

IMPROVING PERIOPERATIVE COMMUNICATION THROUGH THE USE OF A NURSE NAVIGATOR: AN INTEGRATIVE REVIEW

A Scholarly Project

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Elizabeth Irene Christman

Liberty University

Lynchburg, VA

June, 2020

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ABSTRACT

Patient-centered communication practices are critical for ensuring that patients have optimal care experiences and clinical outcomes. Unfortunately, today's health care environment often presents numerous barriers to consistent and clear information exchange. These barriers are magnified in dynamic and fast-paced care environments such as the perioperative setting, where numerous interactions and communication exchanges must occur. The purpose of this integrative review is to examine the value of the nurse navigator role within the perioperative setting and evaluate whether it can improve patient and family satisfaction with communication and the care experience. The review includes the identification and appraisal of relevant literature to substantiate the impact of a nurse navigator in overcoming environmental barriers, enhancing patient education, decreasing patient and familial anxiety, and improving patient satisfaction. The analysis of current literature provides strong evidence for the value of a nurse navigator within the unique perioperative care setting. This review will help inform patient- and family-centered communication processes that can lead to improved care quality and outcomes.

Keywords: perioperative nurse navigator, surgical liaison, patient communication, family communication, patient satisfaction

**INCORPORATION OF A PERIOPERATIVE NURSE NAVIGATOR IN THE
AMBULATORY SURGERY DEPARTMENT: AN INTEGRATIVE REVIEW**

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Dedication

I would like to dedicate this manuscript to my family. First, to my parents, thank you for your unwavering support and encouragement. I would not have been able to complete this journey without you. You made me believe I could do this, even when I was not so certain myself. Second, to my children, Ella and Aubrey, thank you for helping me remember to laugh and enjoy the small moments even on the busiest days. You constantly remind me of how the little things in life really do end up being the big things that matter most. Our chocolate chip cookie making days are always some of my favorites. Finally, to my husband, Travis, thank you for your love and support throughout this process. You have been my “rock” throughout all of life’s challenges. Thank you for your patience with me, your pep talks, making me laugh, and giving me the courage to get through the tough times. I am truly blessed to have you by my side. I could not have done this without you.

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List of Abbreviations

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

SECTION ONE: INTRODUCTION

The perioperative care experience often includes feelings of anxiety and tension as patients and their families navigate through unfamiliar processes and procedures. The surgical setting can be stressful for both patients and families as they await the result of a surgical intervention. In addition, the surgical setting requires dynamic interactions between many members of the multidisciplinary team in order to ensure that the patient has the most favorable surgical outcome. As a result, patients and families interact with multiple members of the health care team in a short period of time. These coordinated efforts ensure the patient is well prepared and receives optimal care throughout the perioperative experience, yet the experience can be overwhelming for patients and families.

Clear communication processes are important for ensuring that patients and families are well informed throughout the care experience. These communication needs can be compounded in the perioperative setting where many individuals are involved in care and rapid change often takes place. As a result, health care organizations must utilize creative strategies to keep patients and their families well informed about the care process. The role of the nurse navigator has emerged as a valuable means of providing continuity in information dissemination. Nurse navigators have been found to be especially helpful during periods that require detailed care coordination or that invoke high feelings of stress and anxiety (Pruitt & Sportsman, 2013). In order to identify best practices in perioperative communication, a detailed evidence review is required. The completion of an in-depth integrative review will allow the project leader to explore the value of the perioperative navigator role and how it impacts the perioperative communication experience. The goal of the review is to identify a strategy to ensure that information is clearly disseminated by health care providers and understood by patients and their

families during the perioperative period. Comprehensive communication practices are important for facilitating both patient and family satisfaction with care. In order to achieve patient and family satisfaction, organizations must engage in the exploration of innovative interventions to bridge the gap between the current standards for communication delivery and patient and family expectations.

Background

Clear patient and family communication is integral to satisfaction with care in the perioperative environment. As patients and their families prepare for a surgical procedure, they participate in multiple interactions with various members of the multidisciplinary team. Sundqvist, Holmefu, Nilsson, and Anderzen-Carlsson (2016) described the perioperative period as one that heightens a sense of fear and vulnerability in the patient as they become reliant on the nurse for information and advocacy. This dependency on the nurse can result in a variable care experience, as staff communication skills can differ within and across the perioperative departments. Additionally, Austin (2016) highlighted that patients and their families want clear communication and positive teamwork from all health care providers. This finding underscores the need for patient-centered communication standards and coordination throughout the pre-, intra-, and postoperative periods. Patients and families whose expectations go unmet may see a significant impact on their levels of satisfaction with the care experience.

Declining patient and family satisfaction can have a significant impact on both consumer interest in an organization and reimbursement. Tevis, Kennedy, and Gent (2015) stated that data from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey are publicly reported to allow consumers to objectively compare hospital performance and motivate hospitals to improve the quality of care. This survey offers the patient an

opportunity to offer detailed feedback on the perioperative care experience, including individual impressions of the communication experience. Poor satisfaction scores may result in decreased consumer interest as health care consumers seek out care at hospitals with higher satisfaction scores (Tevis et al., 2015). Additionally, Medicare reimbursement is aligned directly with clinical care processes and patient experience. The implementation of Value Based Purchasing underscores the significance of HCAHPS scores in relation to financial impact. Tevis et al. (2015) explained that HCAHPS scores reflect 30% of the Value Based Purchasing Program performance that accounts for over 2% of overall Medicare reimbursement in healthcare organizations.

Problem Statement

Communication within today's health care setting remains a vital yet challenging task. The health care system has grown much more complex; an extensive health care team and multiple individuals often contribute to the patient experience. This complex system is evident in all areas of the inpatient environment, including the perioperative setting. Within the perioperative setting, the team is active in preparing the environment to ensure a safe patient experience, while also striving for on-time patient surgical starts, quick operating room turnover, and timely discharge. These influencing forces can easily mitigate the significance of patient and family communication as priorities shift toward organizational initiatives. Despite these competing priorities, it is critical to engage patients and families in the perioperative setting to ensure they receive proper and adequate communication. Communication within this setting contributes significantly to safe and effective quality patient care. Organizations must recognize the value in ensuring that patients and their families adequately understand the perioperative care experience and receive accurate information and responses to questions. Engagement of the

patient and family ensures they receive information readily and become active participants in the collaborative care team.

Purpose Statement

The purpose of this scholarly project is to examine the value of the perioperative nurse navigator role within the ambulatory care setting. The goal is to determine the impact of the navigator role in relation to patient and family outcomes through an examination of literature. The expected outcome of the integrative review was the identification of the value of perioperative nurse navigator intervention in relation to the patient and family communication experience. Additionally, the project leader sought to identify best practices in patient and family communication that could be utilized as the foundation of navigator training. The findings of this review will be disseminated to the project leader's practicum site to evaluate the possibility of implementing a pilot project based on the finding regarding the perioperative navigator role. This review has the potential to lead to a permanent nurse navigator role in the perioperative department and further incorporation of the role in perioperative settings throughout the health system.

Clinical Question

Patient and family engagement can have a significant impact on the health care experience. Herrin et al. (2016) found that patients and families who are more engaged in their care have significantly improved clinical care outcomes that may also enhance patient satisfaction. Engagement is often the result of purposeful patient- and family-centered communication practices. The nurse navigator has emerged as champion of patient- and family-centered communication within the current care environment. As a result, this project leader pursued the following clinical question as the foundation of the review: Does the use of a nurse

navigator within the perioperative environment improve patient and family satisfaction with care and communication?

Building the Scholarly Project

Within this scholarly project, the phenomenon of interest was identified as strategies to enhance communication practices within the perioperative care environment. Although health care communication practices have been well examined in the literature, it was necessary to narrow the topic to a unique strategy that may have applicability within the ambulatory care setting. The impact of a nurse navigator will be thoroughly examined with an in-depth review and analysis of current literature in order to determine the value of this role in the perioperative communication experience.

Project Goals

Two broad project goals that serve as the foundation for the clinical question:

1. To determine if there is evidence support for the value of the nurse navigator intervention in a perioperative setting.
2. To investigate the role of the perioperative navigator and identify attributes that are foundational to successful role implementation.

SECTION TWO: LITERATURE REVIEW

Organizing Framework

The scholarly project integrative review utilizes a guiding framework to provide organization and structure to the information presented. For this project, the project leader employed Whittemore and Knafl's (2005) integrative review method, which allowed a wide array of research evidence to be examined and explored. The process of an integrative review allows one to consider diverse research methodologies, including experimental and

nonexperimental research as well as qualitative, quantitative, and mixed method studies (Whittemore & Knafl, 2005). Additionally, the purpose of an integrative review can be broad, allowing the project leader to examine all concepts, theories, and research evidence relevant to the topic of interest.

To help refine the integrative review process, the project leader utilized a modified version of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to guide the literature search and appraisal process. Utilization of this framework allowed the project leader to organize the structure of the search process and select relevant scholarly literature, aggregate results, and discuss main findings. This process was especially useful for ensuring a comprehensive literature identification and screening process. It also assisted in refining direction and eligibility for the final resources that were selected.

Theoretical Framework

A well-developed scholarly project should have a theoretical framework to serve as the foundation for its development. The perioperative nurse navigator project places a significant emphasis on the importance of the nurse-patient relationship and the impact of this relationship on clinical outcomes. Due to the project's emphasis on the significance of relationship, Hildegard Peplau's nurse-patient relationship theory was chosen as the foundation for this project.

Peplau's theory underscores the value of the nurse and relationship building with patients as they transition through various phases of the care experience. Smith and Parker (2015) explained that Peplau saw the nurse-patient relationship as consisting of four distinct phases: the orientation phase, identification phase, working phase, and resolution phase. During each of these distinct phases, the nurse fosters the patient's ability to progress through the stage.

According to Peplau's theory, the nurse-patient relationship begins with the nurse and patient defining the problem. This element of the orientation phase is fostered by nurse navigators as they establish themselves as a source of information and guidance for the patient in the perioperative experience. Having completed the orientation phase, the relationship soon progresses into the identification phase. In this phase of the relationship, the nurse helps to establish patient goals. This phase can be fostered by the nurse navigator as the navigator helps the patient and family identify what their expectations of care and recovery are prior to the surgical intervention actually taking place.

The third phase of Peplau's theory is the working phase. In the working phase of the relationship, the patient seeks resources to improve health, and the nurse serves to provide education/resources (Smith & Parker, 2015). In this part of the relationship, the patient becomes actively engaged in the services that are offered in order to better prepare for health challenges. The nurse navigator is integral in the working phase, as they understand the strengths and barriers that each patient and family may experience in the perioperative environment. Once these strengths and barriers are identified, the nurse can tailor individual resources to better help the patient and family to progress toward health resolution. This resource customization can be maximized by the perioperative navigator who (early in the relationship) identifies patient and family concerns related to the surgical procedure and recovery experience.

The final phase of Peplau's theory is the resolution phase. This phase is centered on helping the patient transition from dependence to independence (Smith & Parker, 2015). The nurse navigator fosters this patient transition as the navigator assists in guiding the patient's progression to discharge. During this part of the relationship, the navigator revisits goals,

education needs, and potential discharge needs with the patient and family to ensure they have the adequate resources needed to continue in the healing process.

Eligibility Criteria

The research question that served as the impetus of the integrative review is: Does the use of a nurse navigator within the perioperative environment improve patient and family satisfaction with care and communication? This question was developed through a consideration of the complexities of the communication experience and desire to examine the impact of an intervention, such as the implementation of a nurse navigator, on patient and family perioperative care experiences. Identifying the evidence support for the intervention would subsequently lead to information dissemination and potential implementation within the practice setting.

In order to identify the best available evidence, eligibility criteria were clearly defined to help guide the review. The inclusion criteria for this project included scholarly primary research articles that were published from 2014 to current day that explored concepts relevant to communication practices within the perioperative environment. Additional qualifying criteria required that the article be printed in English and be peer reviewed. Use of the initial search criteria led to the inclusion of certain extraneous information, and further refinement to specific implications of the nurse navigator role in the health care setting was required. Research studies from outside of the United States were included; however, studies from countries that defined case managers as nurse navigators were excluded due to the conflicting scope of the role in the various settings. Articles were subsequently categorized and examined for applicability and strength of evidence.

Information Sources

In order to gather relevant evidence within the review process, a comprehensive search of information sources was undertaken. For the perioperative nurse navigator review, the project leader engaged in database searches of Cochrane Database of Systematic Reviews, CINAHL, EBSCO, ProQuest, and PubMed. Source identification occurred when articles aligned with the identified inclusion and exclusion criteria. Filtering criteria were then applied within each database to ensure that all relevant and current information regarding the impact of the nurse navigator role and its application to the perioperative care experience was explored. The aggregation of these resources provided evidence for the value of the perioperative navigator intervention and the potential applicability for health care settings in improving the patient and family care experience.

Search

Identification of relevant scholarly research to support a practice change requires a systematic and detailed literature search strategy. In order to examine current research surrounding the impact of the nurse navigator role, an exhaustive review was conducted. This included a review of articles from the Cochrane Database of Systematic Reviews, CINAHL, EBSCO, ProQuest, and PubMed. Multiple keywords and keyword combinations were utilized to guide the search process. The keywords that facilitated the search process included nurse navigator, perioperative navigator, surgical navigator, nurse communication liaison, surgical services liaison, patient satisfaction, family satisfaction, nurse communication, and patient communication. Initial search results yielded over 1,000 articles with these keywords. Additional filtering criteria were used to help limit the search process. Parameters that were used to guide the search included publication within the last five years, use of the English language, and peer

review. These filtering criteria ensured that the most recent scholarly evidence would be identified. Following the application of the filtering criteria, 54 articles were identified for a more detailed review. Upon review of these remaining articles, 23 were selected based on the alignment with the topic of interest and level of evidence.

Melnik's hierarchy of evidence was used as the organizing framework for appraisal of evidence source strength (Melnik & Fineout-Overholt, 2015). The literature review sought to include an evidence foundation of the best quality. The chosen literature included one systematic review (Level 1) and four randomized controlled trials (Level 2) reflecting the highest level of evidence in the Melnik hierarchy. Additional literature that was chosen for inclusion included two controlled trials (Level 3) and four case-controlled or correlational studies (Level 4). Finally, two systematic reviews of qualitative literature (Level 5) and 10 qualitative or descriptive studies (Level 6) were explored. The complete matrix and detailed breakdown of each study is found in Appendix A. The literature appraisal yielded themes related to family and patient experience, as well as the significance of advocacy for patients within the perioperative setting.

Study Selection

An integrative review of current evidence regarding the value of a perioperative nurse navigator within the ambulatory care setting was conducted to analyze the strength of evidence for this identified intervention. The literature was critiqued and analyzed utilizing an evidence matrix (Appendix A). The articles reviewed included phenomena of interest related to specific communication practices in the perioperative environment as well as the value of the nurse navigator role in settings of high stress for patients and families. Institutional Review Board approval was granted through Liberty University in accordance with the university's guidelines

(Appendix B). The integrative review resulted in a critique and analysis of 23 peer-reviewed articles that were identified and determined to be best evidence based on the search process.

Data Collection

The identification of relevant data from scholarly research can be a challenging task due to the complex variables introduced within the literature. It is important that the project leader remain cognizant of the purpose of the review throughout review process in order to ensure that sources of evidence are best aligned to the objectives of the review. For the integrative review and data collection, the project leader collected information and thematic content from the literature. The project leader completed the necessary Collaborative Institutional Training Initiative modules in order to serve in the project leader capacity for the review (Appendix C). Additionally, the project leader mobilized assistance from the Jerry Falwell Library reference librarians to ensure that appropriate keywords and databases were included to demonstrate a rigorous search process. Through the utilization of an advanced search process by the project leader, scholarly articles were identified that aligned with the topic of the perioperative nurse navigator intervention. The original search process was limited to scholarly, peer-reviewed journal articles that were published within the last five years. The search did not exclude unpublished dissertations and, although potential applicable findings were reviewed, none were included in this project.

Data Items

In order to progress in the integrative review process, it is necessary to list and define the variables for which data were sought. This process is identified as data reduction and is the beginning of data categorization (Toronto & Remington, 2020). In order to examine content variables, the project leader reviewed evidence based on alignment with the intervention, setting,

and thematic foundation. Once the articles had been limited to a manageable number, the evidence sources were evaluated for relevance to the research question and rigor in design. Identifying alignment and contrast in variables allowed the project leader to further identify trends and begin to extract themes (Whittemore & Knafl, 2005).

Risk of Bias in Individual Studies

Introduction of bias in the literature search and selection process is a potential threat to the strength of the scholarly literature review. In order to ensure that literature is appropriately identified, screened, assessed for eligibility, and vetted, a systematic review process must be implemented. The PRISMA flow diagram was utilized to ensure rigor in the search and selection process (Moher, Liberati, Tetzlaff, & Altman (2009). Utilizing the PRISMA flow diagram ensures that project leader bias is removed from initial search process and that all eligible studies are evaluated for inclusion. During the integrative review, no bias was noted in the themes or outcomes that were identified.

Summary Measures

The main purpose of the integrative review was to identify the evidence foundation for the value of the perioperative nurse navigator intervention within the ambulatory care setting. Through a careful review and synthesis of the literature, the project leader was able to identify thematic evidence to support the unique communication challenges within the perioperative setting, the value of patient education for improving perioperative clinical outcomes, patient and family stress within the perioperative setting, and the potential impact of the navigator role on patient satisfaction. Much of the literature that reflected the outcomes of the specific perioperative navigator role did so through data presentation of mean change in outcome

measures. A literature matrix was developed to allow for comparison of significant findings, limitations, and strength of the evidence.

Synthesis of Results

The results of the integrative review provide significant evidence regarding the communication challenges that are inherent to the perioperative environment. Additionally, the review provides evidence for the need for personalized patient and family communication throughout the perioperative period in order to enhance the quality of outcomes and satisfaction. Strong evidence was discovered for the value of implementation of the nurse navigator role within the perioperative environment in order to improve communication and care. Additionally, it was found that facilitating strong communication practices can lead to significant improvement in patient satisfaction outcomes, which may subsequently have a significant financial benefit for a health care organization.

SECTION THREE: RESULTS

In order to examine the potential impact of the perioperative nurse navigator role on patient and family satisfaction with nursing communication, a systematic literature review was performed. The literature review examined the background issues associated with communication breakdown in the perioperative setting, identified the impact of the nurse navigator role on the patient experience, and explored issues influencing family satisfaction with perioperative nursing care. The review offers a critical appraisal of current evidence and synthesizes the research around the role of a nurse navigator to provide support for a practice change.

Study Selection

Identification of relevant scholarly research to support a practice change requires a systematic and detailed literature search strategy. In order to examine current research surrounding the impact of the nurse navigator role, an exhaustive review was conducted. Whitemore and Knafl (2005) explained that well-defined and rigorous review methods are needed to ensure that incomplete or biased search methods are avoided. In order to elicit a comprehensive and thorough review of current literature, the project leader engaged in a comprehensive, computer-assisted search of scholarly databases as well as purposive analysis of the reference lists of retrieved articles.

The process of computer database review included computer-assisted search processes of the Cochrane Library, CINAHL, MEDLINE (EBSCP), ProQuest, and PubMed. Multiple keywords and keyword combinations were utilized to guide the search process. The project leader utilized the PRISMA flow diagram to identify relevant articles and ensure a thorough review process. The keywords that facilitated the search process included nurse navigator, perioperative navigator, surgical navigator, nurse communication liaison, surgical services liaison, patient satisfaction, family satisfaction, nurse communication, and patient communication.

Initial search results yielded over 1,000 articles with these keywords. The flowchart in Appendix D reflects a list of potentially relevant articles identified through the following databases: Cochrane Library (198 articles), CINAHL (388 articles), MEDLINE (EBSCO; 263 articles), ProQuest (123 articles), and PubMed (112 articles). Additional filtering criteria were used to help limit the search process. Parameters that were used to guide the search included publication within the last five years, use of the English language, and peer review. These

filtering criteria ensured that the most recent scholarly evidence would be identified. Following the application of the filtering criteria and removal of duplicate articles, a thorough review of the articles was performed to review alignment with the developed research question. After the alignment review was performed, 54 articles were identified for a more detailed review and rigor analysis. Upon review of these remaining articles, 23 were selected based on their alignment with the topic of interest and level of evidence (see Appendix A). Research studies from outside of the United States were included; however, studies from countries that defined case managers as nurse navigators were excluded due to the conflicting scope of the role in the various settings. The chosen research studies provide evidence regarding the unique requirements of the perioperative setting, the significance of communication in the perioperative environment, patient and family needs within this setting, and value of the nurse navigator role in facilitating communication and improving patient and family satisfaction.

The integrative review process identified a variety of articles that supported the developed research question. Chosen articles included mixed methods research and quantitative and qualitative primary research studies. Additionally, one secondary research study, a systematic review, was identified. The articles were analyzed using an evidence table to allow for identification of main themes, similarities, differences, and appraisal of evidence across the body of aggregated literature. The PRISMA checklist was chosen as the tool to appraise the overarching evidence collected within the integrative review. This checklist subsequently informs the project leader of the level of evidence support for the implementation of an evidence-based practice project within the clinical setting for the evaluation of a practice change.

Study Characteristics

The problem that was addressed in the integrative review regarded the examination of the applicability of a nurse navigator within the perioperative setting for improving patient and family experience in care. With a complex phenomenon like patient and family experience, it is important to ensure that the inclusion and exclusion criteria appropriately assisted in refining relevant research. Whittmore and Knafl (2005) stated that having a clear purpose within the review is essential to help isolate the significant variables of interest and identify data that address the research problem. In review of the selected studies, the project leader ensured the literature informed the problem statement, met inclusion/exclusion criteria, and aligned with research variables. This appraisal assisted in ensuring that no bias was found in the selection process or across the studies that were selected (Whittmore & Knafl, 2005).

Results of Individual Studies

The integrative review of scholarly literature included content related to family and patient experience, the significance of advocacy, the value of patient education, and the uniqueness of the perioperative environment. These studies were grouped thematically for the project leader to compare and contrast study findings.

Perioperative Environment

Significant qualitative research has explored the perceptions of care unique to the surgical setting. Arakelian et al. (2017) and Stutzman, Olson, Greulich, Abdulkadir, and Rubin et al. (2017) identified that patients within the perioperative setting desire recognition as unique individuals and value personalized communication that allays the fears and stress that are often found in the surgical environment. Although Stutzman et al. (2017) conducted a single qualitative study with a relatively limited sample size, their conclusions provide important

evidence of the unique communication needs that exist within the perioperative environment. Similarly, Arakelian et al. (2017) provided a metasynthesis of qualitative articles that demonstrate that patients consider person-centered, individualized care to be critically important within the perioperative environment. These studies are important for the insight they offer into the needs of patients within the confines of the perioperative environment. It is clear that despite the perioperative environment's rapid pace, multiple personnel, and varied channels of communication, the patient (and not the procedure) must remain at the center of the care experience.

Patient Education

Five articles explored the concept of the nurse navigator role in relation to patient education. In a scoping review by Kelly and Doucet (2019), the basic functions of nurse navigators were explored, and the role of education emerged as a critical responsibility. The role of nurse navigator as an expert patient educator was also examined in a quasi-experimental study of heart failure patients (Di Palo, Patel, Assafin, & Pina, 2017). Di Palo et al. (2017) identified that patients who received education from a nurse navigator had improved understanding of discharge instructions and a reduced chance of readmission. This finding provides important support for the value of individualized and dedicated communication in times of discharge teaching. Although the sample size in Di Palo et al.'s (2017) study was small, Shipway et al. (2018) reaffirmed the significance of the nurse navigator as educator in a descriptive study of gastrointestinal surgical patients. Shipway et al. (2018) found that when patients received education from the surgical navigator, they had a significantly increased speed of recovery. Phillips et al. (2019) conducted a similar study with surgical patients undergoing hip and knee arthroplasty. In this correlational study, the surgical patients who worked with the nursing

navigator demonstrated improved discharge understanding and overall reduction in postoperative care costs (Phillips et al., 2019). Additionally, the value of nurse navigators for providing patient education is seen outside of the surgical population. Balaban et al. (2015) conducted a randomized controlled experiment of 120 women newly diagnosed with breast cancer. Results of the study indicate that women who received the guidance, education, and support of a nurse navigator had a statistically decreased chance of readmission.

Patient Experience of Stress

In addition to the impact of the nursing navigator role on education, the literature review provided strong evidence regarding the impact of nurse navigator on patient experience during times of stress in the health care setting. Harding (2015) and Noroozi, Khosravi, and Hekmatpoo (2019) examined the impact of a nurse navigator on patients' experiences and feelings of stress outside of the perioperative setting. Both studies found that the use of nurse navigators can reduce stress in otherwise heightened stress experiences such as undergoing biopsy or being admitted to the intensive care unit (Harding, 2015; Noroozi et al., 2019). Additionally, Stubbs and Muir (2015) examined the impact of the nurse navigator on patients within the perioperative setting and found similar results. In the Stubbs and Muir (2015) correlational study, individuals who were cared for by the surgical navigator experienced decreased levels of anxiety. This is an important finding despite the potential influence of confounding variables within the research.

Family Anxiety

The impact of the nurse navigator role on patients' families is another important consideration to be explored in the literature. Inal and Andsoy (2019) identified that anxiety is prevalent in family members who are awaiting information during surgical procedures. Because this is a heightened time of anxiety, it is important to examine the potential impact of the nurse

navigator role on the stress of families at this time. Deselms, Duvall, and Ruyle (2019), Hanson-Heath, Muller, and Cunningham (2016), and Herd and Rieben (2014) each conducted a descriptive study that examined the relationship between the presence of a nurse navigator and the communication experience of the patients' families during the perioperative period. All found that the nurse navigator role could improve the communication experience and decrease family members' anxiety. Kynoch et al. (2017) affirmed this relationship in a controlled trial that examined the impact of structured communication from a nurse navigator and the impact on family members' anxiety. Although the results in this study were not statistically significant, family members who received structured communication did report lower levels of anxiety. Similar results were seen in a randomized controlled trial by Torke et al. (2016). In this study, the use of a family navigator in the intensive care unit did not reflect a statistically significant difference in anxiety, but open-ended comments reflected a positive experience for patients' families.

Additionally, qualitative research by Harrison et al. (2019) affirms that many families identify variability in communication practices in the surgical experience and its significant impact on the care delivery. Hudson et al. (2019) also examined this concept in a qualitative study in which families identified the value of nurse navigators in providing support, direction, knowledge, and a cohesive plan to care. These studies demonstrate how nurse navigators may impact the communication experience during the perioperative period and ease anxiety for families during this time.

Patient Satisfaction

Finally, it is important to examine the connections between the nurse navigator role and the overall feelings of satisfaction with perioperative care. Lim, Eiting, Satpathy, and Cowan

(2019) examined the impact of a liaison nurse navigation program in the emergency department setting on patient satisfaction. In Lim et al.'s case control trial, it was found that the patient liaison navigator offered a statistically significant increase in patient satisfaction scores.

Additionally, Marshall et al. (2017) conducted a randomized controlled trial on the impact of the nurse navigator role in the perioperative environment in relation to patient satisfaction. Marshall et al. (2017) found that the group who received the nurse navigator care intervention had statistically significant higher mean patient satisfaction scores. Owczarzak, Brokskowski, and Stumpf (2016) examined the impact of a dedicated nurse navigator in the perioperative setting on patient satisfaction, and their results also support these findings, although again there is limitation to generalizability because of the singular settings in which these studies were conducted. Park et al. (2017) built upon this work by identifying the significance of navigation programs for individuals undergoing treatment for thyroid cancer in the perioperative setting. Park et al.'s (2017) work also provided support for the idea that individuals who receive care from the nurse navigator have statistically significant higher satisfaction with their care experience.

Synthesis

In order to offer a detailed presentation of integrative review results and detailed insight into the evidence, multiple processes must be implemented by the project leader. Whittemore and Knafl (2005) emphasized that data analysis occurs through the use of four processes: data reduction, data display, data comparison, and verification of conclusion.

Data Reduction

The first process of data analysis is the step of data reduction (Whittemore & Knafl, 2005). This involves examination of the data in order to break down findings into subgroups.

Whittemore and Knafl (2005) described that the process of data reduction can occur through classifying the data based on type of evidence, design, chronology, sample characteristics, or conceptual classification. Examining the accumulated data resulted in an initial categorization according to research design. Following this initial grouping, conceptual classification occurred, with data being grouped in accordance with conceptual theme variables such as perioperative environment considerations, education in the perioperative setting, patient stress, familial anxiety, and patient and family satisfaction implications.

Data Display

In order to understand the relationships among the aggregated literature, data must be categorized using a systematic matrix. Whittemore and Knafl (2005) asserted that data should be displayed in an organized way that allows for “comparison across primary sources” (p. 551). For the purpose of this review, data were categorized in vertical columns by level of evidence, method and design, sample size, study purpose, results, study limitations, and alignment with research question. This allowed the project leader to easily identify patterns across the literature.

Data Comparison

Following the systematic presentation of data in an organized matrix, a detailed data comparison can be performed. Whittemore and Knafl (2005) explained that data comparison allows the project leader to analyze themes and identify relationships between variables. Review of the variable data resulted in the emergence of multiple thematic trends. Relationships among communication practices, patient stress, family anxiety, satisfaction, and the perioperative care environment were identified as patterns across the aggregated research. These relationships emerged following a critical analysis and appraisal of the research.

Conclusion Drawing and Verification

The final step in data analysis involves the process of conclusion drawing and verification. Whitemore and Knafl (2005) stated that this process involves examining the data comparisons that were identified and offering insights into broad generalizations and themes. Additionally, as themes are examined and relationships are explored, it is important to demonstrate transparency and analytical honesty (Whitemore & Knafl, 2005). The project leader identified themes and connections related to communication processes while also emphasizing how the nurse navigator role had facilitated a positive communication experience for patients and families in care environments both within and outside of the perioperative environment. These identified relationships and conclusions provided the initial support for the consideration of implementation of the perioperative nurse navigator within practice setting.

Additional Analysis

Having completed a detailed examination of the relationships and trends identified within the literature, the project leader found evidence support for the value of the nurse navigator for improving patient and family satisfaction with communication processes within the perioperative care environment. The first trend that was identified was the unique health care setting that exists within the perioperative environment (Arakelian et al., 2017; Stutzman et al., 2017). Although there is a need for clear communication processes within all areas of health care, the need is compounded in the perioperative setting due to the rapidly changing care dynamics, lack of familiarity with routines and care processes, and a multitude of high-stakes staff and patient information exchanges. In order to optimize patient safety and ensure quality care within this environment of dynamic change, a consistent patient care advocate is needed. This finding from the literature offers substantial support for the importance of the presence of the perioperative

navigator to assist patients and families while they steer through the complex health care environment.

The second significant trend that was noted in the integrative review analysis was in relation to the value of the perioperative navigator for providing continuity in the communication experience. When a clearly identified individual is responsible for delivering education, the continuity in delivery can enhance patient and family understanding and satisfaction with care (Balaban et al., 2015; Di Palo et al., 2017; Kelly & Doucet, 2019; Phillips et al., 2019; Shipway et al., 2018). Being consistently available to deliver and emphasize pertinent patient education allows the navigator to assume an expert role in relation to the content delivery.

Additionally, the continuity of the perioperative navigator can help to diminish both patient and family anxiety. Having a navigator present during periods of increased stress can reduce feelings of anxiety and fear for both patients and families (Deselms et al., 2018; Hanson-Health et al., 2016; Harding, 2015; Herd & Rieben, 2014; Noroozi et al., 2019; Stubbs & Muir, 2015). With the consistent presence of the navigator throughout the care experience and the resultant decreased anxiety, patients and families will have an improved care experience. The improved care experience may also enhance patient satisfaction and subsequently impact the patient-consumer perspective of care offered within the health care organization (Lim et al., 2019; Marshall et al., 2017; Owczarzak et al., 2016; Park et al., 2017).

Evaluation Methods

The scholarly project integrative review was evaluated by the project leader and project chair throughout the process of research aggregation. This helped to ensure that the process was comprehensive, detailed, and rigorous enough to meet the requirements of the Doctor of Nursing Practice program at Liberty University. The project leader developed a detailed literature matrix

and cross-referenced extracted themes throughout evaluation of the literature to ensure that conclusions were appropriately supported by the aggregated research. The aggregated results and conclusions were reviewed to ensure that no bias was identified within the literature review process.

The evaluation of the articles within the integrative review process was comprehensive in order to ensure there was a significant body of evidence from which to answer the developed research question. Within the evaluation process, the project leader examined the research evidence, eliciting information such as the type of evidence, specific research design, and alignment with established filtering criteria. The use of the PRISMA flowchart ensured that the evidence that was selected was in alignment with the purpose of project and limited the amount of extraneous information reviewed (Moher et al., 2009). The developed flowchart that was used by the project leader is included in Appendix D. Additionally, once research evidence was identified, it was carefully evaluated via the PRISMA checklist to ensure that the validity and reliability of each article were carefully assessed (Moher et al., 2009). Utilizing the checklist process provided the project leader with a systematic structure for appraising the relevant evidence.

Within the evaluation process of the integrative review, the first step in determining the appropriateness of an identified resource was ensuring the alignment of the source with the developed project question. Once the appropriateness of the resource had been established, the project leader then appraised the level of evidence. Evidence support for the project was selected based on the Melynck's hierarchy of evidence; the articles with the strongest levels of evidence were identified and included within the review. Additionally, each source was subsequently evaluated based on the strength of the evidence that it produced in order to inform the project

question. In order to offer an appraisal of the research strength, the evidence sources were evaluated based on the structure of research design, demonstrated validity, reliability, and limitations in research conclusions.

The proposed implementation of the perioperative nurse navigator pilot has been explored with practicum site partners to evaluate issues associated with implementation. The pilot has been vetted with a regional director of perioperative services, three ambulatory service managers, and a regional director of patient experience. The initial feedback collected in exploration of this pilot implementation helped to inform the direction and evidence level obtained within the review process.

In order to successfully evaluate the implementation of a perioperative navigator role, a process to collect evaluative feedback on the role must be developed. This may occur through the evaluation of patient and family feedback collected via survey or with the use of established benchmarking data such as Press Ganey survey results. It will be important to have a clear and well-developed process with which to examine the results of the navigator implementation in order to achieve organizational support for ongoing role implementation.

SECTION FOUR: DISCUSSION

Summary of Evidence

Completion of the integrative review provided substantive evidence that the use of the nurse navigator can lead to improved patient experience with perioperative care (Lim et al., 2019; Marshall et al., 2017; Owczarzak et al., 2016; Park et al., 2016). The integrative review was intended to demonstrate that use of the nurse navigator role could help to reduce stress and anxiety and improve information dissemination to patients. Although many of the studies provided strong support for the value of the role in the perioperative setting, none could

definitively identify that the navigator role alone led to improved patient outcomes. However, many studies emphasized the value of consistency and clarity in communication in the patient experience (Balaban et al., 2015; Di Palo et al., 2017; Phillips et al., 2019). This evidence provides support for ongoing exploration of the navigator role within the unique perioperative environment.

Additionally, there was significant evidence identified regarding the challenges that families experience with communication in the perioperative setting. Arakelian et al. (2017) and Stutzman et al. (2017) highlighted the uniqueness of the perioperative care environment and how the structure of the environment can lead to challenges with information dissemination. These challenges can compound feelings of familial anxiety and stress as patients undergo surgery. However, multiple studies identified the value of the nurse navigator role in overcoming environmental barriers and ensuring that families receive timely and consistent information regarding the patient's progression through care (Deselms et al., 2018; Hanson-Health et al., 2016; Herd & Rieben, 2014; Inal & Andsoy, 2019). Therefore, the nurse navigator role may have a significant impact on familial anxiety and satisfaction with the care experience in a health care organization.

Dissemination

A review of the current evidence regarding the impacts of the nurse navigator role within the perioperative care environment provides a strong foundation for project implementation. Many organizations have recognized the importance of patient-centered care for eliciting strong quality care delivery and improved patient outcomes (Machta et al., 2019). Implementing a nurse navigator program within the perioperative environment places emphasis on the patient and family as integral members of the health care delivery experience. The nurse navigator project is

founded in Peplau's interpersonal relationship theory, which underscores the significance of the nurse serving as a resource and guide to the patient throughout the care experience. This emphasis on patient experience and individualized care can help organizations achieve the patient-centered model of delivery that many hope will improve the quality of outcomes.

In order to engage others with the perioperative nurse navigator project, the project leader must consider multiple strategies for project dissemination. Having developed the detailed review and analysis of current literature, the leader should examine potential sources of review publication. Various publications might be evaluated and considered; however, the setting of the project would most align itself with a publication targeted toward the perioperative care environment. The project leader might consider submitting to journals such as the *AORN Journal* or *Journal of Perioperative Practice*. This would ensure that the review would reach nurses and other stakeholders who are engaged in challenges and opportunities within the perioperative care setting. The ability to engage nursing staff practicing within the perioperative care environment would be an important consideration when selecting a site for potential pilot project implementation.

The project leader might also consider research dissemination through the submission of a poster or podium presentation at a professional conference. This may occur locally, or at the state or national level. Conferences that might be considered would include the Wisconsin Center for Nursing Annual Conference, AORN Global Summit and Expo, OR Excellence, or another nursing conference emphasizing innovative ideas in patient and family centered care.

Although many stakeholders may have interest in navigator implementation in a perioperative setting, there may be questions on how to operationalize role implementation within an organization. The project leader has developed training resources, checklists, and

evaluation survey materials that could help address these concerns (see Appendices E, F, and G). The training materials were developed by the project leader based on free resources provided by the Agency for Health Research and Quality and address the unique perioperative patient and family information needs that were identified within the review. These resources can be adapted and modified to align with the needs of any health care organization. Having readily available free resources will help engage stakeholders in a potential project pilot of the perioperative navigator role.

Additional barriers that should be addressed when considering perioperative navigator implementation include organizational culture and fit. The perioperative nurse navigator project is strongly aligned with a patient-centered model of care. In order for the role to be successfully implemented, the organization should have strong beliefs and values regarding the importance of patient and family engagement in health care. Organizations with physician-led hierarchical business models may not be the right cultural fit for the perioperative project. It is important that health care organizations understand that this project involves an investment of financial resources into the patient experience in order to enhance safety and quality outcomes. The long-term financial benefit may not be immediately realized by the organization, but rather evaluated as aggregate experiences and outcomes improve over time. It will be important that organizations that embrace this initiative have forward-thinking leaders who are invested in long-term strategies for improved quality and safety.

Limitations

Undergoing process change can be a challenging endeavor for a health care organization. It is important to consider potential barriers that may be experienced within a health care organization in regard to implementation of a change initiative. In order for the perioperative

navigator project to be successfully implemented, various stakeholders must be engaged and receptive to the change. To begin, the organization must have an identified need for change. This may be the result of data-driven metrics, concerns about current workflow, or a collection of patient and staff feedback. Identifying the need for examination of current communication practices due to an identified performance concern can help to elicit buy-in from stakeholders that a process change should occur. For example, metrics collected from patient experience surveys may offer a depth of data to help substantiate a performance concern, or area for improvement, over the long-term. Demonstrating longevity in an issue or process can help underscore the need for action or intervention.

An additional challenge that may be experienced with project implementation is a lack of understanding from staff regarding how the perioperative navigator role implementation may change their current workflow processes and responsibilities. In order to address this challenge, education for staff must be delivered to substantiate the need for change, how their role will change, and what the intended outcome is. It will be important to provide detailed education to various engaged stakeholders such as nursing staff in the pre-, intra-, and post-operative settings, physicians, volunteer staff, patients, and families. Prior to disseminating information to the stakeholders, the project leader may invite initial feedback on educational materials and the workflow process change from leaders and key staff. This will assist in creating a sense of engagement and participation in the process change. Additionally, communication with all stakeholders should emphasize how the change in communication processes may better serve the needs of patients and families during the perioperative experience. Finally, providing educational materials and checklists to describe the role, while allowing time for staff feedback and clarification, will also be an important part of engaging staff in the change.

A final barrier to project implementation is concern regarding the financial feasibility of the project. Organizations may see the investment of resources into the perioperative navigator role as a financial commitment that they are unable to undertake. In order to achieve support for the project, it will be important for the project leader to discuss how reorganization of current staff roles and responsibilities may allow the navigator role to be implemented without the creation of a new position. Creatively reorganizing current staff duties in the preoperative, intraoperative, and postoperative settings may allow for the full time equivalent (FTE) status neutral creation of a navigator role during a pilot period. This would allow the organization to subsequently collect and evaluate data to determine if the role had a positive impact on the patient and family experience during the pilot. With collection of these data, the sustainability of the role in the organization for the long term could be further substantiated.

Unfortunately, without the opportunity to pilot the project, definitive conclusions regarding the impact of the navigator role on patient and family satisfaction cannot be made. Although the literature supports the value of the role in enhancing the patient and family experience, pilot project implementation and data collection will be needed to ensure an appreciable impact on the outcome. The inability to pilot the navigator role within a clinical setting at this time remains a significant limitation of the review.

Although the integrative review provided a substantive foundation for the value of the perioperative navigator role, specific limitations in the review process were noted. Although there was a wide variety of information to support the need for improved communication experiences and processes in the perioperative setting, there is need for additional rigor in research design for future studies. By nature, the perioperative care experience is one that can be impacted by many confounding variables, and it is difficult to control for the multiple

influencing factors that may impact the care experience. Additionally, the level of engagement of a perioperative navigator can vary significantly by how an organization defines the role and who carries out the required navigator duties. This also introduces confounding influence into study results. Finally, in reviewing the aggregated research, the project leader served as the singular source of literature review. This may also allow for the potential influence of researcher bias, although the PRISMA flowchart and checklist were utilized to help mitigate this influence in the search and selection process.

Conclusion

The integrative review on the use of a perioperative nurse navigator offered a substantive evidence basis for the value of the role in improving the patient and family care experience. The review aggregated qualitative and quantitative evidence sources with various research designs to help elicit a thorough and robust examination of the role and its application in the perioperative setting. The complexities of the perioperative setting allow for the influence of multiple confounding variables in relation to the impact on patient experience; therefore, the project leader sought the strongest and most thorough body of evidence to provide insight into the value of the role.

The review of evidence substantiated the unique challenges of the perioperative care setting and demonstrated the need for patient-directed communication practices within the setting. It is clear that strong communication practices in the perioperative environment are needed, but the method by which to provide that communication can be varied. Continuity in information dissemination, process flow, and compassionate patient and family support are crucial (Garrett, 2016). The integrative review demonstrated that the use of a navigator to help

direct the communication and information exchange within the perioperative setting is a valid intervention to help improve the communication experience.

In order to engage in a care delivery process change such as the perioperative nurse navigator implementation, there must be a well-developed plan for the health care organization. Structured resources such as navigator training materials, checklists, and satisfaction surveys can provide a usable toolkit for the organization as it plans for implementation. This allows for ease in piloting the project and evaluating the impact on patient care and the family experience.

Patient and family communication has significant implications on patient engagement, safety, and quality of care delivery. With the complexities and fragmentation of the health care system, organizations must explore strategies that promote patient-centered care. Within the perioperative environment, patient and family communication needs are high. Clear information dissemination between the patient and health care team is needed to ensure the most favorable care outcomes. The integrative review identifies that the perioperative navigator can be a vital tool to help achieve these outcomes. Health care leaders should conscientiously consider the value of piloting the role and examining the positive impact on patient and family experience. Once a pilot of the role has been completed, data can be collected to determine the impact of role and the implications for sustainable system change.

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Appendix A

Evidence Table

| Article Title, Author, etc. (Current APA Format) | Study Purpose | Sample (Characteristics of the Sample: Demographics, etc.) | Methods | Study Results | Level of Evidence (Use Melnyk Framework) | Study Limitations | Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale. |
|--|--|---|---|---|--|---|---|
| <p>Arakelian, E., Swenne, C. L., Lindberg, S., Rudolfsson, G., & von Vogelsang, A. (2017). The meaning of person-centred care in the perioperative nursing context from the patient’s perspective – An integrative review. <i>Journal of Clinical Nursing, 26</i>(17–18), 2527–2544. https://doi.org/10.1111/jocn.13639</p> | <p>To determine the meaning of person centered care from the patient’s perspective and within the context of the perioperative setting</p> | <p>23 articles</p> | <p>Meta-synthesis</p> | <p>Thematic analysis of the studies revealed themes reflecting “Being recognized as a unique entity and being allowed to be the person you are” and “Being considered important by having one’s personal wishes taken into account”</p> | <p>Level 5: Systematic review of descriptive and qualitative studies</p> | <p>Methodological limitations within some reviews including low response rate, variation in author’s understanding of person centered care.</p> | <p>This article does again substantiate that attention should be given to the unique patient experience when patients are cared for in the perioperative environment.</p> |
| <p>Balaban, R. B., Galbraith, A. A., Burns, M. E., Vialle-Valentin, C. E., Laroche, M. R., & Ross-Degnan, D. (2015). A patient navigator intervention to reduce hospital readmissions among high-risk safety-net patients: A randomized controlled trial. <i>Journal of General Internal</i></p> | <p>To determine if patient navigators (PNs), reduces readmissions among high risk, low socioeconomic status patients.</p> | <p>Purposive sample of 120 women newly diagnosed with breast cancer randomized between intervention/control group</p> | <p>Randomized controlled experiment</p> | <p>Findings indicate Intervention patients >60 years showed a statistically significant adjusted absolute 4.1 % decrease [95 % CI: -8.0 %, -0.2 %] in readmission with</p> | <p>Level 2: One randomized controlled trial</p> | <p>Conducted in one setting, limited access to data for full comparison of all hospital readmissions</p> | <p>The conclusions support the value of the nurse navigator role in preventing readmissions and their value in providing patient education</p> |

| | | | | | | | |
|--|---|--|---|---|--|---|---|
| <p><i>Medicine</i>, 30(7), 907–915. https://doi.org/10.1007/s11606-015-3185-x</p> | | | | <p>an increase in 30-day outpatient</p> | | | |
| <p>Deselms, J., Duvall, L., & Ruyle, S. (2018). Family visitation in the postanesthesia care unit: Implementation of a nurse liaison role. <i>Journal of PeriAnesthesia Nursing</i>, 33(5), 669–675. https://doi.org/10.1016/j.jopan.2016.02.009</p> | <p>To evaluate the impact of the nurse liaison role in regard to family anxiety</p> | <p>Surgical patients in a 400 bed community hospital</p> | <p>Descriptive</p> | <p>Findings indicate that patients and families indicate improved communication and decreased family anxiety</p> | <p>Level 6: Descriptive design</p> | <p>Conducted one setting, distinctive sample data not reported in findings</p> | <p>Conclusions support the value the nurse liaison role, but specific data is not well reported in the article, limiting the strength of the conclusions.</p> |
| <p>Di Palo, K. E., Patel, K., Assafin, M., & Piña, I. L. (2017). Implementation of a patient navigator program to reduce 30-day heart failure readmission rate. <i>Progress in Cardiovascular Diseases</i>, 60(2), 259–266. https://doi.org/10.1016/j.pcad.2017.07.004</p> | <p>To identify the impact of the impact of a dedicated nursing navigator role on patient education and hospital readmission</p> | <p>Purposive sample of 120 patients with diagnosis code of heart failure</p> | <p>Quasi-experimental, no randomization</p> | <p>Findings indicate that patients who received education from the nurse navigator had improved understanding of discharge instruction and reduced readmissions (17.6% compared to 25.6% for the medical center</p> | <p>Level 3 - Controlled trial (no randomization)</p> | <p>Sample size is small, study period summer/fall. Difficulty controlling for confounding impact of seasonal readmission considerations when not completed over the course of the year.</p> | <p>This source provides good evidence for the significance of the navigator role for enhancing patient education of discharge instruction.</p> |

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| <p>Hanson-Heath, C., Muller, L., & Cunningham, M. (2016). Evaluating enhancements to a perioperative nurse liaison program. <i>AORN Journal</i>, 103(4), 414–420. https://doi.org/10.1016/j.aorn.2016.01.017</p> | <p>To evaluate the effectiveness of a nurse navigator program on anxiety, psychological distress, and quality of life with breast cancer.</p> | <p>102 families completed surveys regarding the PNL position</p> | <p>Descriptive</p> | <p>96% of family members reported the intraoperative updates were helpful or very helpful 88% agreed or strongly agreed that the PNL assisted in reducing anxiety</p> | <p>Level 6: Descriptive design</p> | <p>Conducted in one setting, would benefit from increased length of time for data collection and excluded families who received updates via phone from the PNL</p> | <p>Provides good foundational evidence regarding the value of the PNL role for communicating with patient families and reducing anxiety</p> |
| <p>Harding, M. (2015). Effect of nurse navigation on patient care satisfaction and distress associated with breast biopsy. <i>Clinical Journal of Oncology Nursing</i>, 19(1), E15–E20. https://doi.org/10.1188/15.CJON.E15-E20</p> | <p>To examine the impact of navigation on patient care satisfaction and distress for women undergoing breast biopsy</p> | <p>Convenience sample of 137 patients from two outpatient radiology clinics in Appalachia</p> | <p>Descriptive, cross sectional survey</p> | <p>Women who experienced navigation had lower scores on all distress measures and were less likely to seek information from outside sources. They also reported greater levels of satisfaction with their care.</p> | <p>Level 6: Descriptive design</p> | <p>Patient satisfaction questionnaire did not specific to the nurse navigator or cancer care, only conducted in two settings which limits generalizability</p> | <p>Provides additional support for the value of navigation for patients, especially in times of stress when undergoing medical procedures and the impact that this role can have on patient satisfaction.</p> |
| <p>Harrison, J. D., Seymann, G., Imershein, S., Amin, A., Afsarmanesh, N., Uppington, J., Aledia, A., Pretanvil, S., Wilson, B., Wong, J., Varma, J., Boggan, J., Hsu, F. P. K., Carter, B., Martin, N., Berger, M., & Lau, C. Y. (2019). The impact of</p> | <p>To describe the neurosurgical patient and caregiver perceptions of provider communication, influence of patient education, and understanding</p> | <p>43 patients and caregivers participated in five focus groups</p> | <p>Qualitative exploratory analysis</p> | <p>Themes emerged regarding the significance of variability in the care experience regarding the quality of communication and patient education</p> | <p>Level 6: Single qualitative study</p> | <p>Conducted in one urban university based medical center, based only on patient and family member opinion limiting generalizability</p> | <p>Provides support for the variability in communication practices that can be seen with the surgical experience in reference subsequently impacting patient-centered and care-</p> |

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| <p>unmet communication and education needs on neurosurgical patient and caregiver experiences of care: A qualitative exploratory analysis. <i>World Neurosurgery</i>, 122, e1528–e1535. https://doi.org/10.1016/j.wneu.2018.11.094</p> | <p>of care trajectory</p> | | | | | | <p>giver centered care delivery.</p> |
| <p>Herd, H., & Rieben, M. (2014). Establishing the surgical nurse liaison role to improve patient and family member communication. <i>AORN</i>, 99, 594–599.</p> | <p>To examine the impact of a surgical nurse liaison role in regard to patient satisfaction.</p> | <p>A convenience sample of 30 patient’s family members in relation to the surgical experience</p> | <p>A non-experimental descriptive survey</p> | <p>Results indicate increases in patient satisfaction across 3 CAHPS survey questions at Q 1: 9% increase (p = 0.003), Q 2: 4% increase (p = 0.160) and Q 3: 3% increase (p=.489). Q, 2 & 3 are not statistically significant, but do support the a positive trend with the hypothesis.</p> | <p>Level 6: Descriptive design</p> | <p>Conducted in one setting, small convenience sample</p> | <p>Provides good foundational evidence regarding the potential impact a surgical nurse liaison role might have on patient satisfaction with communication. Replicability with additional studies, samples, and settings would enhance the strength of the conclusions.</p> |
| <p>Hudson, A. P., Spooner, A. J., Booth, N., Penny, R. A., Gordon, L. G., Downer, T.-R., Yates, P., Henderson, R., Bradford, N., Conway, A., O’Donnell, C., Geary, A., & Chan, R.</p> | <p>To explore patient’s and carers experiences of receiving care from a nurse navigator</p> | <p>Semi-structured interview of 12 patients and 13 caregivers</p> | <p>Qualitative, phenomenology</p> | <p>Thematic analysis revealed four themes: 1) “Being there for us 2) “Being our compass” 3) “Bringing it together”</p> | <p>Level 6: Single qualitative study</p> | <p>Limitations related to representation of sample</p> | <p>Provides additional support for the value of nurse navigators as a resource for patients and families in times of uncertainty in their medical care</p> |

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| <p>J. (2019). Qualitative insights of patients and carers under the care of nurse navigators. <i>Collegian</i>, 26(1), 110–117. https://doi.org/10.1016/j.colegn.2018.05.002</p> | | | | <p>4) “Knowing is power”</p> | | | |
| <p>Inal, N., & Andsoy, I. I. (2019). The needs and expectations in the waiting room for the relatives of patients who undergo surgery. <i>International Journal of Caring Sciences</i>, 12(1), 384–394.</p> | <p>To evaluate the needs and expectations of relatives of patients who are undergoing surgery</p> | <p>300 relatives of patients undergoing surgery in one university hospital</p> | <p>Cross sectional, descriptive</p> | <p>75.2% of family members experienced anxiety when they saw a patient’s name on the information screen denoting patient in procedure. Only 52.3% of patient’s relatives received information regarding anesthesia administration/induction and 80.7% were not informed about the patient’s condition during the procedure. 52.3% felt it was difficult to obtain information</p> | <p>Level 6: descriptive study</p> | <p>Limitations were setting to one University hospital in Turkey. Difficulty generalizing from the information.</p> | <p>Provides some support for the feelings and perceptions of family members in the surgical experience. Describes the need for additional emphasis on communication during this period.</p> |
| <p>Kelly, K. J., & Doucet, L. (2019). Exploring the roles, functions, and background of patient navigators and case</p> | <p>To explore the impact of patient navigators and case managers</p> | <p>Examination of 160 articles to identify the specific function of the nurse</p> | <p>Systematic scoping review</p> | <p>Specific functions of nurse navigators identified related to patient</p> | <p>Level 1: Systematic review</p> | <p>Covered a wide range of disease types without specific focus</p> | <p>Provides strong evidence regarding the value of the nurse navigator role specific to</p> |

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| <p>managers: A scoping review. <i>International Journal of Nursing Studies</i>, 98, 27–47. https://doi.org/10.1016/j.ijnurstu.2019.05.016</p> | <p>across settings and disease contexts</p> | <p>navigator in relation to the treatment of targeted conditions or disease</p> | | <p>advocacy, care coordinators, enhanced needs assessment, engagement with community, education, and psychosocial support</p> | | <p>to the surgical population</p> | <p>issues associated with patient advocacy and education.</p> |
| <p>Kynoch, K., Crowe, L., McArdle, A., Munday, J., Cabilan, C., & Hines, S. (2017). Structured communication intervention to reduce anxiety of family members waiting for relatives undergoing surgical procedures. <i>ACORN: The Journal of Perioperative Nursing in Australia</i>, 30(1), 29–35. https://doi.org/10.26550/2209-1092.1013</p> | <p>To examine the effect of a structured communication program on anxiety of family members’ awaiting relatives undergoing surgical procedures</p> | <p>129 family members of patients undergoing surgical procedures in a tertiary hospital setting</p> | <p>Quasi-experimental design, non-randomized</p> | <p>Family member anxiety scores were found to be lower in the group that received the structured communication intervention, although this was not found to be statistically significant.</p> <p>The control group did report a lack of communication between perioperative staff and family members which can have significant implications on satisfaction and anxiety.</p> | <p>Level 3: Controlled trial</p> | <p>Conducted at one site, family satisfaction was not explored with data collection</p> | <p>Provides foundation support for the inherent lack and inconsistency of perioperative communication and the potential implications for family anxiety and satisfaction.</p> |
| <p>Lim, C., Eiting, E., Satpathy, L., & Cowan, E. (2019). The impact of a liaison program on</p> | <p>To explore the impact of a patient liaison program on</p> | <p>400 participants within the ER setting</p> | <p>Retrospective, case control design</p> | <p>Patients who received intervention of liaison program</p> | <p>Level 4: Case control</p> | <p>Limited to one ER setting</p> | <p>Provides foundational evidence regarding the value of a</p> |

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| <p>patient satisfaction in the emergency department. <i>The Western Journal of Emergency Medicine.</i>, 20(5), S18.</p> | <p>patient satisfaction scores within the Emergency Department</p> | | | <p>reported higher patient satisfaction scores on survey questions regarding “likeliness to recommend” (p=0.010)</p> | | | <p>patient liaison for improving patient satisfaction.</p> |
| <p>Marshall, B., Assef, M., Pitney R., Macco, M., Tschoeke, B., Oksa, M., & Yeatman, A. (2017). Introduction of a surgical navigator in the perioperative process improves patient satisfaction. <i>Journal of Patient Experience</i>, 4(1), 10–16. https://doi.org/10.1177/2374373517692916</p> | <p>The purpose was to explore the impact of a surgical navigator on the patient satisfaction experience with perioperative care.</p> | <p>Randomized controlled trial including 119 intervention (navigator) surgical cases and 134 (control)</p> | <p>Experimental study, with randomization between experimental/ control groups</p> | <p>The intervention group has statistically significant higher mean satisfaction scores (p<= 0.026)</p> | <p>Level 2: One randomized controlled trial</p> | <p>Conducted in one setting. Replicability of study with additional clarification of the navigator role would further enhance the application of the intervention</p> | <p>Provides strong evidence regarding the impact of the nurse navigator role to enhance patient satisfaction</p> |
| <p>Noroozi, M., Khosravi, S., & Hekmatpoo, D. (2019). The effect of liaison nurse on patient anxiety and vital signs during cardiac care unit admission: A randomized clinical trial. <i>Revista Latinoamericana De Hipertension</i>, 14(3), 271–276.</p> | <p>To examine the impact of a nurse liaison nurse on patient anxiety and vital signs during CCU admission</p> | <p>70 coronary heart patients selected through purposeful sampling, randomized between control and intervention groups</p> | <p>Experimental study, with randomization between experimental/ control groups</p> | <p>The intervention group had a statistically significant decrease level of anxiety in comparison to the control group (51.8 vs. 57.23, p= 0.002) The mean heart rate of the intervention group was also statistically lower than the control group (78.2 vs. 84.94 p= 0.016)</p> | <p>Level 2: One randomized controlled trial</p> | <p>Conducted in one setting Relationship focused on anxiety and VS data</p> | <p>Provides strong evidence regarding the impact the nurse liaison in reducing anxiety in times of stress during hospitalization. Although the focus is in the ICU setting, there are strong implications for the value of this role within the perioperative experience.</p> |

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| <p>Owczarzak, J., Broskowski, E., & Stumpf, M. (2016). Bridging the gap: The role of the nurse navigator in the perioperative setting. <i>Journal of PeriAnesthesia Nursing</i>, 31(4), e30. https://doi.org/10.1016/j.jopan.2016.04.069</p> | <p>To examine the impact of a dedicated nurse navigator role on patient satisfaction scores within the perioperative setting</p> | <p>Implementation of role within one perioperative setting, no delineated sample was described</p> | <p>Retrospective, descriptive design</p> | <p>Increase in patient satisfaction scores since role implementation. Press Ganey Patient Satisfaction scores have risen 5% since role implementation</p> | <p>Level 6: Descriptive design</p> | <p>Conducted in one setting, no description of confounding variables which may have influenced satisfaction scores</p> | <p>Provides additional supportive evidence regarding the success of the perioperative navigators pilot for improving patient satisfaction</p> |
| <p>Park, K. A., Oh, Y. J., Kim, K. M., Eum, S. Y., Cho, M. H., Son, Y. H., Park, S. H., Woo, K. M., Lee, Y. S., Kim, S., Chang, H.-S., & Park, C. S. (2017). Navigation programs, are they helpful for perioperative care with thyroid cancer patients? <i>European Journal of Cancer Care</i>, 26(4), e12592. https://doi.org/10.1111/ecc.12592</p> | <p>The purpose was to evaluate the a navigation program for the perioperative care of patients with thyroid cancer</p> | <p>Sample of 204 patients who were undergoing surgery for thyroid cancer. 99 patients in control group 95 patients in navigator group</p> | <p>Case control study using non-equivalent control group methods</p> | <p>Overall satisfaction scores were significantly higher in the navigation vs control group (p =0.025)</p> | <p>Level 4: Case control</p> | <p>Single setting Limitations to intervention in regard to customization to client Program evaluated based on patient satisfaction scores which may have been impacted by confounding variables.</p> | <p>Provides good foundational information in comparison across groups that the use of a navigation program within the perioperative experience can enhance patient satisfaction.</p> |
| <p>Phillips, J. L. H., Rondon, A. J., Vannello, C., Fillingham, Y. A., Austin, M. S., & Courtney, P. M. (2019). A nurse navigator program is effective in reducing episode-of-care costs following primary hip and knee arthroplasty. <i>The</i></p> | <p>To determine whether a nurse navigator program for total hip and total knee replacement patients results in decreased episode of care costs</p> | <p>Sample of 5275 patients undergoing TKA or THA across 16 hospitals</p> | <p>Retrospective correlational design</p> | <p>The NNP group demonstrated a reduced episode of cost \$19,116 vs. 20, 418 p<0.001</p> | <p>Level 4: Correlational</p> | <p>Retrospective correlational design. Unable to provide a matched variable analysis</p> | <p>Provides foundational data that nurse navigator programs may enhance post-surgical experience and improve discharge understanding while reducing costs</p> |

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| <p><i>Journal of Arthroplasty</i>, 34(8), 1557–1562. https://doi.org/10.1016/j.arth.2019.04.062</p> | | | | | | | |
| <p>Pruitt, Z., & Sportsman, S. (2013). The presence and roles of nurse navigators in acute care hospitals. <i>JONA: The Journal of Nursing Administration</i>, 43(11), 592–596. https://doi.org/10.1097/01.NNA.0000434510.74373.40</p> | <p>To offer insight into the hospital executive team’s impressions regarding the value of nurse navigators in healthcare settings</p> | <p>580 nurse executives</p> | <p>Descriptive</p> | <p>24% of respondents had implemented NN programs and most of the respondents rated them as successful.</p> | <p>Level 6: Descriptive design</p> | <p>Potential influence of many confounding variables. Setting of NN was not variable.</p> | <p>Provides foundation evidence that nurse navigator programs can hold value for healthcare organizations in improving outcomes.</p> |
| <p>Shipway, D., Koizia, L., Winterkorn, N., Fertleman, M., Ziprin, P., & Moorthy, K. (2018). Embedded geriatric surgical liaison is associated with reduced inpatient length of stay in older patients admitted for gastrointestinal surgery. <i>Future Healthcare Journal</i>, 5(2), 108–116. https://doi.org/10.7861/futurehosp.5-2-108</p> | <p>To evaluate the impact of a surgical liaison for emergency and elective gastrointestinal survey patients.</p> | <p>682 surgical patients</p> | <p>Descriptive</p> | <p>Mean reduction in length of stay of 4.4. days for patients who received education and assistance with care planning from the surgical liaison</p> | <p>Level 6: Descriptive design</p> | <p>Potential influence of many confounding variables in the structure of the study</p> | <p>Provides foundational evidence for the value of the surgical liaison in relation to patient education and potential impact on speed of recovery</p> |
| <p>Stubbs, M., & Muir, J. (2015). Whilst in our care: Introducing the surgical liaison nurse. <i>ACORN: The Journal of Perioperative Nursing in Australia</i>, 28(2), 12–15.</p> | <p>The purpose was to investigate the impact of a surgical liaison nurse in relation to anxiety and stress levels of</p> | <p>Sample of 980 surgical patients, family members and significant others</p> | <p>Retrospective, correlational design</p> | <p>456 participants scored anxiety at 9 before the SNL service, 402 rated anxiety at 2 after communication with SNL service. Statistical</p> | <p>Level 4: Correlational</p> | <p>Single setting Difficulty controlling for confounding variables</p> | <p>Provides foundational information to demonstrate the correlation between the use of the surgical liaison nurse and the impact on anxiety</p> |

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| | surgical patients' family members | | | significant was not presented in the discussion of findings. | | | for surgical patients and their families |
| Stutzman, S. E., Olson, D. M., Greulich, P. E., Abdulkadir, K., & Rubin, M. A. (2017). The patient and family perioperative experience during transfer of care: A qualitative inquiry. <i>AORN Journal</i> , 105(2), 193–202. https://doi.org/10.1016/j.aorn.2016.12 | The purpose of this study is explore the experiences of patients and their families after transfer of care. | 7 patients/family members who participated in semi-structured patient interview | Qualitative | Thematic analysis revealed the most significant theme to be the importance of communication with the patient and the patient's family/timing of communication for easing fear | Level 6: Single qualitative study | Limited sample size limiting generalizability Two interviewers were used which made data collection more inconsistent | Provides evidence regarding the value of communication in minimizing fear and decreasing anxiety in the perioperative experience for patients and families. |
| Sundqvist, A., Holmefur, M., Nilsson, U., Anderzén-Carlsson, A., Institutionen för hälsovetenskaper, & Örebro universitet. (2016). Perioperative patient advocacy: An integrative review. <i>Journal of PeriAnesthesia Nursing</i> , 31(5), 422–433. https://doi.org/10.1016/j.jopan.2014.12.001 | The purpose of the review was to identify the characteristics and consequence of perioperative patient advocacy | A systematic and integrative review of twelve articles examining the implications of advocacy within the perioperative setting | Systematic integrative review | Thematic analysis revealed the significance of staff “doing good for another human being” as the main tenet of advocacy in the perioperative environment | Level 5: Systematic review of descriptive and qualitative studies | Potential influence of bias in the studies examined, and potential credibility question of one lead author not working in the perioperative environment | Provides some evidence regarding the identified desire of perioperative staff to explore various strategies to increase patient advocacy within the perioperative environment |
| Torke, A. M., Wocial, L. D., Johns, S. A., Sachs, G. A., Callahan, C. M., Bosslet, G. T., Slaven, J. E., Perkins, S. M., Hickman, S. E., Montz, K., & Burke, E. S. (2016). The family | To identify the success of a family navigator in addressing family members' communicatio | 26 patients within the ICU setting. 13 intervention with family navigator, 13 control | Randomized controlled trial | No statistical difference was found in relation to post traumatic stress scores, anxiety, depression, decision conflict | Level 2: Randomized controlled trial | Small sample size, one setting | Although this study did not demonstrate a statistical difference with the use of family navigator role, qualitative open |

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| <p>navigator: A pilot intervention to support intensive care unit family surrogates. <i>American Journal of Critical Care: An Official Publication, American Association of Critical-Care Nurses</i>, 25(6), 498–507. https://doi.org/10.4037/ajcc2016730</p> | <p>n needs within the ICU setting</p> | | | <p>or decision regret between the experimental and control group. Open ended comments support a positive experience with the family navigator role and state a recommendation for use with additional families.</p> | | | <p>ended comments support the role and its positive impact on the patients’ family in the ICU setting.</p> |
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Appendix B**LIBERTY UNIVERSITY**
INSTITUTIONAL REVIEW BOARD

April 16, 2020

Elizabeth Christman
Vickie Moore

Re: IRB Application - IRB-FY19-20-310 Improving Perioperative Communication Through the Use of a Nurse Navigator: An Integrative Review

Dear Elizabeth Christman, Vickie Moore:

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

Decision: No Human Subjects Research

Explanation: Your study does not classify as human subjects research because:

(1) it will not involve the collection of identifiable, private information.

Please note that this decision only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research
Research Ethics Office

Appendix C



Completion Date 22-Jan-2020
Expiration Date 21-Jan-2023
Record ID 34959617

This is to certify that:

Elizabeth Christman

Has completed the following CITI Program course:

Biomedical Research - Basic/Refresher (Curriculum Group)
Biomedical & Health Science Researchers (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

Liberty University

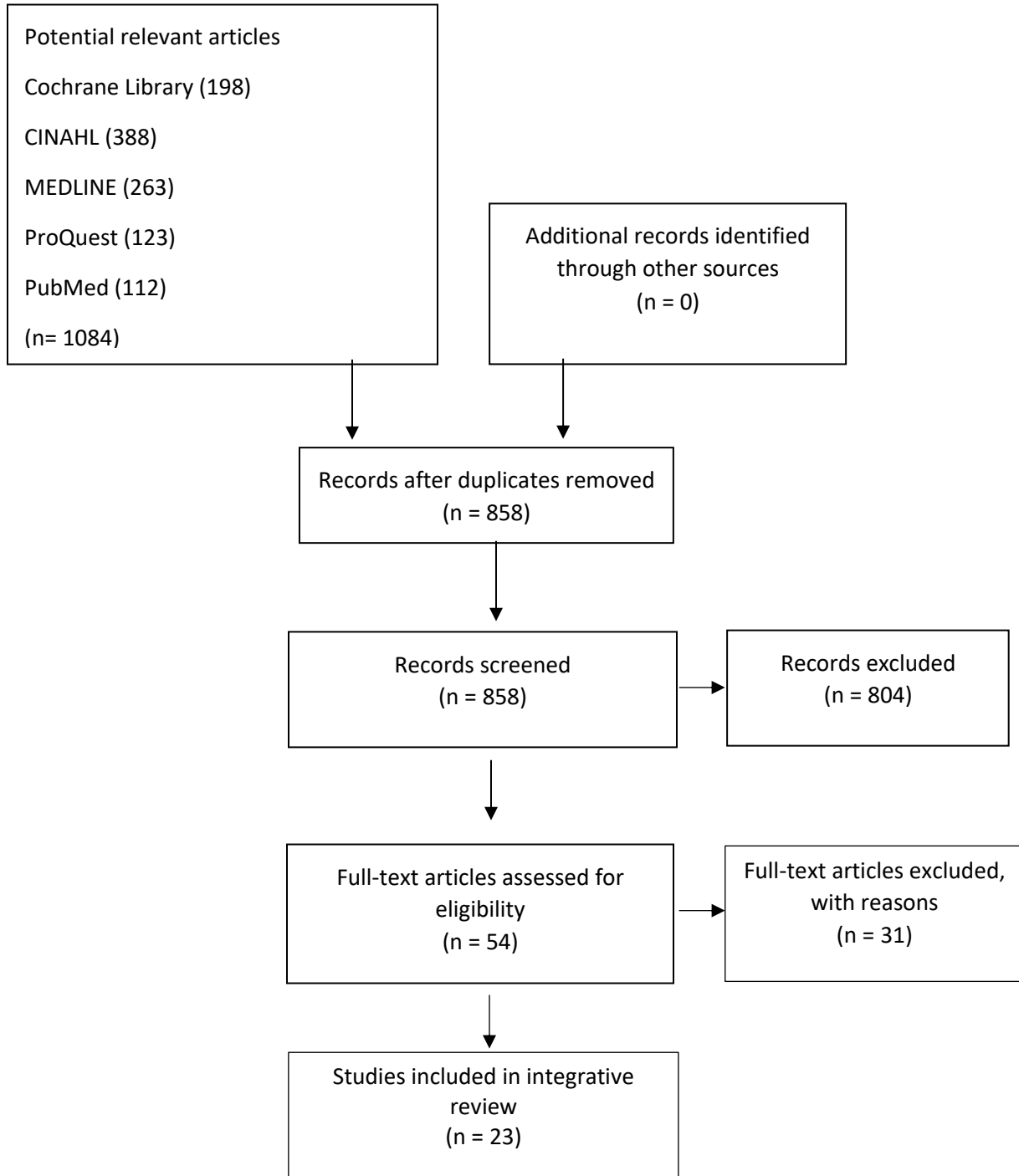


Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w0907e188-c3a4-4fff-b15e-9ba392f73a31-34959617

Appendix D

Project Leader’s PRISMA Flow Diagram



Appendix E

Perioperative Navigator Family Survey

The perioperative services department is currently piloting the use of a perioperative navigator to assist patients and families during the surgical process. We would like to ask you a few questions about the services provided by the navigator today. Completion of the survey is voluntary and responses are anonymous. We are appreciative of any feedback that you are willing to provide.

Please record your response utilizing a score of 1-5 on the following scale to address the following questions:

1- Strongly Disagree, 2-Disagree, 3 – Neutral, 4 - Agree, 5- Strongly Agree

1. Pre-Operative Care:

The information provided by the perioperative navigator prior to surgery was helpful to your understanding of the progression of patient care throughout the surgical experience.

1 2 3 4 5

Comment: _____

2. Intra-Operative Care:

The information provided by the perioperative navigator during the intraoperative period was helpful.

1 2 3 4 5

Comment: _____

3. Post-Operative Care:

The information provided by the perioperative navigator during the post-operative period was helpful in offering clarity for discharge expectations and care.

1 2 3 4 5

Comment: _____

4. Speaking with the perioperative navigator decreased your stress/anxiety.

1 2 3 4 5

Comment: _____

5. The use of a perioperative navigator throughout the perioperative process enhanced your satisfaction with the care of your family member.

1 2 3 4 5

Comment: _____

Appendix F

Navigator Training Module Information

Voiceover PowerPoint module uploaded into HealthStream Education

Content module development based on Agency for Healthcare Research and Quality Patient and Family Engagement in the Surgical Environment

- <https://www.ahrq.gov/hai/tools/ambulatory-surgery/sections/implementation.html>

Content area:

- Define patient and family engagement
- Explain the importance of engaging patients and family members
- Determine the level of patient and family engagement at your facility
- Distinguish between different methods of engaging patients and family members
- Apply engagement methods to the ambulatory surgery center setting
- Determining the whys and how engagement, clear communication enhance safety & quality

Appendix G

Perioperative Navigator Checklist

| | Tasks | ✓ Completion |
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| Pre-Operative Period | 1) Introduce self, explain role 2) Reinforce self as person of contact for patient/family throughout the surgical process 3) Collect contact information from family, question where they will be waiting, preferred method of contact for updates 4) Describe the surgical tracking board and process 5) Seek information regarding questions patient/family may have during this period. | |
| Intra-Operative Period | 6) Provide verbal update at midpoint of procedure (if applicable) 7) Describe process for MD meeting, post-op. transfer 8) Identify room for MD to meet family 9) Show family to room or utilize volunteer to show family to room for MD update | |
| Post-Operative Period | 10) Walk family to post-op ambulatory patient room 11) Clarify process of progressing to discharge. Time, education, discharge prescriptions, etc. 12) Clarify understanding of discharge instructions/needs 13) Verbal thank you for allowing us to participate in care 14) Provide optional family satisfaction survey | |