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Evaluation of Use of Teach-Back for Patient Education

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This is to certify that the doctoral study by

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

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MSN, Walden University, 2012

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The focus of this quality improvement doctoral project was the evaluation of an organization's standardized use of the teach-back process for patient education implemented in February 2018. Teach-back is a process in which the patient restates the key concepts for self-management, so the nurse can assess the effectiveness of the teaching and learning process. The practice-focused question compared 4 questions on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey with literature and recommendations from major health care organizations. The Iowa Model was used to guide the project. The literature review was completed using the Cumulative Index to Nursing and Allied Health Plus with full text database of peer-reviewed articles published between 2013 and 2018. The standardized HCAHPS scores for 4 identified questions from 6 months of preimplementation and postimplementation of the teach-back process were compared using an independent *t*-test to determine whether the teach-back method improved satisfaction scores. No statistically significant change was noted in the postimplementation scores compared with scores prior to the implementation of teach-back. Potential reasons for lack of improvement may include lack of nurse readiness, insufficient communication for nurse involvement, and lack of support for the evidence-based practice. Although the results did not show significant improvement in the 4 selected questions, opportunity exists for continued work to standardize the use of teach-back process to improve communication about medications and care transitions for patients preparing for discharge to home. Improved patient understanding may improve outcomes and promote positive social change.

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Table of Contents

List of Tables

Section 1: Nature of the Project

Introduction

Teach-back is an educational technique that assesses the patient and family's understanding of key concepts for self-management by asking them to restate understanding in their own words. Teach-back puts the emphasis on both the teacher and learner while protecting the patient's dignity (Peter, Robinson, & Jordan, 2015, p. 35). It supports the Institute of Healthcare Improvement's (IHI's) *Triple Aim* of improving population health and the experience of care by increasing knowledge to improve quality care transitions (IHI, 2018). The organization implemented the standardized use of teach-back in February 2018 with presentation of the concept at Nursing Grand Rounds followed up with online education for nurses and education at unit meetings.

Problem Statement

Teach-back for patient education in health care has been used for several years but has never been taught and practiced at the local organization where this project took place, a 99-bed community hospital in the midwestern U.S. The IHI (2018) described teach-back as an "always event", or a clear and pervasive, action-oriented practice, to be implemented to confirm patient understanding of education. Tamura-Lis (2013) stated that teach-back promotes health care literacy and enhanced communication for increased patient satisfaction, safety, and quality of care. Use of teach-back empowers nurses to verify the patient's understanding of education and new self-management skills by encouraging engagement and supporting safe and high-quality care (Kornburger, Gibson, Sadowski, Maletta, & Klingbeil, 2013, p. 290). Before the introduction of teach-back,

education was communicated to patients and families by the traditional written and verbal methods (vice president of nursing, personal communication, March 28, 2017). Nurses had not previously received any formal education from the organization nor were they expected to consistently use the teach-back method for patient and family education prior to implementation of the teach-back method as a standardized process that began in February 2018 (vice president of nursing, personal communication, March 28, 2017). I evaluated the effect of the standardized use of teach-back on 4 identified patient satisfaction questions on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey during the doctoral project.

The use of teach-back supports the patient- and family-centered care (PFCC) initiative at the organization. PFCC supports respectful partnerships by educating and training the patient and family who will be providing routine care at discharge (vice president of patient experience, personal communication, May 4, 2017). The organization has defined *family* as the patient's support person, whether or not they are related (vice president of patient experience, personal communication, May 4, 2017). Recent HCAHPS scores showed that the hospital was below national benchmarking in the areas of care transitions, communication with nurses, and communication about medications (vice president of patient experience, personal communication, May 4, 2017). The hypothesis was that use of the teach-back process would improve the HCAHPS scores for the identified questions. The teach-back process promotes quality education and patient safety by improving the patient and family's understanding of self-management (Porter et al., 2016). Kelly and Putney (2015) reported statistically significant improvement in the

HCAHPS survey on specific questions about medication education after implementation of the teach-back technique for patients with heart failure.

My primary objective of the quality improvement evaluation project was to evaluate the effects of the consistent use of the teach-back method for patient education. My secondary objective was to provide a summary of the findings of the evaluation to key stakeholders in the organization. The significance for the field of nursing practice is potential to add to the body of knowledge about the effects of the standardized use of teach-back for patient education on the HCAHPS scores.

Purpose Statement

The meaningful gap in practice I addressed in this project was evaluation of the organization's standardized practice of the use of teach-back for all inpatient education that was implemented in February 2018. Teach-back helps the nurse to verify the patient understands of education including self-care, medication, and general education. The practice-focused question guiding this project was: Does the use of teach-back method implemented at the clinical site improve patient satisfaction scores for specific questions in the areas of care transitions, communication with nurses, and communication about medications on the HCAHPS survey? In this project, I addressed the gap in practice by evaluating the data and providing a summary of the findings to key stakeholders within the organization.

Nature of the Doctoral Project

The source of evidence was deidentified HCAHPS data for 6 months preimplementation and 6 months postimplementation of the use of teach-back. The

HCAHPS satisfaction data elements included two questions on care transitions, one question on communication with nurses, and one question on communication about medications (Appendix A). The vice president of patient experience provided the data after I obtained the Walden University Institutional Review Board (IRB) approval (No. 09-27-18-0174918). I analyzed the data using an independent *t*-test to determine whether the difference between the preimplementation and postimplementation of teach-back was statistically significant. I synthesized the data into the results, which I then compared to current literature. I organized the literature review and analyzed findings based on the topics of systemic reviews, relationship to the HCAHPS patient satisfaction scores, and patient engagement for self-management.

My purpose in the doctoral project connected the gap in practice at the local organization with endorsement of use of teach-back by National Quality Forum (National Quality Forum [NQF], 2009), JC (2016), AHRQ (2017), and IHI (2018). In the project, I evaluated the effect of the use of teach-back for patient education on the patient satisfaction scores in the areas of care transitions, communication with nurses, and communication about medications on the HCAHPS survey. My hypothesis was that the findings would support the use of teach-back as an effective method to evaluate the patient and family understanding of self-care management and discharge instructions as evidenced by improved HCAHPS scores.

Significance

Forming a team of key stakeholders provides the resources to analyze the evidence, design the practice change, implement and evaluate, and integrate and maintain the change (Melnyk & Fineout-Overholt, 2015, p. 286). The key stakeholders identified for this quality improvement evaluation project were the Nursing Professional Practice Council. This group of front-line leaders from the patient care units is affected, as are the nurses who they represent, by new initiatives such as implementation of standardized use of the teach-back method for all patient education. The potential negative effect was that nurses may view the initiative as additional work. The potential positive effect was for nurses to realize the benefits of the standardized use of teach-back as evidenced by improvement in the HCAHPS scores. The potential contribution of the doctoral project to nursing practice is validating the process within a small organization. Also, within the organization, the process for use of teach-back for inpatient education may be implemented in outpatient areas. The positive social change is improved communication of patient education for better understanding of self-care management and discharge instructions.

Summary

Health care education is complex and even educated persons can be at risk for misunderstanding health information (JC, 2016). The use of teach-back supports safety by asking the patient to use their own words to repeat back the information taught to demonstrate their comprehension and ensure the nurse has explained in a way that is clearly understood. This consistent teaching strategy supports immediate feedback to the

nurse to assess the patient's understanding of self-care management and discharge instructions. The quality improvement evaluation project has increased the body of knowledge by evaluating the HCAHPS scores in the areas of care transitions, communication with nurses, and communication about medications. I will further discuss additional background and context of the project in Section 2.

Section 2: Background and Context

Introduction

Teach-back for patient education in health care has been used for several years but has never been taught and practiced at the local organization where the project takes place until February 2018. The practice problem that I addressed in this study was the need for an evaluation of the use of teach-back by nurses on inpatient units at the hospital. The practice-focused question helped me determine whether the use of the teach-back method improved patient satisfaction scores on the HCAHPS survey for specific questions in the areas of care transitions, communication with nurses, and communication about medications. My purpose in this quality improvement evaluation project was to determine whether the use of teach-back for inpatient education significantly improved the HCAHPS scores during the 6 months postimplementation. In Section 2, I define concepts, models, and theories; relevance to nursing practice; local background and context; and my role as the doctor of nursing practice (DNP) student.

Concepts, Models, and Theories

The PFCC model is the organization's action plan for improving patient experience (vice president of patient experience, personal communication, May 4, 2017). The cultural transformation plan includes strategic influences in the area of leadership, hearts and minds, respectful partnerships, reliable care, and evidence-based care. The Institute of Medicine's (Institute of Medicine [IOM], 2001) *Crossing the Quality Chasm* supports PFCC as it defines six areas for improvement in health care including safe, timely, efficient, effective, equitable, and patient-centered care. PFCC model

interventions have been shown to improve outcomes and increase patient satisfaction (Gallo, Hill, Hoagwood, & Olin, 2015; Goldfarb, Bibas, Bartlett, Jones, & Kahn, 2017). Through my DNP project, I supported the PFCC model in the areas of reliable and evidence-based care with evaluation of the use of teach-back.

Evaluation of the change of practice and disseminating the results were guided by the Iowa Model of Evidence-Based Practice to Promote Quality Care (University of Iowa Hospitals, 2015). The Iowa Model uses the scientific process and includes several steps for feedback, analysis, evaluation, and modification. After the change of practice, the process and outcome data were analyzed, and the results were disseminated. The Iowa Model provides for additional review postimplementation by key stakeholders with the potential to modify practice or adopt the new process into practice. This model, originally used in 1994, has had several updates and revisions and is "widely recognized for its applicability and ease of use by multidisciplinary health care teams" (Melnyk & Fineout-Overholt, 2015, p. 283).

Relevance to Nursing Practice

The significance of this project to nursing practice is improved understanding of this consistent, effective teaching strategy and improved compliance with providing patient education (Peter et al., 2015). Walden's positive social change mission and this project supports the IHI's (2018*) Triple Aim* goals of improving population health and experience of care and decreasing per capita costs. Teach-back increases knowledge and retention of information learned (Caplin & Saunders, 2015). This practice supports both

improving the patient's health and the experience of care by increasing knowledge to improve quality care transitions.

More than one-third of U.S. adults have low health literacy, which is the inability to effectively understand both needed and preventative health care (Tamura-Lis, 2013). The National Institutes of Health (n.d.) described low health literacy as a major source of economic inefficiency with an estimated cost to the U.S. economy between $106 and $238 billion annually. Eichler, Wieser, and Brűgger (2009) reported additional costs for those with low health literacy range from 3% to 5% of the total health care cost per person totaling additional expenditures from $143 to $7,798. The expectation for the use of the standardized method of teach-back was to improve inpatient comprehension of all education, including medication education and care transitions as evidenced by satisfaction scores on key questions on the HCAHPS survey.

Bowen, Rotz, Patterson, and Sen (2017) stated that proper education is vital for positive patient outcomes and although nurses have confidence in patients being able to follow the medication instructions, there is less confidence in the patient's ability to know what to expect and how to manage side-effects. Some barriers to providing adequate medication education include time, communication barriers, and resources (Bowen et al., 2017). Current strategies include motivational interviewing, pill boxes, written and verbal education, and the use of teach-back, and future strategies may include patient-friendly drug information, pharmacist involvement, and collaboration with pharmacist (Bowen et al., 2017). Abrecht et al., (2014, p. 1491) discussed additional barriers to compliance with discharge education including age, language, educational level, reading ability,

formatting of discharge instructions, and follow-up. The complexity of discharge instructions, comorbidities, and cognitive impairment can cause additional problems in managing care at home (Abrecht et al., 2014). Standard practice for patient education includes demonstration of skills, video or audio education, and verbal and written instructions.

Evaluation of the use of the teach-back process addressed the gap in practice at the organization. Limited information exists in the literature about which format of teaching provides optimal education. Adequate education for safety and self-management is necessary due to complex health care instructions, shorter hospital stays, and individual needs and learning barriers of patients (Kornburger et al., 2013). The evaluation provided the organization with information about effects of the teach-back process on HCAHPS scores in the areas of care transitions, communication with nurses, and communication about medications. The evaluation allowed for opportunities for reflection of current practice and continuation of the use of teach-back, change, or optimization, and use of the process in other areas of the organization.

Local Background and Context

The 99-bed community hospital in the midwestern U.S. identified low HCAHPS scores related to patient education in 2017 and initiated the use of teach-back throughout the organization in February 2018. The 4 specific HCAHPS questions identified for evaluation are listed in Appendix A. The hospital is part of a stand-alone not-for-profit health care system which includes the hospital, multispecialty physician clinic, and Foundation. The organization's mission is Your Health Is Our Mission. The teach-back

initiative supports the mission by encouraging shared decision making and self-management for optimal health. The hospital is accredited by the JC which has health literacy requirements in Provision of Care Standard 02.03.01 (JC, 2016). This standard describes assessing the patient's learning needs and identifying health literacy needs and providing education consistent to those needs (JC, 2016). I used the HCAHPS data to evaluate the results of implementation of the teach-back process in this quality improvement evaluation project.

Role of DNP Student

My role in the DNP project was the evaluation of the existing quality improvement initiative of standardized use of teach-back for patient education within the local organization. The organization had identified the lack of a plan for evaluation as a gap in practice. I obtained deidentified data after Walden IRB approval. As a DNP student, I obtained data from preimplementation and postimplementation of the teach-back process and analyzed the data using IBM® SPSS Statistic Software Version 25. I synthesized the results and compared them to the national standards and to findings from the literature review. Then I prepared a summary which was presented to the key stakeholders of the Nursing Professional Practice Council on October 17, 2018.

As an employee of the organization and DNP student, I am interested in helping the support the organization's vision of Guiding You (patients) to BETTER (health). The evaluation of the teach-back initiative supports the vision through better evaluation of the patients' understanding of self-management and education. I initially planned to implement the teach-back initiative, and then I found that the timing would not allow for

me to do this. The organization implemented the new process and I continued to support this initiative through evaluation of the project. I identified no potential biases.

Summary

Today's health care is complex, and instructions may be difficult to understand and follow, especially for those patients with low health literacy. Current education techniques are not providing patients with the satisfaction scores desired by the hospital. A need exists to provide enough education for patient self-management and to increase nurse confidence of the patient's understanding. The doctoral project was guided by the Iowa Model (University of Iowa Hospitals, 2015) which provided for feedback through analysis, evaluation, and recommendations for modification. I will identify the sources of evidence in Section 3.

Section 3: Collection and Analysis of Evidence

Introduction

The educational technique of using teach-back for assessing key concepts learned by the patient during the hospital stay had never been taught or consistently practiced at the clinical site, a 99-bed community hospital in the midwestern U.S.. My purpose in this DNP project was to evaluate the organization's new expectation of use of teach-back for all inpatient education. The practice-focused question helped me to determine whether the use of the teach-back method improved patient satisfaction scores on specific questions of the HCAHPS survey. The teach-back initiative supports the organization's mission of Your Health Is Our Mission by encouraging shared decision making and self-management for optimal health of the patient. In Section 3, I identify collection and analysis of evidence including the practice-focused question, sources of evidence, archival and operational data, and analysis and synthesis.

Practice-Focused Question

The practice-focused question helped me to determine whether the use of teach-back at the organization improved patient satisfaction scores on specific questions on the HCAHPS survey. The local practice problem identified by the organization was the need for better patient education as evidenced by patient satisfaction scores in the areas of care transitions, communication with nurses, and communication about medications. I used the evaluation project to assess the influence of the use of teach-back for patient education. Using this approach, I compared data from the HCAHPS survey from before and after nurses received education on the use of teach-back.

Sources of Evidence

I completed a literature review in June 2018 of peer-reviewed articles in the CINAHL Plus with full text database using the search terms of *teach-back* or *teach back* and *patient satisfaction* in studies published between 2013 and 2018. This resulted in 68 articles, which I reviewed and used to address the practice-focused question. I added an additional search term of HCAHPS score, resulting in only two articles. Centrella-Nigro and Alexander (2017) reported significant improvement in patients' knowledge scores on the HCAHPS survey in this quasi-experimental research study. Gillam, Gillam, Casler, and Curcio (2016) noted improvement with a dual intervention, use of teach-back and patient drinking mugs. I provided the evidence from the literature review during the presentation of the summary of findings to the key stakeholders. I used the analysis of the literature review to support the use of teach-back for all patient education in the organization.

Archival and Operational Data

The vice president of patient experience identified the data that were relevant to the practice problem. The patient satisfaction questions on the HCAHPS survey, which I evaluated, included questions in the areas of care transitions, communication with nurses, and communications about medications (Appendix A). The HCAHPS is an ongoing, publicly reported monthly survey with collection of data measuring the patients' perception of their hospital experience (Centers for Medicare and Medicaid Services [CMS], 2017). This survey asks a random sample of discharged patients 27 questions about their recent hospital stay in critical aspects of their experience between 48 hours

and 6 weeks after discharge (CMS, 2017). The reported results are based on choices of *always*, *sometimes*, *usually,* or *never* with reported scores for those who answer *always*, or choices of *strongly agree, agree*, *disagree*, or *strongly disagree* with reported scores for those who answer *strongly agree.* The relevance of these data to the practice problem was to identify the influence of the consistent use of the teach-back method for patient education. For the project, I requested permission from and was approved by the vice president of nursing, and I obtained access to the operational data from the vice president of patient experience.

Analysis and Synthesis

I received and analyzed the standardized HCAHPS data from preimplementation and postimplementation of the teach-back process using IBM® SPSS Statistic Software Version 25. I used an independent *t*-test to determine whether the difference between the preimplementation and postimplementation was statistically significant. I set an alpha of .05 to determine statistical significance. I synthesized and compared the data with national standards and findings from the literature review. I completed and presented a summary to key stakeholders on the Nursing Professional Practice Council in October 2018. I anticipated no problems with integrity of the evidence or missing information. The statistical analysis provided information on significant changes in the HCAHPS scores.

Summary

I used the literature review to determine how others have approached the same problem and helped to identify effective strategies (Oermann & Hays, 2016). After I received the Walden University IRB approval, I requested data and I analyzed and compared them with current standards and the literature review. I presented the evaluation and recommendations to the Nursing Professional Practice Council in October 2018.

Section 4: Findings and Recommendations

Introduction

The local practice setting identified low scores on HCAHPS patient education as a practice problem that needed a quality improvement initiative to improve the low scores and improve patient satisfaction. As a result of recognizing the practice problem, the organization implemented teach-back education to all inpatient nurses in February 2018. As the implementation began, no immediate plan to evaluate the effectiveness of the teach-back process was evident. Furthermore, "Effective patient education can have a significant impact on quality care and patient safety, and leads to improved patient satisfaction" (Tamura-Lis, 2013, p. 267). The gap in practice identified was lack of a plan for evaluation of the teach-back initiative. I used the practice-focused question to determine whether the use of teach-back at the organization improved patient satisfaction scores for specific questions on the HCAHPS survey.

My purpose in this the DNP project was evaluation of the preimplementation and postimplementation scores from the HCAHPS survey for 4 specific questions related to patient education in the areas of care transitions, communication with nurses, and communication about medications. After receiving the Walden University IRB approval, I requested data from the vice president of patient experience. The data, including trending monthly scores for each question, and a trend line for each question's score by month were provided by the Customer Success Manager at National Research Corporation (NRC) Health. I analyzed the data using an independent *t*-test with SPSS

software to determine if the differences between the HCAHPS scores preimplementation and postimplementation of the teach-back process were statistically significant.

Findings and Implications

I evaluated the data using a preimplementation and postimplementation design for the time period of six months before and after initiation of the teach-back process. I excluded scores for the month of February, during the time of initiation of the teach-back process. The HCAHPS score reflects how many patients answered *always* or *strongly agree* to the questions and was compared to the current NRC averages of the same size hospitals (Table 1). The goal was improvement in the patient satisfaction scores for the questions of care transitions, communications with nurses, and communication about medications.

Table 1

HCAHPS Data

Group Statistics

	Pre or Post	*N*	*M*	*SD*	*SDE*
Understood managing of health	Pre Teach Back	6	56.4667	7.43873	3.03685
	Post Teach Back	6	46.6667	6.34529	2.59045
Understood purpose of medications	Pre Teach Back	6	63.3333	6.66893	2.72258
	Post Teach Back	6	59.3833	8.04821	3.28567
Nurses explained things understandably	Pre Teach Back	6	75.0500	7.88156	3.21763
	Post Teach Back	6	74.0667	5.00387	2.04282
Staff described new medication side effects	Pre Teach Back	6	52.0667	4.59202	2.28191
	Post Teach Back	6	43.6667	4.59202	1.87469

Independent Samples Test

		F	Sig.	*t*-test	*df*	sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval - Lower	95% Confidence Interval - Upper
Understood managing of health	Equal variances assumed	.088	.773	2.455	10	.034	9.80000	3.99160	.90616	18.69384
Understood purpose of medications	Equal variances assumed	.076	.788	.926	10	.376	3.950000	4.26709	-5.55767	13.45767
Nurses explained things understandably	Equal variances assumed	1.075	.324	.258	10	.802	.98333	3.81134	-7.50885	9.47552
Staff described new medication side effects	Equal variances assumed	.016	.902	2.844	10	.017	8.40000	2.95323	1.81980	14.98020

Results of Question on Care Transitions 1: Managing Health

The first question for care transitions was: When I left the hospital, I had good understanding of the things I was responsible for in managing my health. I used an independent *t*-test to determine whether the preimplementation and postimplementation scores were significantly different. I conducted a Levene's test to test for the assumption of homogeneity, which I found to be nonsignificant ($p = .773$), indicating the assumption of homogeneity was met. For this question, I compared the 6-month preimplementation score of $M = 56.47$ ($n = 389$) and 6-month postimplementation score of $M = 46.67$ ($n = 353$). The independent *t*-test result ($t = 2.46$, $p = .773$) was not statistically significant. I then compared the mean scores with the NRC average score of 54.2 for the first question. The preimplementation scores exceeded the NRC average; however, the postimplementation scores did not meet the standard.

Results of Question on Care Transitions 2: Managing Health

The second question for care transitions was: When I left the hospital, I clearly understood the purposes for taking each of my medications. I used an independent *t*-test to determine whether the preimplementation and postimplementation scores were significantly different. I conducted a Levene's test to test for the assumption of homogeneity found that it was not significant ($p = .788$), indicating the assumption of homogeneity was met. For this question, I compared the 6-month preimplementation score of $M = 63.33$ ($n = 346$) and 6-month postimplementation score of $M = 59.38$ ($n = 299$). The independent *t*-test result ($t = .926$, $p = .778$) was not statistically significant. I then compared the mean scores to the NRC average score of 62.8 for the second question.

The preimplementation scores exceeded the NRC average; however, the postimplementation scores did not meet the standard.

Results of Question on Communication With Nurses

The question about communication with nurses was: During the hospital stay, how often did nurses explain things in a way you could understand? I used an independent *t*-test determine whether the preimplantation and postimplementation scores were significantly different. I conducted a Levene's test to test for the assumption of homogeneity and was found to be not significant ($p = .324$), indicating the assumption of homogeneity was met. For this question, I compared the 6-month preimplementation score of $M = 75.05$ ($n = 394$) and 6-month postimplementation score of $M = 74.07$ ($n = 352$). The independent *t*-test result ($t = .258$, $p = .324$) was not statistically significant. I then compared the mean scores with the NRC average score of 54.2 for the third question. The preimplementation scores exceeded the NRC average; however, the postimplementation scores did not meet the standard.

Result of Question on Communication about Medication Side Effects

The question about communication about medications was: Before you had any new medicine, how often did hospital staff describe possible side effects in a way you could understand? I used an independent *t*-test to determine whether the preimplementation and postimplementation scores were significantly different. I conducted a Levene's test to test for the assumption of homogeneity, which I found to be nonsignificant ($p = .902$), indicating that the assumption of homogeneity was met. For this question, I compared the 6-month preimplementation score of $M = 52.07$ ($n = 223$)

and 6-month postimplementation score of $M = 43.67$ ($n = 190$). The independent t-test result ($t = 2.84$, $p = .902$) was not statistically significant. I then compared the mean scores with the NRC average score of 50.8 for the question. The preimplementation scores exceeded the NRC average; however, the postimplementation scores did not meet the standard.

Unanticipated Limitations and Outcomes and Potential Effects

A limitation to the quality improvement evaluation project is the HCAHPS reporting lag for completed data for August 2018, which I did not expected. It was noted that 3 months of 11 months reviewed had 1 question each month with an insufficient sample size. This limitation did not affect the results of the evaluation due to the generalized lack of improvement in the HCAHPS scores in the postevaluation months.

Implications From Findings to Individuals and Organization

I implemented an evidence-based approach to improve patient satisfaction scores at the site. The evaluation of postimplementation data did not show statistically significant improvement in the post implementation scores compared with the pre-implementation scores. Potential reasons for lack of improvement may include lack of readiness by nurses, lack of communication for involvement, and lack of a work environment supporting the evidence-based practice (EBP) (White, Dudley-Brown, & Terhaar, 2016).

Potential Implication for Positive Social Change

Teach-back processes support improvement in health and the experience of care by increasing knowledge and retention of health education information learned by the patient and their family members or caregivers (Caplin & Saunders, 2015). The lack of

improved HCAHPS scores at such an early point in the implementation is not as important as the need to continue the process of teach-back at the site. The process is known to improve outcomes and therefore may need more time to show benefit. The potential positive social change that can come from improved patient understanding of their health information is far reaching. When patients understand the health information that they are provided by their health professionals, they are more likely to follow through with medical and nursing care recommendations in their home setting. As a result, health may improve, and patient satisfaction may improve.

Recommendations

The recommendations as a result of this project are to continue to use teach-back for patient education. Teach back has been described as an *always event* for confirmation of the patient's understanding of the education provided (IHI, 2018). It is also endorsed by the NQF (2009), JC (2016), and AHRQ (2017). Teach-back can provide nurses the tool for a consistent teaching strategy and compliance with providing patient education.

The proposed recommendation is to use the Iowa Model to guide evaluation and further recommendations for practice by a group of direct care nurses. Melnyk and Fineout-Overholt (2015) stated that "dissemination of results is important for professional learning" (p. 287). An audit could be performed to indicate the frequency that teach-back is being documented in the electronic health care record (EHR). Staff knowledge, willingness, and readiness to use teach-back could be assessed using an on-line survey tool. Nursing leadership will need involvement to support the environment for use of this EBP. After reeducation and charting audits show standardized use of teach back, the effects on

HCAHPS scores for the four questions identified will be reevaluated. The modification of the data will be evaluated for both process and outcome indicators (University of Iowa, 2015).

Strengths and Limitations of the Project

This quality improvement evaluation project was guided by the Walden Quality Improvement Evaluation Manual. I collected the data using the organization's standardized HCAHPS data, which are compared to national data for the same questions in like-sized organizations. These were the two main strengths of the project.

A limitation of the project was the timeline for project completion, which included insufficient sample sizes for the month of August. In addition, it may have been helpful to have planned and included data on the frequency that teach-back was being documented in the EHR. It is also unknown what percentage of nurses received training through Grand Rounds, online education, and unit meetings.

This project is supported by systematic reviews in the literature that promote teach-back as a best practice for patient education (Almkuist, 2017; Dantic, 2014). Further research is needed to evaluate the effect of the use of teach-back for patient education on HCAHPS scores. Although this project did not show clinical or statistically significant improvement in any of the four questions evaluated, some unknown variables could have affected the results. Adherence to the educational approach by nursing staff is not known.

Recommendations for Future Projects

Future projects may include use of the teach-back method that are specifically focused on discharge instructions, medication education, or self-management. Similar methods could be used for implementation with increased staff participation. The preimplementation and postimplementation HCAHPS data is standardized and could be used for evaluation.

Section 5: Dissemination Plan

Dissemination to Organization

The plan for dissemination to the organization was a PowerPoint presentation of the summary of findings to the Nursing Professional Practice Council. This group represents nurses from each patient care unit. They are a group of front-line leaders who are still learning the shared governance structure with their sponsor, the vice president of nursing. The goal was to share recommendations and encourage support for continuing the standardized use of teach-back within the organization and forming a work group.

After additional work and evaluation, the project could be shared with a broader nursing profession. One way would be to share the process and results through the local university, which offers associate and bachelor of science of nursing classes. A neighboring organization also offers a yearly research day each fall, which would be an appropriate venue for disseminating additional findings.

Analysis of Self

As a DNP scholar practitioner, I have proficiency in evaluation of quality improvement processes as a result of completing this project. I have gained insight into the organizational and professional culture needed to create and sustain change. As a result, I am confident that I will be able to address other practice problems within the organization. My interest in participating in evidence-based quality improvement projects has grown during and since my Organizational and Systems Leadership for Quality Improvement class in Summer 2017. Evaluating changes in practice is important for successful implementation of evidence-based quality improvement initiatives (Zaccagnini

& White, 2014). My key learning points for success are making sure the initiative or project is important to the organization; early planning for evaluation of the project using a measurable outcome; and creating and using a timeline to keep the project on track.

This new knowledge aligns with my long-term professional goal to be an EBP mentor within the organization. The organization has departments for quality and process improvement, but as an EBP mentor, I offer in-depth knowledge and skills to help lead the organization in advancing evidence-based care and excellence. Best practice is not always used due to "time, communication, involvement, resources, patient expectations, and perceived priority" (Zaccagnini & White, 2014, p. 95). As an EBP mentor, I will engage with the clinicians in planning, implementation, and outcomes evaluation to support and encourage their role and promote a culture of best practice. I am also sharing my knowledge by teaching the "Evidence-Based Practice" class for online bachelor-degree students at the local university in Fall 2018.

The completion of the project has been confirming that I made the right decision to return to school for my DNP. I know of two other nurses who have achieved this degree while working within the organization. One is no longer with the organization and the other is not using the degree to the fullest potential. I have learned that most of the leaders in the organization do not fully understand the role of the DNP. I can raise awareness of the role of the DNP within the organization at the "highest level of clinical practice and scholarship, integrating concepts of leadership and advocacy in to the richness of nursing science and theory" (Zaccagnini & White, 2014, p. 418). As a DNP, I will be able to assist interdisciplianry teams in implementing and evaluating evidence-

based practice to ensure patient safety and quality outcomes. In addition, I will be an encouraging and supportive role model of other nurses returning to school including those who may be considering this terminal nursing degree.

The completion of the project has gone smoothly with the organization's and my mentor's help and support. The most significant challenge for me was setting up the data, which included results which were not positive. This was accomplished with the help of my project chair. As a scholar practitioner, I was able to speak to that result, review the current literature, and recommend continued work for consistent, standardized use of teach-back throughout the organization for better patient outcomes. I will be able to assist the work group in planning, implementing additional education or changes, and evaluation at a future date. The other challenge that I have had with the project was time management with completing the project along with other classes, work, teaching, and life! The new term plan goal form presented this quarter has been extremely helpful to keep me on track. A solution for future projects will be the creation of a timeline for project completion with intermittent evaluation of goals.

Summary

The organization implemented the teach-back process in February 2018 to improve patients' understanding of educational key concepts for self-management and improvement of the HCAHPS patient satisfaction scores. The gap in practice identified for the DNP project was the lack of a plan for evaluation of the organization's standardized practice of the use of teach-back for all inpatient education. The Iowa Model (University of Iowa Hospitals, 2015) guided the DNP project and included steps for

further evaluation and modification. I evaluated the standardized HCAHPS scores using SPSS software and I presented the data results to the key stakeholders, the Professional Practice Council, in October 2018. Teach-back has been endorsed by key health care organizations, so it was somewhat disappointing to review the results, which were not clinically or statistically significant. The findings did not support improvement in the HCAHPS scores. The stakeholders offered suggestions on why the results may not have been favorable and would like to continue to standardize the teach-back process. They identified a work team to continue with the effort. This project will continue with modification and evaluation, until the process is imbedded into the organization's culture. Nursing will work for adoption of the process to be successful in using the evidence-based practice. The improvement in transitions of care for the patient by providing standardized education should lead to improved patient self-management representing positive social change.

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Appendix: HCAHPS Questions Evaluated

Care Transitions

- When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
- When I left the hospital, I clearly understood the purpose for taking each of my medications

Communication with Nurses

- During the hospital stay, how often did nurses explain things in a way you could understand?

Communication about Medications

- Before you had any new medicine, how often did hospital staff describe possible side effects in a way you could understand?