bachelor's degree nurses in the academic setting, particularly in the area of clinical nursing. My future endeavor is to adopt the six strategies from Rosswurm and Larabee's model for evidence-based practice change to facilitate identification of a need for change in institutions (White et al., 2016) through integrating and maintaining change in the practice setting. During my practicum experience I have had invaluable experiences important to the development of the AACN DNP essentials (AACN, 2009). The DNP essentials have provided me tools to enable successful project development, implementation, evaluation, and dissemination as a scholar practitioner and nurse leader. For my practicum experiences, I have acted in the leadership role of advocating for improvement in the patient experience of care by collaborating with appropriate stakeholders in creating and implementing an evidence-based information brochure to improve nurse-patient engagement aimed at enhancing nurse-patient communication. Additionally, I have been coleader in an initiative to reduce 30-day readmission of the patients diagnosed with diabetes. In evaluating the transition of care process, I understand the challenge for adequate patient education prior to discharge, especially of patients with diabetes as a diagnosis who are at high risk for readmission.

Additionally, I employed the DNP competencies of systems thinking, interprofessional collaboration, and also the knowledge and skills of an advanced practice leader in organizing, implementing, evaluating and presenting a successful grand round on diabetes survival skills. This initiative also entailed utilizing the competency of clinical scholarship and evidence-based practice. By engaging in opportunities for professional development such as a grand round not only imparted information but has strengthened my confidence as a DNP nurse leader. The experiences gained from these leadership deliverables will benefit my future plans to engage in leadership as a nurse educator as well as a consultant and advocate for prevention of diabetes and care of populations diagnosed with the disease. I will engage the nursing process, the logic model, the DMAIC process improvement model, and the preceed-proceed model in my future plans to further hone my leadership skills in project assessment, planning, intervention, and evaluation.

### **Summary**

This paper provided perspective on a QI project with important information to support a professional development activity incorporating teach-back as a standardized, evidenced-based, patient-centered way of improving communication about medications with nurse communication, particularly new medications. As noted, the result of the Wilcoxon Signed Ranks test showed an improvement in the nurses' knowledge scores, although there were no statistically significant changes in attitude. This was probably because the nurses were experienced nurses with greater than 5 years tenure in nursing with the belief that they already knew how to provide teach-back. Additionally, analysis

of the data from the charge nurse rounding log and the HCAHPS survey scores demonstrated an improvement in patient responses post intervention. The cause of the demonstrated improvement was not reliable, however, due to insufficient data and the small population of patients who responded. More vigilance in staff education and competency evaluations using the teach-back intervention with consistent monitoring of the application in the practice setting can support transformational changes in organizational cultural to always provide safe, quality, value-based care. Thus, even though the project was small and focused on one nursing unit, the results reinforce the value of the teach-back strategy in daily nursing practice. The impact on the patient is another important outcome of the project. As patients leave the inpatient setting with a clearer view of their care management plan and a better understanding of how to manage medication issues, the result is care that is clearly patient-centered, indicating a positive social change.

## References

- Agency for Healthcare Research and Quality. (2018). *Strategy 2: Communicating to improve quality: Implementation handbook*. Bethesda, MD: Author. Retrieved from [https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy2/Strat2\\_Implement\\_Hndbook\\_508.pdf](https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy2/Strat2_Implement_Hndbook_508.pdf)
- Agency for Healthcare Research and Quality. (2019). *The share approach—Using the teach-back technique: A reference guide for health care providers*. Bethesda, MD: Author. Retrieved from <https://www.ahrq.gov/sites/default/files/wysiuyg/professionals/education/curriculum-tools/shareddecisionmaking/tools/tools-6share-tool.pdf>
- Agency for Healthcare Research and Quality. (2015). Use the teach-back method: Tool #5. In *Health literacy universal precautions toolkit* (2nd ed.). Bethesda, MD: Author. Retrieved from <https://www.ahrq.gov/health-literacy/quality-resources/tools/literacy-toolkit/healthlittoolkit2-tool5.html>
- Algase, D. (2009). The centrality of theoretical thinking and the value of empirical evidence. *Research and Theory for Nursing Practice*, 23(4), 251-252.
- Ali, M. (2017). Communication skills 1: Benefits of effective communication for patients. *Nursing Times*, 113(12), 18-19. Retrieved from <https://www.nursingtimes.net/clinical-archive/assessment-skills/communicationskills-10benefits-of-effective-communication-for-patients/7022148.article>.

- American Society for Quality. (2019). *The define, measure, analyze, improve, control (DMAIC) process*. Retrieved from <https://asq.org/quality-resources/dmaic>
- Association for Patient Experience. (2013). *Improving medication communication with ask 3/teach 3*. Retrieved from <https://www.patient-experience.org/Resources/Best-Practice/Case-Studies/Improving-Medication-Communication.aspx>
- Association for Patient Experience. (2014). *Get back to teaching with teach back*. Retrieved from <https://www.patient-experience.org/Resources/Best-Practices/Case-Studies/Get-Back-to-Teaching-with-Teach-Back>
- Aucoin-Gallant, G. (1994). Adult apprenticeship using the Knowles model. *Canadian Nurse, 90*(11), 31-34.
- Baduczewski, A., Bauman, L., Blank, A., Dreyer, B., Abrams, M., Stein, R., . . . Sharif, I. (2017). Relationship between teach-back and Patient-centered communication in primary care pediatric encounters. *Patient Education and Counseling, 100*(7), 1345-1352. doi:10.1016/j.pec.2017.02.022
- Bolster, D., & Manias, E. (2010). Person-centered interactions between nurses and patients during medication activities in an acute hospital setting: Qualitative observation and interview study. *International Journal of Nursing Studies, 47*(2), 154-165. doi:10.1016/j.ijnurstu.2009.05.021
- Boykins, A. D. (2014). Core communication competencies in patient-centered care. *ABNF Journal, 26*(2), 40-45.
- Candela, L., Piacentine, L. B., Bobay, K. L., & Weiss, M. E. (2018). Teaching students to

- teach patients: A theory-guided approach. *Journal of Nursing Education and Practice*, 8(11), 92-101. doi:10.5430/jnep.v8n11p92
- Capko, J. (2014). The patient-centered movement. *Journal of Medical Practice Management*, 29(4), 238-242.
- Centers for Medicare and Medicaid Services. (2019). HCAHPS: Patients' perspectives of care survey. Retrieved from <https://www.cms.gov/Medicare/Quality-Initiatives-patient-assessment-instruments/hospitalqualityinits/hospitalhcahps.html>
- Centrella-Nigro, A. M., & Alexander, C. (2017). Using the teach-back method in patient education to improve patient satisfaction. *Journal of Continuing Education in Nursing*, 48(1), 47-52. doi:10.3928/00220124-20170110-10
- Christensen, T. (2017). Rebalancing the patient experience: 20 years of pendulum swing. *Patient Experience Journal*, 4(3), 6–8. doi10.35680/2372-0247.1257
- Cleary, P. D., (2016). Evolving concepts of patient-centered care and the assessment of patient care experiences: Optimism and opposition. *Journal of Health Politics, Policy and Law*, 41(4), 675-696.
- Daniel, E. (2016). The usefulness of qualitative and quantitative approaches and methods in researching problem-solving ability in science education curriculum. *Journal of Education and Practice*, 7(15), 91-100.
- Dearmon, V., Roussel, L., Buckner, E. B., Mulekar, M., Pomrenke, B., Salas, S., . . . Brown, A. (2013). Transforming care at the bedside (TCAB): Enhancing direct care and value-added care. *Journal of Nursing Management*, 21, 668-678. doi:10.1111/j.1365-2834.2012.01412.x



- Dunfee, T. S. (2017). What is social change and why should we care? Retrieved from <https://www.snhu.edu/about-us/newsroom/2017/11/what-is-social-change>
- George, S., Rahmatinick, S., & Ramos, J. (2018). Commit to sit to improve nurse communication. *Critical Care Nurse*, 38(2), 83-85. doi:10.4037/ccn2018846
- Gatti-Petito, J., Lakatos, B. E., Bradley, H. B., Cook, L., Haight, I. E., & Karl, C. A. (2013). Clinical scholarship and adult learning theory: A role for the DNP in nursing education. *Nursing Education Perspectives*, 34(4), 273-276. doi:10.5480/1536-5026-34.4.273
- Gillam, S. W., Gillam, A. R., Casler, T. L., & Curcio, K. (2015). Education for medications and side effects: A two-part mechanism for improving the patient experience. *Applied Nursing Research*, 31(2016), 72-78. doi:10.1016/j.apnr.2015.11.017
- Gray, J. R., Grove, S. K., & Sutherland, S. (2017). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (8th ed). St. Louis, MO: Elsevier.
- Ha Dinh, T. T., Bonner, A., Clark, R., Ramsbotham, J., & Hines, S. (2016). The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: A systematic review. *JBIR Database of Systematic Reviews and Implementation Reports*, 14(1), 210-247. doi:10.11124/jbisrir-2016-2296
- Heath, S. (2018). How cultural, language barriers impact positive patient experience. *Patient Satisfaction News*. Retrieved from

<https://patientengagementhit.com/news/how-cultural-language-barriers-impact-positive-patient-experience>

Henderson, V. (1978). The concept of nursing. *Journal of Advanced Nursing*, 3, 113-130.

Henderson, V. A. (1991). *The nature of nursing: Reflections after 25 years*. Washington, DC: National League for Nursing Press.

Hospital Consumer Assessment of Healthcare Providers and Systems. (2019). Summary analyses. Retrieved <https://www.hcahpsonline.org/en/summary-analyses/#NoteAboutBoxes>

Institute for Healthcare Improvement. (2011). Achieving an exceptional patient and family experience of inpatient hospital care. Retrieved from <http://www.ihl.org/resources/Pages/IHIWhitePapers/AchievingExceptionalPatientFamilyExperienceinpatientHospitalCareWhitePaper.aspx>

Institute for Healthcare Improvement. (2019a). Tools: plan-do-study-act (PDSA) worksheet. Retrieved from [www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx](http://www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx)

Institute for Healthcare Improvement. (2019b). Always events toolkit. Retrieved from <https://www.ihl.org/resources/Pages/Tools/Always-Events-toolkit.aspx>

Institute of Medicine. (2001). Crossing the quality chasm: A new health system for the 21st century. Retrieved from <https://www.nap.edu/download/10027>

Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, DC: National Academies Press.

Irizarry, T., Dabbs, A. D., & Curran, C. R. (2015). Patient portals and patient

- engagement: A state of the science review. *Journal of Medical Internet Research*, 17(6), e148. doi:10.2196/jmir.4255
- Jeffs, L., Beswick, S., Lo, J., Campbell, H., Ferris, E., & Sidani, S. (2013). Defining what evidence is, linking it to patient outcomes and making it relevant to practice: Insight from clinical nurses. *Applied Nursing Research*, 26, 105-109. doi:10.1016/j.apnr.2013.03.002
- Joint Commission. (2018). *Advancing effective communication, cultural competence, and patient- and family centered care*. Retrieved from <https://www.jointcommission.org>
- Katyal, N., Hether, T., & Govindarajan, R. (2018). Mentoring, education, and engagement: An employee training technique to improve patient experience and employee satisfaction. Retrieved from <https://catalyst.nejm.org/mentoring-education-engagement-mee-technique/>
- Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (2000). *To err is human: Building safer health system*. Washington, DC: National Academy Press.
- Koo, L. W., Horowitz, A. M., Radice, S. D., Wang, M, Q., & Kleinman, D. V. (2016). Nurse practitioners' use of communication techniques: Results of a Maryland oral health literacy survey. *PLoS ONE*, 11(1). doi:10.1371/journal.pone.0146545
- Klingbeil, C., & Gibson, C. (2018). The teach back project: A system-wide evidence based practice implementation. *Journal of Pediatric Nursing*, 42, 81-85. doi:10.1016/j.pedn.2018.06.002
- Kourkouta, L., & Papathanasiou, I. V. (2014). Communication in nursing practice.

*Materia Socio-Medica*, 26(1), 65-67. doi:10.5455/msm.2014.26.65-67

Morony, S., Weir, K. R., Bell, K. J. L., Biggs, J., Duncan, G., Nutbeam, D., & McCaffery, K. J. (2018). A stepped wedge cluster randomized trial of nurse-delivered teach-back in a consumer telehealth service.

doi:10.1371/journal.pone.0206473

Marino, M. G. (2017). Therapeutic reciprocity: A concept synthesis. *International Journal for Human Caring*, 21(2), 91-94. doi:10.20467/humancaring-d-16-00029.1

Matamoros, L., & Cooke, M. (2017). A nurse-led innovation in education: Implementing a collaborative multidisciplinary grand round. *Journal of Continuing Education in Nursing*, 48(8), 353-357. doi:10.3928/00220124-20170712-06

McCabe, C. (2004). Nurse-patient communication: An exploration of patients' experience. *Journal of Clinical Nursing*, 13(1), 41-49. doi:10.1111/j.1365-2702.2004.00817.x

McEwen, M., & Wills, E. M. (2014). *Theoretical basis for nursing* (4th ed.). Philadelphia, PA: Williams & Wilkins.

Newell, S. & Jordan, Z. (2015). The patient experience of patient-centered care communication with nurses in the hospital setting: A qualitative systematic review protocol. *JBT Database of Systematic Reviews and Implementation Reports*, 13(1), 76-87. doi:10.11124/jbisrir-2015-1072

New England Journal of Medicine Catalyst. (2017). What is patient-centered care? Retrieved from <https://catalyst.nejm.org/what-is-patient-centered-care/>

- Ousley, A. L., Swarz, J. A., Milliken, E. L., & Ellis, S. (2010). Cancer education and effective dissemination: Information access is not enough. *Journal of Cancer Education, 25*(2), 196-205.
- Price, R. A., Elliott, M. N., Zaslavsky, A. M., Hays, R. D., Lahrman, W. G., Rybowski, L., . . . Cleary, P. D. (2014). Examining the role of patient experience surveys in measuring health care quality. *Medical Care Research and Review, 7*(5), 522-554.
- Prochnow, J. A., Meiers, S. J., & Scheckel, M. M. (2019). Improving patient and caregiver new medication education using an innovative teach-back toolkit. *Journal of Nursing Care Quality, 34*(2), 101-106.  
doi:10.1097/ncq.0000000000000342
- Ryan, A. M., Burgess, J. F., Pesko, M. F., Borden, W. B., & Dimick, J. B. (2015). The early effects of Medicare's mandatory hospital pay-for-performance program. *Health Service Research, 50*(1), 81-97.
- Sandal, S., Iannuzzi, M. C. & Knohl, S. J. (2013). Can we make grand rounds "grand" again? *Journal of Graduate Medical Education, 5*(4), 560-563. doi:10.4300/jgme-d-12-00355.1
- Smyth, W., & Abbernethy, G. (2012). Nursing grand rounds: The North Queensland, Australia, experience. *Journal of Continuing Education in Nursing, 44*(5), 203-208.
- Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urologic Nursing, 33*(6), 267-271. doi:10.7257/1053-8164.2013.33.6.267
- Terry, A. J. (2018). *Clinical research for the doctor of nursing practice* (3rd ed.).

Burlington, MA: Jones & Bartlett.

- Ting, X., Yong, B., Yin, L., & Mi, T. (2016). Patient perception and the barriers to practicing patient-centered communication: A survey and in-depth interview of Chinese patients and physicians. *Patient Education and Counseling, 99*(3), 364-369. doi:10.1016/j.pec.2015.07.019
- Weyant, R. A., Clukey, L., Roberts, M., & Henderson, A. (2017). Show your stuff and watch your tone: Nurses' caring behaviors. *American Journal of Critical Care, 26*(2), 1-7.
- White, K. M., Dudley-Brown, S., & Terharr, M. F. (2016). *Translation of evidence into nursing and health care practice* (2nd ed.). New York, NY: Springer.
- Wilson-Stronks, A. (2009). Promoting effective communication: The Joint Commission's efforts to address culture, language, and health literacy. Retrieved from [www.nationalacademies.org/hmd/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/WilsonStronks.pdf](http://www.nationalacademies.org/hmd/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/WilsonStronks.pdf)
- Wolf, Z. R., Bailey, D. N., & Keeley, P. A. (2014). Creation of a caring protocol: Activities and dissemination strategies in caring research and instruments. *International Journal of Human Caring, 18*(1), 66-82. doi:10.20467/1091-5710-18.1.66
- Xu, P. (2012). Using teach-back for patient education and self-management. *American Nurse Today, 7*(3),
- Yu, K.-T., & Ueng, R.-G. (2012). Enhancing teaching effectiveness by using the Six-Sigma DMAIC model. *Assessment & Evaluation in Higher Education, 37*(8),

949-961.

## Appendix A: Teach-Back Educational Planning Grid

Learning Outcome(s): Participants will be able to:

- Define teach-back
- Explain the purpose of the teach-back technique and how it relates to patient-centered communication
- Describe healthcare provider factors that poses communication barriers
- Discuss patient factors that create communication barriers
- Demonstrate the teach-back technique

This educational activity is focused on nursing professional development with the aim of improving the elements of *nurse communication* and *communication about medication* on the HCAHPS survey. Improving patient experience is a QI priority for the organization and an important patient as well as organization outcome. The teach-back methodology will be introduced as an evidenced-based intervention to improve the gap in practice.

Topical Content Outline	Time frame	References	Teaching method/learner engagement and Evaluation method
Introduction Background of the problem (current state) Purpose of the educational intervention (desired state) Identify the gap in practice	5"	CMS (2019). HCAHPS: Patients' perspectives of care survey. Retrieved from <a href="https://www.cms.gov">https://www.cms.gov</a>  HCAHPS (2019). Summary analysis. Retrieved from <a href="https://www.hcahpsonline.org/en/summary-analyses/#NoteAboutBoxes">https://www.hcahpsonline.org/en/summary-analyses/#NoteAboutBoxes</a>	Power Point Presentation, Lecture, Questions and answers
Patient-Centered Care fundamental to quality care	5"	Institute of Medicine (IOM). (2000). <i>To err is human: Building a safer health system</i> . Washington, DC: National Academies Press.  Gillam, S. W., Gillam, A. R., Casler, T. L., & Curcio, K. Education for	Power Point Presentation, Lecture, Questions and answers



		<p>medications and side effects: a two part mechanism for improving the patient experience. <i>Applied Nursing Research</i>, 32(2016), 72-78</p> <p>Joint Commission (JC). (2018). <i>Advancing effective communication, cultural competence, and patient and family centered care</i>. Retrieved from <a href="https://www.jointcommission.org">https://www.jointcommission.org</a></p>	
<p>Communication Elements of effective communication</p>	5''	<p>Wilson-Stronks, A. (2009). Promoting effective communication: The Joint Commission's efforts to address culture, language, and health literacy. Retrieved from <a href="http://www.nationalacademies.org">www.nationalacademies.org</a></p> <p>Boykins, A. D. (2014). Core communication competencies in patient-centered care. <i>ABNF Journal</i>, 26(2), 40-45</p>	<p>Power Point Presentation, Lecture, Questions and answers</p>
<p>Communication barriers: - Healthcare providers - Patient factors</p>	5''	<p>George, S., Rahmatinick, S., &amp; Ramos, J. (2018). Commit to sit to improve nurse communication. <i>Critical Care Nurse</i>, 38(2), 83-85.</p> <p>Ting, X., Yong, B., Yin, L., &amp; Mi, T. (2016). Patient perception and the barriers to practicing patient-centered communication: A survey and in-depth interview of Chinese patients and physicians. <i>Patient Education and Counseling</i>, 99(3), 364-369.</p>	<p>Power Point Presentation, Lecture, Questions and answers</p>
<p>Teach-back Technique Define teach-back Explain the purpose of teach-back Discuss and demonstrate the teach-</p>	5''	<p>Klingbeil, C., &amp; Gibson, C. (2018). The teach back project: A system-wide evidence based practice implementation. <i>Journal of Pediatric Nursing</i>, 42, 81-85. doi:10.1016/j.pedn.2018.06.002</p> <p>Prochnow, J. A., Meiers, S. J., &amp; Scheckel, M. M. (2018). Improving patient and caregiver new medication education using an innovative teach-back</p>	<p>Power Point Presentation, Lecture, Questions and answers, Demonstration</p>

back technique as it relates to communication about medication		toolkit. <i>Journal of Nursing Care Quality</i> , 34(2), 101-106.	
Tips for effective teachback.	5”	AHRQ. (2019). The share approach using the teach back technique: A reference guide for health care providers (workshop curriculum: tool 6). Retrieved from <a href="https://www.ahrq.gov/sites/default/files/wysiuyg/professionals/education/curicullum-tools/shareddecisionmaking/tools/tools-6share-tool.pdf">https://www.ahrq.gov/sites/default/files/wysiuyg/professionals/education/curicullum-tools/shareddecisionmaking/tools/tools-6share-tool.pdf</a> Institute for Healthcare Improvement (IHI). (2019). Always events toolkit. Retrieved from Retrieved from <a href="http://www.ihl.org/resources/Pages/Tools/Always-Events-Toolkit.aspx">http://www.ihl.org/resources/Pages/Tools/Always-Events-Toolkit.aspx</a>	Power Point Presentation, Lecture, Questions and answers
Teach-back Practice Exercise	30”	Institute for Healthcare Improvement (IHI). (2019). (workshop curriculum: tool 6). Retrieved from <a href="https://www.ahrq.gov/sites/default/files/wysiuyg/professionals/education/curicullum-tools/shareddecisionmaking/tools/tools-6share-tool.pdf">https://www.ahrq.gov/sites/default/files/wysiuyg/professionals/education/curicullum-tools/shareddecisionmaking/tools/tools-6share-tool.pdf</a> Role play scenarios (see Appendix D)	Case Study & Role Play

## Appendix B: Teach-Back Competency Checklist

	Steps	Yes	No	N/A
1.	Used a caring tone of voice and attitude..			
2.	Displayed comfortable body language, made eye contact, and sat down.			
3.	Explained information clearly using plain language, regarding the disease, course of treatment, and provided instructions about how to properly take medications, including name of medication, the indication for use and side effects.			
4.	Asked the patient to explain back in their own words what they were told: The recommended medication Indication for use 2 or 3 side effects including when to call the doctor.			
5.	Avoided asking questions that can be answered with a simple “yes” or “no” answer. Used open-ended questions that starts with “what” or “how”.-			
7.	Took responsibility for making sure to explain information clearly.			
8.	Assessed for understanding using open-ended questions and explained again if the patient is not able to teach-back correctly.			
9.	Used reader-friendly print material to support learning			
10.	Documented use of and patient response to teach-back			
11.	Included family members/caregivers if they are present			

Name: \_\_\_\_\_ -Signature: \_\_\_\_\_  
 Evaluator: \_\_\_\_\_ Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

## Appendix C: Educational Session Pretest and Posttest

To be completed before and after the teach-back educational session.

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

Check one:

Pretest \_\_\_\_ - Date: \_\_\_\_\_ Posttest \_\_\_\_ - Date: \_\_\_\_\_

Demographic Questions:

Age Range: 25-30, 31-40, 41-50, 51-60, > 60

Years as a RN: 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40, 40-45, 45-50

Educational Preparation:

Diploma

Associate Degree

BSN

MSN

Doctoral degree

Currently enrolled in:

BSN program

MSN program

Doctoral program

Other \_\_\_\_\_

Question 1: Patient-centered care is a key component of quality care. Circle the answer that best describes the concept of patient-centered care.

- a. Encourages active collaboration and shared decision making between, patient, family, and provider for planning and managing the plan of care.
- b. Ensures information is shared fully and in a timely manner so that patients and their family members can make informed decisions for best health outcomes.
- c. Care is focused on physical comfort as well as emotional, mental, spiritual, social and financial perspectives.
- d. All of the above

Question 2: What is true about the benefits of patient-centered care? Circle the best answer.

- a. Improved satisfaction scores and patient/family experience.
- b. Better morale and productivity among clinicians and ancillary staff.
- c. reduces expenses and improves resource allocation
- d. All of the above

Question 3: Circle the answer that best defines teach-back.

- a. Teach-back ensures that the responsibility to explain clearly about the patients' health problem and treatments is on them, not the provider.

- b. Teach-back is a patient-centered communication technique used to assess patient's comprehension and recall of important information covered in health education such as teaching patients about medication.
- c. Teach-back is an approach that is used to overwhelm the patients with questions to ensure understanding and adherence with care.
- d. None of the above

Question 4: When engaging in teach-back, effective teach-back elements include: Circle the answer that list elements of effective teach-back

- a. Explaining things clearly using plain language, avoiding use of medical jargon, and using a caring tone of voice .
- b. Asking the patient "do you understand" after you have explained important information such as new medication.
- c. A & B
- d. None of the above.

Question 5: Why is teach-back a top safety practice? Circle the correct answer.

- a. Teach-back supports patient engagement, and enhances the patient's experience of care
- b. Reduces patient's misunderstanding and possible misuse of medications
- c. A & B
- d. None of the above

Question 6: Healthcare provider factors can pose communication barriers. Identify the provider factors that pose communication barrier.

- a. The belief that they are already communicating effectively.
- b. Limited knowledge on how to collaborate with patient and family.
- c. Lack of empathy and responsiveness.
- d. All of the above

Question 7: When communicating with patients about medications, what patient factors can create communication barriers?

- a. Low health literacy
- b. Cognitive deficits
- c. Hearing impairment
- d. All of the above

Question 8: On a scale of 1-10, how convinced are you that it is important to use teach-back to explain key information including communicating about new medications.

Not at all important Very Important  
 1      2      3      4      5      6      7      8      9      10

Question 9: On a scale of 1 to 10, how confident are you in your ability to use teach-back?

Not at all Confident Very Confident  
 1      2      3      4      5      6      7      8      9      10

Question 10: How often do you ask patients to explain back, in their own words, what they need to know or do to take care of themselves?

Not at all (0)      Sometimes (1-6)      Usually (7-9)      Always (10)  
 1      2      3      4      5      6      7      8      9      10

## Appendix D: Role Play Scenarios

## Role Play Scenario 1– New medication Lasix

1. Mr. Brown was newly diagnosed this hospital visit with heart failure. He is 58 years old with a history of hypertension. His home medication prior to hospitalization was Norvasc 5/10 mgs. During the hospital stay he commenced a new medication Lasix 40 mgs po daily. You are reviewing the new medication to assure that he understands the pertinent information in readiness for discharge home.

**NURSE:** Mr. Brown, your doctor has ordered a new medication for your Congestive Heart Failure (CHF).

**Explain – Name of medication:** The name of the medication is Lasix.

**Explain indication for use:** Lasix is called a diuretic it helps to improve symptoms and prevent symptoms of heart failure from worsening. It helps the body remove extra fluid by causing you to urinate more. Your doctor will have you take the Lasix daily, or more or less often. Talk with your doctor about how well the medication is working.

**Explain side effects:** Some potential side effects of Lasix may be dizziness, nausea/vomiting, diarrhea, muscle cramps, weakness, dark urine, dehydration. If you are having side effects talk with your healthcare provider, your medication may need to be adjusted.

Do you have any questions?

**MR. BROWN:** No. You gave me a lot of information.

**NURSE:** I am giving you printed material on the Lasix for you to read more about Lasix.

## Role Play Scenario 2 – New medication Lasix

2. Mr. Brown was newly diagnosed this hospital visit with heart failure. He is 58 years old with a history of hypertension. His home medication prior to hospitalization was Norvasc 5/10 mgs. During the hospital stay he commenced a new medication Lasix 40 mgs po daily. You are reviewing the new medication to assure that he understands the pertinent information in readiness for discharge home.

**NURSE:** Mr. Brown, your doctor has ordered a new medication for your Congestive Heart Failure (CHF).

**Explain – Name of medication:** The name of the medication is Lasix.

**Explain indication for use:** Lasix is called a diuretic it helps to improve symptoms and prevent symptoms of heart failure from worsening. It helps the body remove extra fluid by causing you to urinate more. Your doctor will have you take the Lasix daily, or more or less often. Talk with your doctor about how well the medication is working.

**Explain side effects:** Some potential side effects of Lasix may be dizziness, nausea/vomiting, diarrhea, muscle cramps, weakness, dark urine, dehydration. If you

are having side effects talk with your healthcare provider, your medication may need to be adjusted.

- **Medication Name:** Just to be sure I explained things well. Can you tell me the name of your medication?
- **Indication for use:** I want to make sure I explained the reason you are taking the Lasix?

How would you explain to your wife the reason you are taking Lasix?

- **2-3 Side effects:** I want to make sure I did a good job explaining the side effects of Lasix. Can you tell me 3 potential side effects of Lasix.

**MR. BROWN:** The name of my medication is Lasix. I am taking it to improve my CHF by removing extra fluid from my body. Three potential side effects are dizziness, nausea/vomiting, muscle cramps.

**NURSE:** I am providing you with this printed material I will place in your medication folder for you to keep as a reference. I have underlined the important points we discussed today.

#### **Role Play Scenario 3 – New Medication Metformin**

Ms. Orange 46 years old female was admitted from home with complaints of excessive thirst, excessive urination, weakness. Her blood sugar by fingerstick is 300 mgs/dl. The HbA1c is 8.2%. Her admitting diagnosis is newly diagnosed type 2 diabetes mellitus. She has no significant medical history, and no home medications. Her doctor has prescribed insulin as her discharge medication.

**NURSE:** Ms. Orange, you will be going home with a new medication Metformin to treat your Diabetes/high blood sugar. Some common side effects are stomach ache, diarrhea, nausea, vomiting, uneven breathing, and muscle pain. If you are having side effects talk with your healthcare provider, your medication may need to be adjusted. As a safety check, I want to make sure I am being clear, and to answer any questions you may have.

- So that I am sure I told you the name of your new medication: What is the medication called?
- In your own words can you tell me: What is it for or the reasons your doctor prescribed Metformin?
- So that I may know that I have explained things right: Tell me 3 common side effects that you may feel when taking Metformin.

**MS. ORANGE:** The medication is called Metformin. The doctor prescribed Metformin to treat my high blood sugar/diabetes. Three common side effects to look out for are nausea, vomiting, and diarrhea.

**NURSE:** I am providing you with this printed material I will place in your medication folder for you to keep as a reference. I have underlined the important points we discussed today.

**Reflection**

You have had the opportunity to explore three scenarios, consider the differences between scenario 1 part 1 and part 2.

- What did the nurse in the first scene do to produce the differences in the patient's response?