Improving Patient and Family Experience in Level One Post Anesthesia Care Unit

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Notes from the Author

The road to completing my DNP program has been long and arduous. To begin with, I must pause and reflect on how essential my faith in God is to every aspect of my life. Without the grace and mercy of God reflected best in the love of His son Jesus, I could never be where I am today. I am forever thankful for my DNP faculty Dr. Campbell-O' Dell, and my site chair Dr. Aucoin, for their unceasing guidance and support throughout this entire process. Lastly, a heartfelt thank you to my biggest supporters: Kayla, Rani, Regimol, PACU manager and all of the PACU nurses.

I would like to dedicate this work to my husband, Mike. Without his ceaseless encouragement, his unwavering support, his faithful service in being a sounding board, and his wisdom in helping me to relax and not sweat the little things I would never have finished this program. Finally, I want to dedicate this work to my mother Su-Lan. She became a single mother when my father died in a scooter accident in Taiwan. She selflessly sacrificed to raise me and my three siblings. She is the voice in my head that comforts me when I want to quit. I owe her a debt of gratitude that I will never be able to pay. I can only tell her that despite the times when it seemed like you love, and guidance was for nothing it has finally paid off. I hope that I can be half as tenacious and courageous as you. There are so many things I wish I could tell you but I will just say three special words 我愛你 (I love you)!

Abstract

Historically speaking, post-anesthesia care units (PACU's) have been closed off to visitation. However, several studies on the patient experience of care that demonstrates that family visitation in PACU not only increases patient and family satisfaction, but also decreases their anxiety. The purpose of this project was to improve family outcomes by implementing family visitation in the PACU, utilizing two new valid survey items in the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery survey (CAHPS OAS). This project sought to demonstrate the need to change the focus from health care to optimizing health for patients and their families in the implementation of family visitation in the PACU. The basis for the implementation of this intervention rested on the Family-Centered Care model of practice. Pre-implementation and post-implementation surveys were conducted and collected into two different sets of data. The project result is clear that patient and family satisfaction increased by implementing family visitations in the PACU.

Keywords: family visitation, family satisfaction, patient satisfaction, PACU, recovery room, patient-family centered care, family presence

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Section I. Introduction

Background

It can be stressful for both the patient and their family when patients have surgery in an acute care setting (Deselms, et al., 2018). Since the family plays such a vital role in the caregiving and recovery process, it is important that they stay well informed and feel included in the recovery process (Deselms, et al., 2018). As a rule, post-anesthesia care units (PACU's) have historically been closed off to visitation. This has meant that families had to anxiously wait in a patient's room of a designated area while a patient recovered from surgery (Sullivan, 2001). It is not uncommon for patients to forget when they see their family in the PACU due to anesthesia (Deselms, et al., 2018). However, several studies on the patient experience of care that demonstrates that family visitation in PACU not only increases patient and family satisfaction, but also decreases their anxiety (Sullivan, 2001; Voncina, 2016; Lee et al., 2015).

Organizational Needs Statement

Post-discharge phone calls have consistently provided comments from the patients and families that it would have been helpful to see their loved ones for mutual reassurance during the recovery in the PACU ([redacted], personal communication, March 31, 2021). Evidently, there is a gap between care that is currently providing and the care that the patient and family need. The issue to be addressed is that should PACU staff allow family members to visit patients during recovery ([redacted], personal communication, March 31, 2021). The fundamental problem is how to balance the needs and desires of patients' families while at the same time maintaining a professional and focused clinical environment.

At present, this organization does not allow family members to visit their loved ones in

the PACU. This practice has been standard policy for this organization and many other hospital facilities for many years (Boschma, & Bonifacio, 2008). Although this policy gives nurses and other hospital staff a distraction-free environment, it fails to address the stress and anxiety that patients and families experience when they are cut off from contact with one another. Patient satisfaction scores are directly correlated to the hospital facilities reimbursements (Mehta, 2015). This incentive offered by insurance providers and other healthcare funding sources compels PACU, such as the one at this organization, to consider how implementing a more patient-focused strategy might improve patient satisfaction scores.

One study demonstrated that while 83.7% of hospital staff would want to have the option of visiting their family member in PACU, only 47% of those same respondents believe family visitation should be allowed in the PACU. Clearly, the data and anecdotal evidence show that nurses don't like the idea of families being present in the PACU (Walls, 2009).

When studies about family satisfaction are considered, the benchmarks clearly demonstrate that allowing families to visit their loved ones, increases family member satisfaction and decreases family member stress and anxiety (Voncina, 2016; Lee et al., 2015). In order for this organization to meet the benchmarks for family satisfaction demonstrated by research at many other hospital facilities, the possibility of allowing family access to PACU needs to be explored and addressed.

In addition to the potential benefit, this organization is missing out on whether the current policy aligns with the Triple Aim and Healthy People 2020. According to the Institute for Healthcare Improvement, the Triple Aim is a framework for helping organizations transition from focusing on healthcare to optimizing health for individuals and populations. The task, therefore, of increasing patient satisfaction and decreasing family stress and anxiety are aligned

with the experience of care portion of the triple aim framework (Stiefel & Nolan, 2012). Healthy People 2020 primary objectives address the need to decrease mental health for populations of all ages and ethnicities (Office of Disease Prevention and Health Promotion, 2020). Sullivan (2001) allows family visitation to reduce anxiety levels and improves overall mental health, which intersects with Healthy People 2020. Increasing satisfaction and decreasing stress and anxiety among families in the PACU can have a positive effect not just on the physical but also on the mental and the social well-being.

Problem Statement

Currently, this organization does not allow family visitation in the PACU. The problem that inhibited the implementation of family visitation in the PACU was the resistance from the nursing staff due to the challenges that family visitation may bring ([redacted], personal communication, March 31, 2021). Patient and family needs in the PACU in this organization were unmet, indicating a missed opportunity for patients and families to have more excellent care and satisfaction. This may affect this organization to benefit from a higher survey score and greater reimbursement to align with the Institute for Health Improvement Triple Aim for better care for individuals and lower per capital cost of care to benefit communities.

Purpose Statement

The purpose of this project was to improve family outcomes by implementing family visitation in the PACU, utilizing two new valid survey items in the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery survey (CAHPS OAS).

This project sought to demonstrate the need to change the focus from health care to optimizing health for patients and their families in the implementation of family visitation in the

PACU. Such a change will enable this organization to demonstrate its commitment to the Triple Aim framework and Healthy People 2020.

Section II. Evidence

Literature Review

An extensive literature search was conducted limited to all English-language studies on family experience and satisfaction in the post-anesthesia care unit (PACU). The search included the criteria of meta-analysis, randomized controlled trial, and system review, and excluded the criteria of inpatient surgeries.

The literature search was conducted utilizing the Cumulative Index of Nursing and Allied Health Complete (Ebsco Host), PubMed, and Google Scholar, Cochrane databases with various combinations of search terms, utilizing the Boolean search (*patient satisfaction* OR *family satisfaction*) AND (*PACU* OR *recovery*); *family visitation* AND (*PACU* OR *recovery*); *family visitation* AND *patient satisfaction*; *family visitation* AND *PACU* AND *family satisfaction* ; *family visitation* AND *recovery*; *patient-family centered care*; *family presence* ; *family visitation* AND *PACU*; *family visitation* AND *family satisfaction* AND *ICU*.

Narrowing down the articles to the ones published within the last five years resulted in 524 articles. After a meticulous review of the titles and abstracts and excluding articles not relating to family visitation, only eight articles were considered relevant to the project for further review. Among the eight articles, there was no randomized control study found. Most of the studies are qualitative. In order to collect broader evidence to support the correlation between family visitation and a patient's physical state, the search timeframe was extended to within 30 years. The result yielded 1380 articles. All the articles are peer-reviewed. Finally, a total of 12 articles pertaining to this topic were kept to synthesize the literature.

Current State of Knowledge

There is very limited data to show current practice for PACU visitation in the United States. However, one study revealed that only eight percent of patients over 18 years old are allowed to have a visitor present in the PACU (DeLeskey, 2009). On the other hand, 60 % of children under three are consistently allowed to have a visitor in the PACU. 48 % of children between three and 12 years old are allowed to have a visitor in the PACU (DeLeskey, 2009). 25% of patients between 12 to 18 are allowed to have a visitor in the PACU (DeLeskey, 2009).

Proper attention, however, must be given to prepare for and ensure that the visits are successful. According to the 2019-2020 peri-anesthesia nursing standard, practice recommendations, and interpretive statements, to prepare for family visitation should take place in the preoperative phase. Patients should be informed that they have the option to allow the family member (s) to visit them in the PACU level one while they wake up from anesthesia. A family visitation guide should be distributed to family members(s) in the perioperative area (American Society of Perianesthesia Nurses [ASPN], 2018). In order to determine beneficial family interactions and to assure the patient's family, the patient's primary nurse should be available to answer questions (ASPAN, 2018). These nurses should use their judgment to assess the therapeutic benefit of family visits and end the visit when it becomes disruptive or no longer beneficial (ASPAN, 2018). The length of the visits is also up to the discretion of the primary nurse (ASPAN, 2018)

Family visitation in the PACU is slowly growing in popularity and in practice. In order to ensure that these visits accomplish their intended purpose and don't become a strain on hospital personnel, however, preparation is necessary. The utilization of common-sense measures by nursing professionals can enable family visitation to be a net benefit and not a distraction.

Current Approaches to Solving Population Problem(s)

The literature research centered around increasing patient and family satisfaction in general and increasing family satisfaction in the PACU in specific. One of the more researched approaches to increasing family satisfaction in the PACU is the practice of allowing family visitation. Given that patients recovering from surgery can awaken confused, and extremely vulnerable (Lee, Li, & Yates, 2015). It is logical that the presence of a familiar face can offer comfort and reduce stress. Contemporary research on the topic has demonstrated this to be true (Lee, Li, & Yates, 2015).

One of the key goals of the PACU is to manage post-operative pain. Increased levels of anxiety on behalf of the patients can be tied to increased levels of pain (Carr et al., 2006). By allowing family visitation, patient anxiety levels can be decreased, and this can have an ameliorating effect on patient pain levels (Lee, Li, & Yates, 2015).

One of the greatest barriers to the implementation of the practice of family visitation is the resistance of nursing staff to incorporate it into common use (Vocina, 2016). Nursing staff have the perception that family visitors disrupt and pose a barrier to efficient and effective care (Walls, 2009). When nurses become patients, however, they overwhelmingly prefer to have the option to have family visit them in the PACU (Walls, 2009).

Despite the hesitation by nursing staff to implement family visitation, the evidence for inclusion is clear. The benefits of having family members visit their loved ones coming out of surgery has a significant impact on reducing stress and anxiety. When patients' anxiety levels decrease then there is a greater opportunity to manage pain more easily (DeLeskey, 2009). This can in turn make the job of the nursing staff less stressful and more efficient because they are not having to use increased and more intense methods of pain control (DeLeskey, 2009).

Some measures have been suggested for making family visits more effective and less likely to create disruption and difficulty for the nursing staff. One such suggestion is the use of a nurse liaison. Such a person could find out the patient's wishes for visitation before surgery and then monitor the progress of the patient and then accompany the named family member to the patient's bedside at the appropriate time (Deselmes, et al., 2018) This practice gives the patient the comfort of knowing the family member is present while at the same time giving the nursing staff a measure of control as to how the family visitations are conducted (Deselmes, et al., 2018).

Evidence to Support the Intervention

Having family visitation is the most effective approach to maintaining and raising patient satisfaction in the PACU (Croke, 2019). There are a number of reasons for this that are backed by peer-reviewed studies. One of the first and obvious benefits is the reduction of stress and anxiety. There is a direct relationship between anxiety and an increase in pain in post-operative patients (DeLeskey, 2009). Schulte et al. (1993) found that patients in the cardiac care unit received family visitation has a lower heart rate. A perspective, randomized, controlled study revealed parental visitation in the PACU reduced children's surgical pain and the required amount of anxiolytic medication (Lardner, et al., 2010). Patients who are allowed to have family visitation in the PACU exhibit far less stress which in turn allows for better pain management and control (Lardner, et al., 2010).

Another benefit to patient visitation in PACU is greater patient and family satisfaction (Wendler, et al., 2017). Patients and their family members who are allowed PACU visitation exhibit much higher levels of satisfaction with their experience in the unit (Wendler, et al., 2017). This has ramifications for the patient and family well-being as well as hospital satisfaction scores and the resulting funding.

In addition to the other stated benefits, participants in the PACU who have participated in family visitation research have demonstrated the belief that the visitation greatly benefitted recovery. According to the data, participants' views on the benefit of visitation to recovery outcomes more than doubled from 30.1 % pre-operative to 69.1 % post-operative (Pagnard & Sarver, 2018). The significant and positive impact of family visit implementation has proven to be a best practice that an overwhelming body of peer-reviewed research supports.

Evidence-Based Practice Framework

The basis for the implementation of this intervention rested on the Family-Centered Care model of practice. According to this model, families and health care providers enter into a cooperative relationship to provide patient care. This model rests on communication, education, cooperation, and compassion (Rawson, 2016). The family-centered care model is a well-researched and studied method of building trust between patients and families and health care providers (Rawson, 2016). Interventions such as family visitation in the PACU follow practices that are both complementary and correlated to the family-centered care model (Rawson, 2016). Another important aspect of the family-centered care model is its emphasis on change in contemporary nursing practice (Kokorelias et al., 2019).

Family visitation in PACU is an intervention that has not been implemented universally and when put into practice furthers the aims of the family-centered care model and opens the dialog for further care discussion and improvement.

Ethical Consideration & Protection of Human Subjects

This project has no potential harm to the target population due to the design of this project. During the implementation, family members waiting in the waiting room were given the option to visit their loved ones in the PACU. The target population was taken advantage during

the implementation. During the data collection, the survey was administered from a third-party vendor directly to the patients and report back to the third party to the organization. There was no specific identifier for the target population on the survey. The target population was taken advantage. The DNP student was not given access to retrieve the family's geographic information at the project site in order to protect the target population.

There were two steps for the project approval process. First of all, the DNP student completed the required Collaborative Institutional Training Initiative (CITI) modules training for Group 2: Social/Behavioral Research Investigators and Key Personnel (CITI Program, 2021). Secondly, the DNP student used the Institutional Review Board quality improvement/program evaluation self-certification tool as a guide with the aid of the course faculty to ensure all the information on the tool was correct and approved by the course faculty. Lastly, East Carolina University Self-Certification Qualtrics survey was completed (See in Appendix A). This project was submitted for institutional review board review, and it was considered exempt and not needing further review.

Section III. Project Design

Project Site and Population

This project was conducted in an organization located in Wake County, North Carolina. The target population of this project is ambulatory surgery patients with general anesthesia and their family members in this institution. The patients and family members are over 18 years old. There are several facilitators that are facilitating the entire process of the project and supportive of this project, such as the surgical management team, patient experience team, the site champion, and the nurse staff in PACU. The patient experience team was very helpful in getting the two new questions to help round out the survey.

Barriers to the incorporation of family visitation in PACU included a lack of personnel to guide the family members to PACU to visit patients. The DNP student acted as a nurse liaison role to guide the family members to PACU when time allowed on top of her regular work schedule. The lack of personnel to guide family members to visit patients might lessen the number of family member visitation which might skew the data. There was limited demographic data accessible, other than the type of surgeries that the patients have had. The last barrier was that family visitation in the PACU was resistance by the nursing staff in the PACU.

Description of the Setting

The project site was a magnet medical center with multiple specialties having 25,000 surgeries every year. There were thirty operating rooms and twenty-eight beds in the pre-operative area along with twenty-two bays in the PACU, accommodating orthopedic, gynecologic, urologic, general surgery, otolaryngologic, plastic, pulmonary, rectal, and neurologic procedures. Seven to eight nursing staff are scheduled on a daily basis and two during the night shift.

Description of the Population

The target population was ambulatory surgery patients who have had recovered in the PACU and their family. The patient's ages ranged from eight months and above. The family members were at least eighteen years old. Guardians were expected to complete the survey for pediatric patients.

Project Team

The project team consisted of multiple people. First, was the project leader who was responsible for developing, implementation, and evaluation of the project. Second, was the East Carolina University faculty who served as a coach for the project. Third, was the director of

quality improvement at the organization who serves as the site champion for this project. Last, was the nursing staff in the PACU who helped to answer any questions that family members have while they visited patients in the PACU.

Project Goals and Outcome Measures

The goal of this project was to improve patient and family satisfaction outcomes by implementing family visitation in the PACU utilizing two valid survey items in the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery survey (CAHPS OAS). Given the nature of this project, this project was submitted for IRB review, and it was considered exempt and not needing further review. This project used data collected prior to the implementation and after implementation to measure outcomes.

Description of the Methods and Measurement

A quasi-experimental design was utilized for the project. Two custom questions were added to the original CAHPS OAS survey during the period of the project, including pre-implementation and post-implementation. Measurements to two custom questions were collected through the five-point Likert scale, which were very good, good, fair, poor and very poor (See in Appendix C). The CAHPS OAS survey was administered by an independent third-party vendor directly to the patients and report back to the third party to the organization. Pre-implementation and post-implementation surveys were conducted and collected into two different sets of data. After the two sets of data were collected, the outcome was determined by the data analysis result.

Discussion of the Data Collection Process

During the pre-implementation and post-implementation phases, all the ambulatory surgery patients received an electronic survey from the third independent party during these two periods of time. During the post-implementation phase, once family visits were completed, data

were collected from an online survey sent to patients by the third independent party. The data for the specified time period was automatically aggregated and made available for analysis and comparison. The pre-implementation data was retrieved by the visit date from May 30th through July 10th. The post-implementation data was retrieved by the visit date from July 11th through August 21st.

At the end of each phase, it takes six weeks to collect the data that was submitted. Once the data set from implementation is complete, then it will be compared to the data set collected for pre-implementation. Data analysis will determine what quantitative effects can be measured by family visitation.

Implementation Plan

There were several steps that must occur for this project to be properly implemented. Before the implementation, an email with PowerPoint education information along with family visitation guide (See in Appendix E.) were sent out to PACU staff to help them understand the implementation process and the issues that they might encounter during family visitation in the PACU.

During the implementation, The DNP student acted as a nurse liaison to escort family members to PACU for a brief visitation. Guided family visitation was administered five days a week during the implementation phase. Patients in the surgical holding area were approached and briefed on the project, and their verbal consent was requested to allow the visit. Once patients had been briefed and have had consented verbally, then their families in the waiting area were also briefed and given a handout with visitation guidelines. One family member was allowed to participate in the visit.

The nurse liaison communicated with the PACU primary nurse as to when was the best time to escort the family back to PACU for a brief of five-minute visit. Supervised visits then were conducted along project guidelines. Patients were then sent satisfaction surveys electronically by a third party to measure what effect visits have had on patient and family satisfaction.

Timeline

The timeline for this project includes the initiation phase, pre-implementation phase, and implementation phase, and evaluation phase. The initiation phase began in March to early May 2021 with finding the project site and finalizing the topic of the project. The pre-implementation phase began on May 30th to July 10th with completing CITI modules, receiving IRB approval from East Carolina University (See in appendix B.), confirming that no IRB review process was needed from the project site, and completing PACU staff education.

The implementation phase began on July 11th and ran through August 21st . The evaluation phase was from January to April 2022. The results were interpreted and disseminated following the implementation phase. The final report was presented with a poster at East Carlina University on April 5th, 2022, and the DNP paper was submitted into the Scholarship East Carolina University's online repository.

Section IV. Results and Findings

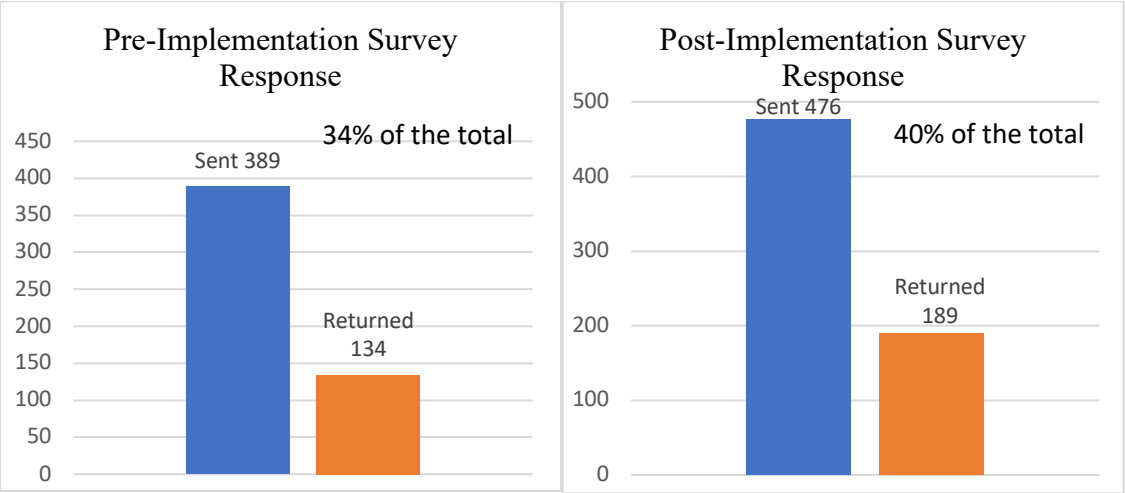
Results

The purpose of this project was to conduct guided family visitation in the PACU at an organization in Wake County to determine the effect of such visits on patient and family satisfaction. Based on pre-implementation literature search, such visits have been implemented in various hospital units worldwide and have increased patient and family satisfaction. This

project sought to recreate the same conditions and to measure the quantitative results in a specific clinical setting.

The means for quantifying the results of the guided visitation was through a survey that is routinely given to all patients who have had orthopedic, thoracic, and urologic surgeries with general anesthesia and recovered in the PACU. A sample data set was collected prior to project implementation in order to establish a baseline for the results of the project. The pre-implementation response rate was 34 % and post-implementation response rate was 40%. (See Chart 1). The actual survey responses also help to quantify what if any effect guided family visitations had on patient and family satisfaction.

Chart 1



Note. Data represents numbers of surveys sent and returned, pre-implementation versus post-implementation

The pre-implementation and post-implementation comfort levels of families are shown below in Table 2. The median score for family comfort level in the recovery room increased by 2.% during the project time frame from May 30th, 2021, to August 21st, 2021.

Table 2 *Survey Question 1 Score*

Comfort Level of the Recovery Room for Family		
Time Period/Sample	Mean Score	Average
Pre-implementation phase		
5/30 - 6/5 (n-21)	90.48	
6/6 - 6/12 (n=20)	88.75	
6/13 - 6/19 (n=24)	86.46	
6/20 - 6/26 (n=23)	85.87	
6/27 - 7/3 (n=17)	91.18	
7/4 - 7/10 (n=23)	83.7	87.7
Post-implementation phase		
7/11 - 7/17 (n=34)	88.97	
7/18 - 7/24 (n=31)	91.13	
7/26 - 7/31 (n=20)	93.75	
8/1 - 8/7 (n=23)	91.3	
8/8 - 8/14 (n=12)	81.25	
8/15 - 8/21 (n=16)	96.88	90.5

The second targeted criteria focused on how well families and patients felt the procedure had been explained to them during the guided visits following surgery. The results of this criteria are found below in Table 3. There was a 4.3% increase in the patient/family understanding of the procedure and recovery process based on the surveys administered from May 30th, 2021, to August 21st, 2021. There are two line graphs displaying the survey question score in appendix D.

Table 3 *Survey Question 2 Score*

Explains To You and Your Family About What Was Done		
Time Period/Sample	Mean Score	Average
Pre-Implementation phase		
5/30 - 6/5 (n=21)	94.05	
6/6 - 6/12 (n=20)	88.1	
6/13 - 6/19 (n=24)	92.71	
6/20 - 6/26 (n=23)	88.04	
6/27 - 7/3 (n=17)	92.5	
7/4 - 7/10 (n=23)	92.71	91.4
Post-Implementation Phase		
7/11 - 7/17 (n=34)	97.22	

7/18 - 7/24 (n=31)	94.53	
7/26 - 7/31 (n=20)	94.74	
8/1 - 8/7 (n=23)	93.75	
8/8 - 8/14 (n=12)	95.83	
8/15 - 8/21 (n=16)	98.33	95.7

Discussion of Major Findings

The corpus of data found in peer-reviewed literature on guided family visitations supports that conclusion that guided family visitations generate higher satisfaction for both patients and their families (Wendler, et al., 2017). The purpose of this project was to determine if those same results could be recreated in a hospital setting that is not currently implementing family visitations. The project result is clear that patient and family satisfaction increased, albeit modestly, with the implementation of guided family visitation. The findings of this project were, therefore, in keeping with the data found in peer reviewed literatures on the subject.

Section V. Interpretation and Implications

Costs Benefits Analysis

A Cost Benefits Analysis (CBA) is a systematic evaluation of a project or activity. It involves assigning a monetary value to the costs and benefits to determine if a particular project or activity is worthwhile (Boardman, Greenberg, Vining, Weimer, 2017). CBA demonstrates what the greater expenses between cost and benefit are (Boardman, Greenberg, Vining, Weimer, 2017).

Based on the literature review, among all the family visitation related projects, none of them have mentioned the cost for the project. Therefore, there is a lack of information about how much the project would cost. Appendix C illustrates the proposal cost for this project. The proposed total cost for this project was $8340.40. The cost was divided into two categories, one

was personnel cost and the other one was supply cost. According to the hourly wage with full time benefit for a registered nurse who acted as a nurse liaison role for the project, it costed $64,00. This role can be substituted with an employee whose wage is less, such as nursing assistance or volunteers who have had training, if the organization prefer to cut down the cost for the personnel.

In addition to the costs already mentioned, there were the costs associated with leading the project. A project manager incurred costs related to research, literature review, developing collaborative relationships with organizational management, implementation of the project, revising and modifying the project, as well as analyzing the findings, and disseminating the findings. There are other responsibilities that could be added in terms of project management, but the previous lists constitute the bulk of what must be covered.

The other main cost category was related to supplies. There were some items that must be produced to effectively conduct the project. One was the visitation guide to be distributed to the families. This guide incurred costs for printing about $0.40 a piece totaling $190.40 for 476 guides. In addition to the visitor guides, there were costs associated with hosting a nurse luncheon to educate and gain support in favor of the project and to win over their support and assistance. This appreciation meals costed approximately $15.00 per person.

Resource Management

There are no resources that exist in the organization that are unallocated or free to be allocated to this project. To implement a program of family visitation in PACU, the organization would need to procure the use of low-skilled employees or trained volunteers. These personnel could ensure the proper implementation of family visitation without distracting from or being a drain on the resources of PACU. The research portion assessing the impact of family visitation is

already in place due to the work of the organization's practice, quality, and patient satisfaction team and their survey apparatus. The costs for adapting this program to the organization remains low while the potential positive impact remains high.

Implications of the Findings

The goal of this project was to determine if guided family visitation in PACU would have a positive effect on patient and family satisfaction scores. According to the results of the surveys collected, guided family visits increased patient and family satisfaction scores in two key areas. Patients and their families recorded a net benefit to the implementation of the guided visits.

Implications for Patients

The implementation of guided family visitation carries with it the opportunity to return a level of control or engagement back to the patients and their families. These guided visitations communicate to patients and families that they are active participants. This also gives reassurance to patients and families that they are valued and not a burden to the hospital staff. Family visitation helps distract and comfort the patients and enable better pain management.

Implications for Nursing Practice

Guided family visitation requires cooperation with the PACU nursing staff. They have to be open to seeing the visits as a critical component to care and not a barrier of it. The upside of guided family visits to nursing practice is that it broadens the understanding of what constitutes care to include a more patient and family focused perspective. With this broader understanding of care, nursing practice then gains a higher standard and a higher profile in the lives of those receiving care. Family visitation enables the nurse to gather more information about the patients which help the nurse to provide better care for the patients.

Impact for Healthcare Systems

Healthcare systems stand to gain a great deal from the implementation of guided family visitations. To begin with, there is the obvious benefit of increased patient and family satisfaction scores and the potential funding that comes along with that. There is also the benefit of a shift towards patient and family centered level of care. This alone has great implications for not only the care process, but the competency of the healthcare professionals involved in the process. These visitations also demonstrate to the community that this healthcare system places great value in cooperating with friends and families in the care that they offer thus establishing a bond of trust between the system and the community at large.

Sustainability

The implementation of guided family visitation is sustainable to the PACU. All that would be required is for the hospital to designate the position of visitation facilitator. This role could be filled by a qualified volunteer as long as they had the proper disposition and training to carry out the responsibilities. The investment that the hospital would need to make would be in finding and training the right individual or team of individuals. Once trained, the volunteer(s) would require minimal supervision and should not represent a drain on hospital resources.

Dissemination Plan

The findings of this project will be presented to the Quality Council Committee at the project site as well as East Carolina University DNP presentation group on April 5th, 2022. The project manager will have the opportunity to present the findings with faculty and answers any questions they have about the project and its conclusions. The project manager will also conduct a meeting with the PACU manager and staff to present them the results and findings and answer any questions about the project and its conclusions. The project paper will then be submitted to The Scholarship, East Carolina University’s online repository after the presentation.

Section VI. Conclusion

Limitations and Facilitators

There were some limitations and barriers that slowed or impeded the ability to see the project through to the fullest during implementation. One main limitation was the personnel. The DNP student as a nurse liaison role to guide the family members to PACU when time allows on top of her regular work schedule. The lack of personnel to guide family members to visit patients may lessen the number of family member visitations. This may negatively skew the data. It's challenging to bring other family members back to visit their loved ones when emergent situations occur in the PACU. Patient's privacy becomes a challenge as there are no individual rooms. Consequently, there were a number of patients and families that fell through the cracks and were not able to take part in the visits. Another limitation was COVID-19, families are not allowed in the pre-operative area as usual. Because there are multiple patients being prepped for surgery, it is very difficult to get around to them all to inform them of the opportunity of family visitation in PACU. Having more than one person setting up visits in the preoperative area or finding a way to incorporate this in the preoperative area routine, would have been a force multiplier.

Lastly, safety is another concern for implementation of PACU visitation. There have been incidents where family members gave items to the patients that were against hospital regulations. Another barrier was the resistance of the nursing staff. Some of the nursing staff were hesitant to support family visits because they perceived that they would interfere with patient care.

While there were limitations that hampered the success of the project, there were also facilitators that greatly helped in making the project a success. One of the biggest facilitators was the cooperation of the administration and nursing staff. The Director of Practice, Quality, and

Research provided crucial assistance with setting up the project, securing the assistance of the nursing staff, giving access to survey data, and assisting in the synthesis and interpretation of the data. In addition, the nursing manager and staff were very accommodating and gave the project manger the freedom to implement the guided visitation in an unheeded fashion. Lastly, the faculty at ECU for providing patient guidance and wisdom along the way which made the project go smoothly.

Recommendations for Others

The implementation of guided family visits in PACU is one that can be very simply replicated in virtually any hospital setting. Before seeking to implement this project, there are a few things that would be helpful to keep in mind. First, it is very important that time is devoted to casting a vision for the project with the nursing staff and allowing them the time to understand the project, ask any questions they may have, and grow comfortable with it before implementation occurs.

Second, it would be helpful to ensure that there are sufficient personnel, volunteers or otherwise, to cover all the bases of implementation. Ideally, the family visitation can be conducted at the other PACU at this organization. This will greatly increase the ability to see higher measurable results. Lastly, it would be wise to have realistic expectations for the project before beginning. Sometimes it takes time to see the kind of results that project suggests one should see. Keeping expectations grounded and staying focused on incremental improvement is vital.

Recommendations for Further Study

In order to enhance the potential that family visitation in PACU affords, it would be beneficial to see it implemented on a full scale, not just through the efforts of one aspiring DNP

student seeking to complete a requirement for a program of. In other words, if the limited efforts of this author were capable of garnering modest gains in patient satisfaction, imagine what a complete implementation by a team of administrators and providers could accomplish. Such an implementation would communicate both to the hospital staff and to the patients and their families that a hospital was genuinely committed to patient-centered care and are willing to commit resources to prove it.

Final Thoughts

This project manager set out to see if guided family visitation in PACU could improve patient and family satisfaction. The project met the intended goal that guided visitations do indeed improve patient and family satisfaction. The project was constructed along the lines of the findings in hope to replicate their results in the project site.

In the end, the project was able to recreate the suggested conclusion and demonstrate that guided family visitations do improve patient and family satisfaction. This was observed and received anecdotal positive feedback but, more importantly, it was quantified through the use of targeted surveys to the patients and their families. It remains for other clinicians and aspiring clinicians to review the data of this project and the great corpus this project is based on and form their own conclusions. Sufficed to say, the case for implementing guided family visitation is very strong and should not be overlooked in the ongoing pursuit of improving patient care.

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Appendix A.

IRB Evaluation Self-Certification Tool

Click "download PDF" to save a copy of this page for your records.
Note: The IRB Office does not maintain copies of your responses.

Below is a summary of your responses

Download PDF

Quality Improvement/Program Evaluation Self-Certification Tool

Purpose:
Projects that do not meet the federal definition of human research pursuant to 45 CFR 46 do not require IRB review. This tool was developed to assist in the determination of when a project falls outside of the IRB's purview.

Instructions:
Please complete the requested project information, as this document may be used for documentation that IRB review is not required. Select the appropriate answers to each question in the order they appear below. Additional questions may appear based on your answers. If you do not receive a STOP HERE message, the form may be printed as certification that the project is "not research", and does not require IRB review. The IRB will not review your responses as part of the self-certification process. For projects being done at Vidant Health, site support will be required. Please email crg.quality@vidanthealth.com to obtain site support from Vidant Health.

Name of Project Leader:

PEI-CHUN CHEN

Project Title:

Improving family experience and satisfaction in level one post-anesthesia care unit

Brief description of Project/Goals:

The purpose of this project is to improve family satisfaction outcomes by implementing family visitation in the post-anesthesia care unit (PACU) utilizing two valid survey items in the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery Survey. The guiding question for this quality improvement project is : Will family visitation in level one PACU improve the family experience and satisfaction?

Will the project involve testing an experimental drug, device (including medical software or assays), or biologic?

- ○ Yes
- ● No

Has the project received funding (e.g. federal, industry) to be conducted as a human subject research study?

- ○ Yes
- ● No

Is this a multi-site project (e.g. there is a coordinating or lead center, more than one site participating, and/or a study-wide protocol)?

- ○ Yes
- ● No

Is this a systematic investigation designed with the intent to contribute to generalizable knowledge (e.g. testing a hypothesis; randomization of subjects; comparison of case vs. control; observational research; comparative effectiveness research; or comparable criteria in alternative research paradigms)?

- ○ Yes
- ● No

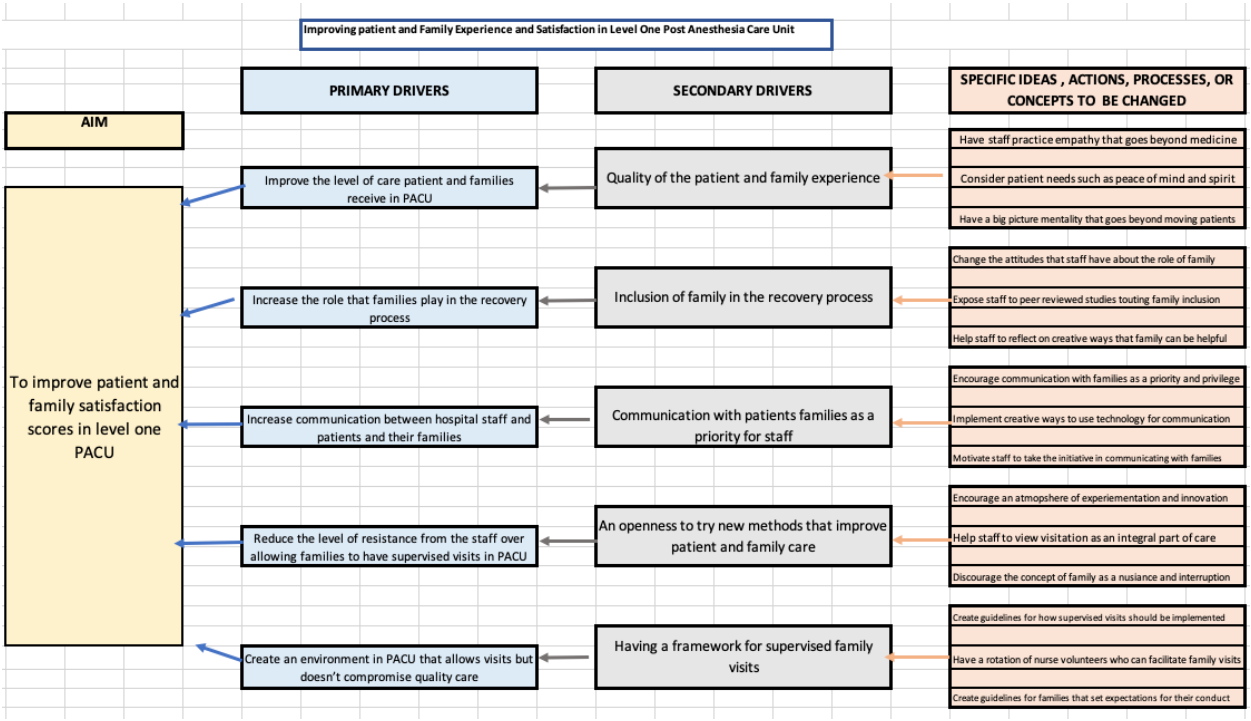
Will the results of the project be published, presented or disseminated outside of the institution or program conducting it?

- ● Yes
- ○ No

Appendix B.

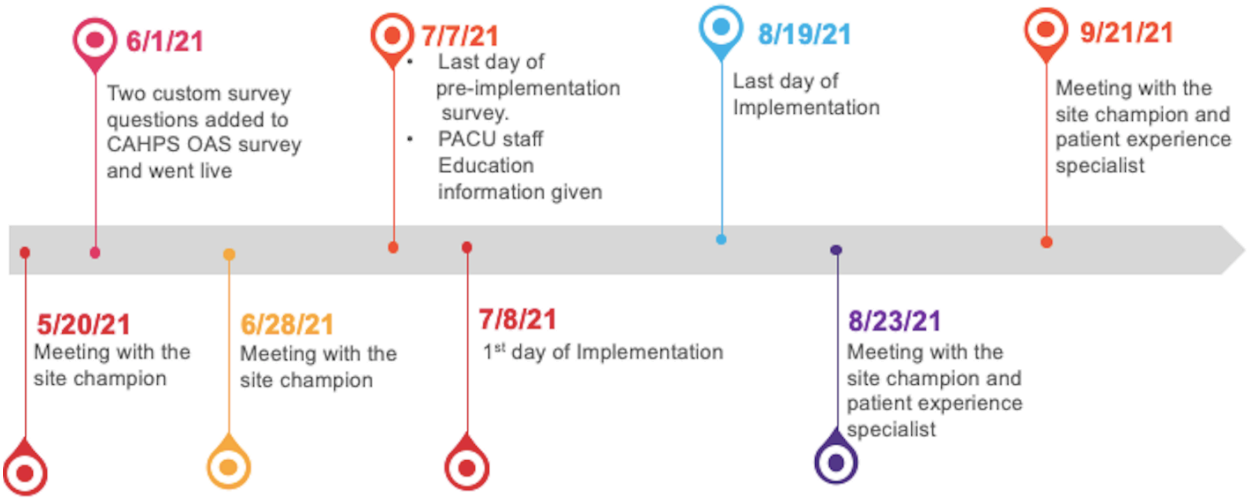
Figure 1.

Driver Diagram



Appendix C

Figure 2. *Project Timeline*



Note. This figure illustrates the timeline for this project

Appendix D.

Survey Questions

Section Instructions: If you did have someone with you, please answer the following questions:	very poor 1	poor 2	fair 3	good 4	very good 5
1. Comfort of the recovery room for your family	O	O	O	O	O
2. Explanations given to you and your family about what was done	O	O	O	O	O

Appendix E

Table 3.

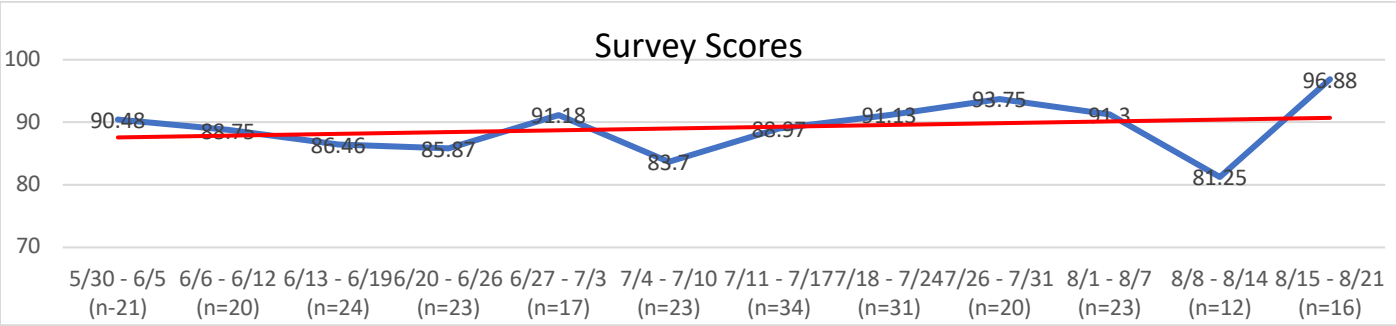
Project Budget

Family Visitation Project Beget			
Item	Cost Per Item	Number of Items	Total Cost
PERSONNEL			
Nurse Liaison	$40.00 per hour	476	$64,00.00
Project Manager	$16,00.00 per person	1	$16,00.00
SUPPLIES			
Visitation Guide	$0.40 per paper	476	$190.40
Appreciation Meal for Staff	$15.00 per person	10	$150.00
PROJECT TOTAL COST $8340.40			

Note. This table shows the full budget of this project

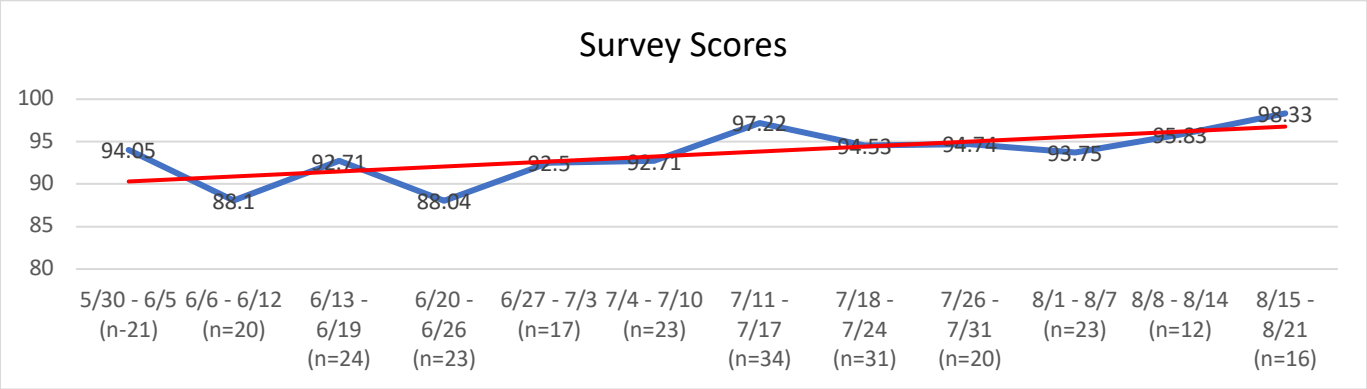
Appendix F.

Pre-Implementation and Post-Implementation Score for Comfort Recovery Room for Family



Note: This line graph illustrates the survey question score

Pre-Implementation and Post-Implementation Score for Explain to You/Family What Was Done



Note: This line graph illustrates the survey question score

Appendix G.

Visitor Information for PACU East

The safety and comfort of our patients is our highest priority. To ensure the safety and privacy of our PACU patients, we invite you to partner with us in caring for your loved ones by following these simple guidelines:

1. PACU is a large room where many patients are in the process of waking up from surgery at the same time. Patient beds can be made private by a curtain. Please limit your visit to 5 minutes.
2. It may take at least 30 minutes after the patient arrives in the PACU before we bring the family back. Sometimes it may take longer, depending on the patient's condition. Please wait for a nurse or other hospital staff to come and direct you to the appropriate location.
3. Only one visitor per patient is allowed back in PACU. Please remain within the bedspace of the patient you are visiting.
4. Peace and quiet are needed to provide appropriate care for PACU patients. Please speak quietly and silence your cellphones while visiting in the PACU.
5. Please understand that no children under the age of 18 will be allowed back in PACU.
6. Please respect the privacy of other patients in the PACU and do not share any information you may see or hear while visiting PACU.
7. Sometimes emergencies occur in the PACU. We may require you to leave during the emergencies.

Thank you for your cooperation and let us know if you have any additional questions or concerns.

Appendix H.

Letter of Organizational Support

Date: April 19, 2021

To East Carolina University College of Nursing:

We at [redacted] have reviewed Pei-chun Chen's DNP Project Summary ***"(Visitation in the PACU)."*** Pei-Chun has organizational support and approval to conduct the Doctor of Nursing Practice student project within our institution. Our organization's liaison, or project champion, for the project [redacted]

We understand that the timeframe for this project is from the date of this letter through May 1, 2022. Implementation at the project site will occur July 1, 2021 through November 30, 2021, unless otherwise negotiated. We understand that for Pei-Chun to achieve completion of the DNP program, dissemination of the project is required by the University and will include a public presentation related to the project and submission to the ECU digital repository, The Scholarship. In addition, we understand that ECU College of Nursing encourages students completing exemplary scholarship to develop a manuscript for publication, but that is not a requirement. Our organization understands and agrees that the student will not use our organization's name in the formal project paper or any subsequent posters, presentations, or publications.

Our organization has deemed this project as a ***quality improvement initiative***. Our organization is aware that this project will be continuously monitored after formal review through University and Medical Center Institutional Review Board of East Carolina University (UMCIRB), if needed. Our organization ***does not require additional*** Institutional Review Board determination

Thank you,

[redacted], DNS, RN, NPD-BC, CNE
Director of Practice, Quality, and Research
Patient Care Services

Appendix I.

Project Management Report 1.

Name: PEI-CHUN CHEN

Were you able to collect the data you thought you'd collect? Yes No

If no, why not?

_____

Did you meet with your site champion on the date(s) you had planned to meet? Yes No

If not, why not?

_____

Succinctly identify & discuss barriers to your implementation.

When critical condition occurs in one of the patients in the PACU. It's very challenging to bring other family members back to visit their loved ones as there is no wall between patients. Patient's privacy becomes a challenge. Safety issue is another concern for implementation of PACU visitation. There was an incident that occurred. One family member gave the patient a vaping device against hospital regulations. Another barrier was the resistance of the nursing staff. A few of them were hesitant to support family visits because they perceived that they would interfere with patient care.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

_____

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)? Face to face present at the project site acting as a nurse liaison in PACU level one on July 20, 23, 27, 26 29

Succinctly identify 1-3 things you've learned during this implementation interval.

1. I learned the importance of collaboration with key stakeholders. Trying to plan and implement a project of this magnitude alone is doomed to failure.

2. I learned the value of critical thinking in the planning process. It's important to take action but it's more important to take appropriate action based on clear and logical objectives.

3. I learned to have faith in the curiosity and inquisitiveness of my colleagues. It never pays to sell your coworkers short or to assume that they don't have anything to offer than can improve what you are trying to do.

Statement of Collaboration

We have collaborated on the project process, needed revisions, and implementation strategies and agree that this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature PEI-CHUN CHEN Date 09/09/2021

Site Champion Signature __ [redacted] _____ Date __9/16/2021_____

Comments

Please share addition thoughts/notes on progress, barriers, concerns, etc.

My thoughts are – Patti Chen is a good listener and very thoughtful about the steps she takes to executing a project. She has accepted feedback to make minor modifications, gained independence in her thinking, and addressed patient safety throughout the project. We are very excited to view the patient/family satisfaction results and report out to our entity teams.

Appendix J

Project Management Report 2.

Name: PEI-CHUN CHEN

Were you able to collect the data you thought you'd collect? Yes No

If no, why not?

_____

Did you meet with your site champion on the date(s) you had planned to meet? Yes No

If not, why not?

_____

Succinctly identify & discuss barriers to your implementation.

Prior to the implementation, the plan was to do a presentation about the project to the staff at our PACU monthly meeting. However, the meeting was cancelled due to COVID. Therefore, an email with PowerPoint about the project was sent to the staff prior to the implementation and I made myself available to answer questions accordingly prior to the implementation.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

_____

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)? Face to face present at the project site acting as a nurse liaison in the PACU level one on Aug. 3,10.

Succinctly identify 1-3 things you've learned during this implementation interval.

1. I learned the importance of being flexible when circumstances change.

2. I learned the importance of collaborating with other professional who can help me to achieve the project goals.

3. I learned better research skills that help me to find accurate information on which to make good decisions.

Statement of Collaboration

We have collaborated on the project process, needed revisions, and implementation strategies and agree that this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature PEI-CHUN CHEN Date 10/1/2021

Site Champion Signature _____[redacted]_____ Date __10/01/2021____

Appendix K.

Project Management Report 3.

Name: PEI-CHUN CHEN

Were you able to collect the data you thought you'd collect? Yes No

If no, why not?

_____

Did you meet with your site champion on the date(s) you had planned to meet? Yes No

If not, why not?

_____

Succinctly identify & discuss barriers to your implementation.

Prior to the implementation, the plan was to do a presentation about the project to the staff at our PACU monthly meeting. However, the meeting was cancelled due to COVID. Therefore, an email with PowerPoint about the project was sent to the staff prior to the implementation and I made myself available to answer questions accordingly prior to the implementation.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

_____

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)? Face to face present at the project site acting as a nurse liaison in the PACU level one on Aug11,2021 and virtual meeting with site champion and patient satisfaction specialist on Sep,21, 2021.

Succinctly identify 1-3 things you've learned during this implementation interval.

1. I learned the importance of data literacy. It is important to thoroughly collect data, accurately describe data, and properly interpret data. We have reviewed pre-implementation data.

2. I learned the value of backing up your conclusions with properly sourced peer-reviewed publications and research studies.

3. I learned that you have to be as dispassionate as possible following the data and science wherever it leads you.

Statement of Collaboration

We have collaborated on the project process, needed revisions, and implementation strategies and agree that this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature PEI-CHUN CHEN Date 10/24/2021

Site Champion Signature [redacted] Date 10/24/2021

Appendix L.

Project Management Report 4.

Name: PEI-CHUN CHEN

Were you able to collect the data you thought you'd collect? Yes No

If no, why not?

_____

Did you meet with your site champion on the date(s) you had planned to meet? Yes No

If not, why not?

_____

Succinctly identify & discuss barriers to your implementation.

Prior to the implementation, the plan was to do a presentation about the project to the staff at our PACU monthly meeting. However, the meeting was cancelled due to COVID. Therefore, an email with PowerPoint about the project was sent to the staff prior to the implementation and I made myself available to answer questions accordingly prior to the implementation.

Did you update/revise your tools (PDSA, data collection tools, etc.)? Yes No

If No, why not? _____

_____

What date(s) were you at your project site during this implementation interval (face-to-face or virtually)? Face to face present at the project site acting as a nurse liaison in the PACU level one on Aug, 17, virtual meeting with site champion and patient satisfaction specialist on Oct 5th,2021.

Succinctly identify 1-3 things you've learned during this implementation interval.

1. I learned that it is important to follow up with stakeholders and communicate well and communicate often. This ensures that the process goes smoothly.

2. I learned that some data sources take longer to collect and sift through. It is important to allow enough time in each phase to not be rushed and to ensure a good result by doing things thoroughly.

3. I learned that as much as you want to trust those who have sent you information that it never hurts to check behind them and confirm things for yourself. This level of detail ensures that you are getting an accurate data set.

Statement of Collaboration

We have collaborated on the project process, needed revisions, and implementation strategies and agree that this project is on target with the timeline. As needed, provide additional comments on the following page.

Student Signature PEI-CHUN CHEN Date 11/03/2021

Site Champion Signature [redacted] Date __11/03/2021____

Appendix M.

DNP Implementation Summary Report

Section A.

Did your project go as you felt it would during your Initial Project Implementation Plan?

All in all, the project did go about as I had expected it to go during the initial project implementation plan. The pre-implementation or planning phase got off to a little bit of a slow start because of my lack of understanding. Once I met with my site champion, she was able to lend her experience to help me flesh out what I needed and what would work well within the constraints of the clinical setting. We were able to craft an implementation plan that worked seamlessly with assessments that the Rex team were already conducting. She was also able to give me access to pre-implementation data to use as a control for the data that we would be collecting.

If so, what do you feel contributed to your "smooth sailing"? Did you have any problems along the way?

The cooperation of that staff at Rex along with the support of the faculty at ECU contributed greatly to my ability to formulate a plan and execute it along the guidelines laid out for the project. It was also advantageous for me that I was able to conduct this project in the unit where I am currently employed. I had the benefit of working as an "insider" with my colleagues at UNC Rex. It might have been a little more difficult if I were coming to a clinical setting where I have no supportive network already established.

There were several problems that I encountered in the process of planning and implementing my project. One of the first obstacles was a difference of opinion with my clinical manager about how the project was to be conducted. Fortunately, we were able to resolve this quickly with the assistance of the site champion. Another difficulty I encountered was a missed opportunity to present the project to the entire

PACU staff. Initially I was scheduled to present the project in a staff meeting prior to the implementation phase. Because of covid-19, however, I had to present the project to the staff through an email and make myself available for questions. During implementation of the project, I also ran into an issue with a family visitor giving a patient a vaping device. The use of such devices is against hospital regulations, so I had to remove the device and ask the family to abide by the regulations. Lastly, I also had to deal with the hesitancy on the part of some in the nursing staff. Having family visitors in the PACU can be perceived by the staff as a nuisance or a distraction so I had to overcome these negative perceptions.

If not, what were the barriers to implementing your project as you had anticipated? In retrospect, what would you have done differently?

As stated above, there were barriers that were encountered but these were all dealt with appropriately and were not terminal obstacles that prevented me from completing my project. As far as what I might have done differently is concerned, I can think of a few things that might have made the process a little smoother. First, I would have given my nurse colleagues more lead time and notice. Not having the opportunity to present the project to them face to face and answer their questions face to face created a barrier of negative perceptions that I had to overcome during the implementation phase. It would have been better if I could have overcome these negative perceptions prior to implementation. Second, I would have liked more of an opportunity to spend time with family members ahead of time to go over hospital regulations and what to expect when they go into the PACU. Because there are no barriers between patients it is crucial for privacy and safety that visitors respect the space and the rights of the patients being held in PACU. Lastly, I would have preferred to have more control over how the data was collected from the patients. I was somewhat limited in this respect because of hospital regulations and HIPPA. It would have been nicer if it were possible to give more input into the evaluation process and in the manner of the data collection.

Section B.

How often did you meet virtually with your project champion?

All the meetings that I have with my site champion are virtual meeting and phone calls. Mostly are virtual meetings. We meet once a month in average.

How often did you meet face-to-face with your project champion?

When we first started to meet, it was during COVID-19. Virtual meeting works well so we haven't met in person.

What was the total number of meetings you had with your champion?

Seven times.

Did you meet with other people at the project site? If so, what were their roles in your project?

Yes, I met with the PACU clinical manager where the project was conducting to talk about the logistics for the project implementation. I also met with patient satisfaction specialist who helps me with data retrieval.

Section C.

Does the organization plan to continue your project past this semester?

They are discussing about the possibilities of continuing it. However, at present there are no definite plans for continuing the project.

Section D.

Discuss, in detail, organizational changes that will be needed to continue the project past this semester?

In order for my project to continue, [redacted] would need to make a few organizational changes. First, they would have to get more buy-in for PACU visitation on the part of the nursing staff. This could, of course, become something that is mandated but it would be more effective if the nurses could be won over through incentivizing and training. Second, they would have to have a volunteer or paid nurse liaison who could implement family visitation and supervise the family visits. Given the nature of PACU it would be impossible to have unsupervised family visits. Lastly [redacted] would have to have a more robust way of collecting data on the effectiveness of family visitation on patient satisfaction scores.

Taking a more scientific approach to the collection and analysis of this data could go a long way in justifying the project more strongly and demonstrating its effectiveness to the staff and other stakeholders.

Section E.

Who benefitted from your project (patients, organizations, etc) and how were they benefitted?

There is both data proven evidence and anecdotal evidence to demonstrate that patients and their families benefitted from the implementation of this project. The patients were much comforted by having a loved one nearby when they woke-up from surgery and the loved ones were comforted to see that the patient was resting comfortably and recovering well. Family visitation, as we have demonstrated, has the opportunity to provide mental, social, and health benefits to patients and their families.

In the long run, it is likely that the improvement in patient satisfaction scores could also benefit the PACU and [redacted] as an organization. To reap these benefits, however, it would require following some of the suggestions I outlined in Section D. Having high patient satisfaction scores can positively affect funding and budget allocation for organizations that are able to achieve them.

Section F.

Recommendations for other organizations who replicate this project.

If I were able to make recommendations for other organizations wishing to implement patient and family visitation in their PACU, I would start with the staff. It is crucial that nursing staff, both the nursing personnel and their supervisors have a positive vision for what family visitation can accomplish. They should be exposed to the literature that demonstrates the positive effect that family visitation can have on the patients and their families. They should also be able to see how higher patient and family satisfaction scores can benefit the unit and the hospital as a whole. Second, I would make sure that you have an adequate means for engaging and educating patients and families. They need to understand what implementation practices they should follow that allow them to gain the most benefit from the visits without taking a toll on the nursing staff who are working or the other patients who are recuperating.

Lastly, I would recommend finding ways to leverage your efforts. Make sure that you have a robust way of collecting data and quantifying the positive benefits of the visits. Be sure to present the results to all stakeholders so that they can feel good about being a part of something that benefits such a large number of people.

Appendix N.

Doctor of Nursing Practice Essentials

	Description	**Demonstration of Knowledge**
Essential I ***Scientific Underpinning for Practice***	**Competency** – Analyzes and uses information to develop practice **Competency** -Integrates knowledge from humanities and science into context of nursing **Competency** -Translates research to improve practice **Competency** -Integrates research, theory, and practice to develop new approaches toward improved practice and outcomes	• The project leader conducted research about family visitation and its impact on patients and families. • The project leader conducted research about the relationship between family visitation and patient and family experience and satisfaction. • The basis for the implementation of this intervention rests on the Family-Centered Care model of practice.
Essential II ***Organizational & Systems Leadership for Quality Improvement & Systems Thinking***	**Competency** –Develops and evaluates practice based on science and integrates policy and humanities **Competency** –Assumes and ensures accountability for quality care and patient safety **Competency** -Demonstrates critical and reflective thinking **Competency** -Advocates for improved quality, access, and cost of health care; monitors costs and budgets **Competency** -Develops and implements innovations incorporating principles of change **Competency** - Effectively communicates practice knowledge in writing and orally to improve quality **Competency** - Develops and evaluates strategies to manage ethical dilemmas in patient care and within health care delivery systems	• The project leader conducted a quality improvement project in the level one post anesthesia care unit (PACU) designed to increase patient and family satisfaction by implementing family visitation. • Several studies on the patient experience of care that demonstrates that family visitation in PACU not only increases patient and family satisfaction, but also decreases their anxiety. • This project has no potential harm to the target population due to the design of this project. • During the implementation, family members waiting in the waiting room are given

		the option to visit their loved ones in the PACU. The target population will not be taken advantage during the implementation.
Essential III ***Clinical Scholarship & Analytical Methods for Evidence-Based Practice***	**Competency** - Critically analyzes literature to determine best practices **Competency** - Implements evaluation processes to measure process and patient outcomes **Competency** - Designs and implements quality improvement strategies to promote safety, efficiency, and equitable quality care for patients **Competency** - Applies knowledge to develop practice guidelines **Competency** - Uses informatics to identify, analyze, and predict best practice and patient outcomes **Competency** - Collaborate in research and disseminate findings	• Literature review was conducted, and the evidence was synthesized based on the literature review. • The project leader conducted a quality improvement project in the level one post anesthesia care unit (PACU) designed to increase patient and family satisfaction by implementing family visitation. • The findings of this project were disseminated at the project site, and at East Carolina University's Poster Presentation IN April, 2022.
Essential IV ***Information Systems – Technology & Patient Care Technology for the Improvement & Transformation of Health Care***	**Competency** - Design/select and utilize software to analyze practice and consumer information systems that can improve the delivery & quality of care **Competency** - Analyze and operationalize patient care technologies **Competency** - Evaluate technology regarding ethics, efficiency and accuracy **Competency** - Evaluates systems of care using health information technologies	• A quasi-experimental design was utilized for the project. Two custom questions are added to the original CAHPS OAS survey during the period of the project, including pre-implementation and post-implementation. Measurements to two custom questions will be collected through the five-point Likert scale. • The DNP project was submitted into the Scholarship East Carolina University's online repository. • Use of information technology such as email, WebEx, text messages and

		phone calls to communicate with DNP project team to keep updated of the status of the project. • The project leader developed a family visit guide and distributed to the family members prior to the visitation in PACU.
	Description	**Demonstration of Knowledge**
Essential V ***Health Care Policy of Advocacy in Health Care***	**Competency**- Analyzes health policy from the perspective of patients, nursing and other stakeholders **Competency** – Provides leadership in developing and implementing health policy **Competency** –Influences policymakers, formally and informally, in local and global settings **Competency** – Educates stakeholders regarding policy **Competency** – Advocates for nursing within the policy arena **Competency**- Participates in policy agendas that assist with finance, regulation and health care delivery **Competency** – Advocates for equitable and ethical health care	• DNP project leader completed the required Collaborative Institutional Training Initiative (CITI) modules training for Group 2: Social/Behavioral Research Investigators and Key Personnel. • The Institutional Review Board quality improvement/program evaluation self-certification tool was used as a guide with the aid of the course faculty to ensure all the information on the tool is correct and approved by the course faculty. • Advocated for policy change and increased better patient-centered care for patients and family members at the project site.
Essential VI ***Interprofessional Collaboration for Improving Patient & Population Health Outcomes***	**Competency**- Uses effective collaboration and communication to develop and implement practice, policy, standards of care, and scholarship **Competency** – Provide leadership to interprofessional care teams **Competency** – Consult intraprofessionally and interprofessionally to develop systems of care in complex settings	• The project leader communicated with surgical management team, patient experience team, the site champion, the nurse staff in PACU, and the patient service team to discuss the project's purpose, goals of targeting patient and family

		population and the logistics of the project. • There are several facilitators that are facilitating the entire process of the project and supportive of this project, such as the.
Essential VII ***Clinical Prevention & Population Health for Improving the Nation's Health***	**Competency**- Integrates epidemiology, biostatistics, and data to facilitate individual and population health care delivery **Competency** – Synthesizes information & cultural competency to develop & use health promotion/disease prevention strategies to address gaps in care **Competency** – Evaluates and implements change strategies of models of health care delivery to improve quality and address diversity	• The project aimed to increase patient and family experience and satisfaction in PACU. • Increasing patient and family experience ultimately leads to a higher survey score and greater reimbursement to align with the Institute for Health Improvement Triple Aim for better care for individuals and lower per capital cost of care to benefit communities.
Essential VIII ***Advanced Nursing Practice***	**Competency**- Melds diversity & cultural sensitivity to conduct systematic assessment of health parameters in varied settings **Competency** – Design, implement & evaluate nursing interventions to promote quality **Competency** – Develop & maintain patient relationships **Competency** –Demonstrate advanced clinical judgment and systematic thoughts to improve patient outcomes **Competency** – Mentor and support fellow nurses **Competency**- Provide support for individuals and systems experiencing change and transitions **Competency** –Use systems analysis to evaluate practice efficiency, care delivery, fiscal responsibility, ethical responsibility, and quality outcomes measures	• Monthly meetings with the site champion and biweekly meetings with the faculty to update the status of the project. • The proposal of cost-benefit analysis was developed to provide information regarding the cost of the project. • An email with PowerPoint education information along with family visitation guide were sent out to PACU staff to help them understand the implementation process and the issues that they may encounter during family visitation in the PACU.