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Succession Planning and the Identification of Future Perioperative Leaders: A Mixed Methods
Study

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Doctor of Nursing Practice Final Scholarly Project

In Partial Fulfillment of the Requirements for the Degree

Doctor of Nursing Practice

Otterbein University

2017

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Executive Summary

Purpose: The purposes of this study were to determine if there is a relationship between succession planning and the identification of future perioperative leaders; if there is a relationship between mentoring for leadership and the identification of future perioperative leaders; to understand the current state of leadership in the operating room (OR), and to determine what methods are being used to identify perioperative nurse leaders.

Background: An impending nursing shortage is expected to occur in the next decade, particularly within the specialty of perioperative practice and leadership. Providing access to surgical care is a major challenge for meeting the nation's health needs and is a concern of the Institute of Medicine (IOM). Perioperative registered nurse orientation involves almost a year of competency-based mentoring and training while the perioperative nurse leader orientation may take even longer. The nursing shortage combined with the extensive training needed for leadership positions may contribute to a reduction of active ORs during the time period that nurses are undergoing training. The inability to staff the OR may in turn have a negative effect for the remaining five concerns of the IOM aims of quality, safety, equality, efficiency, and cost. Solutions to successfully close the gap between the supply and demand of perioperative nurses and nurse leaders need to be identified.

Methods: A descriptive, mixed method study using a quantitative method with a modified grounded theory qualitative survey design was used. The target population was OR managers and directors, who are members of AORN and who work in a hospital environment.

Findings: A significant ($p=0.0001$) relationship between succession planning and the identification of future perioperative leaders was identified. Additionally, the majority of identified leaders, once identified, were being mentored.

Succession Planning and the Identification of Future Perioperative Leaders: A Mixed Methods
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Section 1 – Problem Identification—The Introduction

Clinical Problem

An impending “nursing shortage is expected to occur in the next decade”(2006), particularly within the specialty of perioperative practice and leadership. In one large workforce survey, greater than 55% of respondents, predominantly managers, plan to retire between 2011 and 2020 (Hader, Saver, & Steltzer, 2006, p. 23). The gap, between supply and demand of registered nurses, is expected to increase by 50% by 2020 (Hader et al., 2006). Additionally, the Bureau of Labor Statistics projects that there will be a deficit of nurses by 2022 greater than twice as large as any nursing shortage that has occurred since the 1960s (Grant, 2016). The demand for perioperative nurses is predicted to increase two to three percent per year as baby-boomers age (Messina, Ianniciello, & Escallier, 2011). The average age of the perioperative nurse, according to the survey by Hader, is 51 to 55 years of age. Nurses’ average age in other specialties ranges from 42 to 47 years of age. Since the operating room (OR) has the oldest age nurses of the specialties, the operating room has one of the highest risks of experiencing a critical shortage of registered nurses and in particular registered nurse leaders (Hader et al., 2006).

Results from a survey conducted in 2012 of operating room leaders reported that 76% of these respondents had greater than 20 or more years of nursing experience, and approximately 65% of respondents indicated plans to retire within 10 years or less (Sherman, Patterson, Avitable, & Dahle, 2014). The loss of experienced nurses may result in the remaining nurses having less experience and skill. Deloitte, a global leader in the labor market, stated that in a survey of human resource executives in the United States, greater than 70% of respondents report that inadequate skill poses the greatest threat to business performance. This statement

pertains to the OR first hand since the operating room is a multi-million dollar business within the hospital (Stevens, 2008). The loss of experienced leaders combined with a reduced number of leaders creates a staffing challenge for the future.

Staffing in the perioperative environment is also more difficult. This is primarily due to the absence of perioperative environment curricula in most undergraduate nursing programs (Ball, Doyle, & Oocumma, 2015). The decreased exposure to perioperative nursing prevents the imprinting of this specialty practice area on the nursing student, resulting in a lack of awareness of the scope of the role and creates a situation that further exacerbates the shortage.

Additional reasons for the nursing shortage include an increase in need for nurses due to an aging population, increasing incidence of chronic health problems, and aging faculty members who are also retiring. Faculty members who are retiring in turn lead to an inability of nursing schools to keep pace with needed enrollments (Grant, 2016). The rising demand for nurses and nurse leaders, particularly in the operating room, coupled with a reduced supply, signals a need for identifying strategies to close the gap.

Significance

Providing access to surgical care is a major challenge for meeting the nation's health needs and is a concern of the Institute of Medicine (IOM) (*The future of nursing*, 2011). A lack of staffing in operating rooms, driven by an impending nursing shortage of perioperative registered nurses and perioperative leaders, may lead to the closure of operating rooms.

Perioperative registered nurse orientation involves almost a year of competency-based mentoring and training while the perioperative nurse leader orientation may take even longer. The nursing shortage combined with the extensive need for perioperative training may contribute to a reduction of active operating rooms during the time period that nurses are undergoing training.

The inability to staff operating rooms will in turn have a cascading effect for the other five IOM aims of quality, safety, equality, efficiency and cost.

Quality is defined as “the degree to which systems, services and supplies for individuals and populations increase the likelihood of positive health outcomes and are consistent with current professional knowledge” (Hickey & Brosnan, 2012, p. 6). Failure of a health care system to provide access to care, resulting from the inability to provide staff in operating rooms, leads to a reduction in quality. Additionally, if hospital executives replace perioperative nurse leaders with non-nurse leaders in an effort to keep operating rooms open, potentially negative outcomes may occur. Operating room non-nurse leaders may be less qualified to lead an operating room since they do not possess current professional perioperative nursing knowledge; therefore the likelihood of achieving positive health outcomes may be reduced. Additionally, if these non-nurse perioperative leaders open operating rooms utilizing perioperative registered nurses who have not completed the specific competency-based orientation, quality of care outcomes may be impacted negatively.

Quality and safety go hand in hand and discussing one without the other is difficult. The loss of qualified perioperative nurses and nurse leaders is of concern. The concern is due to the loss of nurses with critical thinking ability in nurses who are deemed expert practitioners, such as those with over 20 years of experience. Expert practitioners provide critical thinking based on experiential learning that contributes to, and has a direct impact on, quality and safety. The critical thinking, skill, and knowledge drain that is lost when expert nurses leave the workforce, or are replaced by nurses less qualified or with less experience, elicits legitimate concern. Perioperative nurses and nurse leaders in the perioperative environment provide patient advocacy during a time when the patient is most vulnerable. The future of perioperative nursing is dependent on an adequate pipeline of operating room nurses from which candidates who want to

be perioperative leaders are replenished. Every patient deserves to benefit from the unique skills of a perioperative registered nurse or nurse leader who can advocate for the quality and safety outcomes for each and every patient.

Equality of care is achieved through consistent practices that provide each patient the same care and probability of positive outcomes no matter where his or her surgical care is provided (Hickey & Brosnan, 2012, p. 60). Some organizations may experience perioperative nurse and perioperative nurse leader shortages to a greater degree than others. Standards of practice for perioperative replacement, orientation and training are essential to achieve positive outcomes. So equality must be addressed in a uniform manner related to the impending perioperative nursing shortage. The standard of practice for quality of care to patients undergoing a surgical procedure is to have one dedicated registered nurse circulator for each operating room. Currently, however, there are only twenty-four states that have strong regulations mandating that the “surgery circulator is a perioperative registered nurse who is dedicated to each patient and is present during that patient’s entire perioperative experience” (“AORN position statement,” 2014). Although not mandated in all states, the gold standard is to practice to this level of care. Mandating the gold standard in all states provides an element of care that prevents deviation from the standard.

The operating room has one of the highest costs in a hospital and waste contributes directly to the cost of health care in the surgical environment. Providing the best combination of supplies, equipment, and human resources at the lowest cost to achieve positive patient outcomes is needed when considering meeting organizational financial metrics for a defined population (Hickey & Brosnan, 2012, p. 60). The perioperative nurse and perioperative leader are in the best position to assess, implement and evaluate the structure, the efficiency processes and outcomes that contribute to the overall quality care needs of the surgical patient.

Operating rooms have been described widely as the economic engines of the hospital, as up to 60% of hospital revenue is generated by the operating room (Sherman et al., 2014). The inability to staff the operating room with qualified registered nurses and registered nurse leaders would ultimately affect the financial engine, creating a corresponding effect that may lead to crisis decisions by hospital executives. To try to recoup financial loss, decisions by hospital executives to replace perioperative registered nurse leaders with less qualified non-nurses may occur, which could contribute negatively in leading the complex operations of a perioperative enterprise. The implications and significance of replacing perioperative registered nurse leaders with non-nurses can affect financial metrics and cost, as well as the Institute of Medicine (IOM) aims, of safety, quality, access to care, equality, and efficiency. These six aims, in the IOM 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century* are all concerns that may have dire consequences for the operating room environment and require action oriented prevention strategies (Berwick, 2002) (NCBI Bookshelf Website, 2001).

Needs Assessment

In 2012, I noted a growing shortage of registered nurse and registered nurse leaders in the perioperative environment within a Mid-western hospital system. After I attended a presentation at the annual Association of periOperative Registered Nurses (AORN) convention, I identified that perioperative staffing and leadership vacancies were not just a local concern but also a national issue. Continued discussions with others at this convention as well as other professional meetings and symposia occurred over several years. As a result, I created a balanced scorecard needs assessment model.

The balanced scorecard quadrants included quality, work-life, service, and finance. The balanced scorecard indicators within each quadrant, such as infection rate, staff turnover or on

time starts, can be used as strengths or weaknesses of the six IOM aims depending on whether the indicators are positive or negative. The balanced scorecard framework provides a method to identify areas that would be impacted due to shortages or vacancies in perioperative nurse leader positions. The model in Figure 1 indicates the connection of the four balanced scorecard quadrants, with their associated indicators, with the IOM's five aims of access to care, quality, safety, equality and efficiency. The sixth aim of cost surrounds all of the indicators in this model. The quality and work-life indicators in the model primarily affect access and safety. The finance and service indicators in the model primarily affect equality and efficiency. Cost and quality outcomes are entities that payers are most concerned about and are willing to pay for and as a result must be integrated across all quadrants.

Small informal focus discussions with individuals and small groups of perioperative leaders occurred during my attendance at various conferences and professional meetings. The purposes of the informal focus discussions was to validate the needs assessment for identifying what strategies are being used to mitigate the future perioperative leader shortages, but also identifying the quality; work-life, finance and service indicators that participants felt would be affected by the impending shortages. I held informal discussions with a total of 45 individuals, while attending conferences across several states, including, Tennessee, Texas and California from September 2015 to April 2016. The majority of participants indicated experiencing staff shortages in the perioperative registered nurse and registered nurse leader positions, loss of expert critical thinking skills due to retirements of expert nurses and prolonged ability to fill vacancies. Participants also expressed a negative impact occurring from many of the indicators in the balanced scorecard model.

Problem Statement

Solutions to successfully close the gap between the supply and demand of perioperative nurses and nurse leaders need to be identified. In addition, solutions must be categorized, taking into consideration cost, feasibility, resources, risk, organizational support, and policy actions. Formal succession planning is one strategy that is used by some organizations to mitigate the impending nursing shortage. However, it is not known if there is a relationship between succession planning with mentoring for leadership and the identification of future perioperative nurse leaders.

Section II – Summarizing the Evidence -The Literature Review

Synthesis of Current Knowledge State

I conducted an extensive and systematic review of the literature, utilizing multiple electronic databases that spanned the most recent five-year time period. Keywords included succession planning, succession planning in nursing, succession planning in perioperative nursing, succession planning in the operating room, talent management, and succession planning in the perioperative environment combined with the term nursing shortage. Boolean phrases, related words and application of equivalent subjects were utilized in the search. The following electronic databases were searched, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline, PubMed and the Cochrane databases. Gray literature was searched as well. Dates searched were primarily from January 2012 to June 2016. A few key articles were identified from the literature prior to 2012 that were applicable. Ultimately, 342 total citations were identified and 94 articles were reviewed. Fifty-six of these articles were reviewed in greater depth and resulted in 29 selected as relevant to determining if there is a relationship between succession planning with mentoring for leadership and the identification of

future perioperative leaders. The 29 articles consisted of general articles related to succession planning, articles regarding the nursing shortage and succession planning and a few articles specific to succession planning and the perioperative environment. From these 29 articles, there were only six studies regarding succession planning and only one that was directly related to succession planning in the perioperative environment.

The importance of succession planning in the perioperative environment is documented, however, little is written about succession planning as a concrete strategy. The study identified in the literature review was related to the perioperative environment but did not look at succession planning outcomes. Although there is a large body of literature discussing succession planning as a general topic and succession planning in nursing, there were no studies related to the use of succession planning in the perioperative environment that resulted in the identification of individuals who are being mentored for a perioperative nurse leader role. According to an AORN White Paper, succession planning was identified as an important strategy along with promoting student experiences in the perioperative environment. The white paper noted that promoting student experiences in the perioperative environment had been adopted in a resolution by the AORN House of Delegates and noted as “Project Alpha” in 1981 (AORN, 2015, p. 2). The White Paper also noted a lack of overall implementation in the thirty-four years since the resolution passed.

The literature search revealed several articles, studies and survey data related to the impending nursing shortage. One survey in particular, *An Aging Workforce Survey*, was completed in 2006 and provided one of the first comprehensive surveys that contributed to identifying strategies to retain aging nurses in the workforce. The survey identified that operating room nurses have the oldest nurses and the highest risk for a staffing crisis (Hader et

al., 2006). Although succession planning was noted as a needed strategy in the survey, the use of succession planning was only noted as being utilized by 28% of respondents (Hader et al., 2006).

The importance of succession planning is evident in the literature as is the nursing shortage. The nursing shortage, combined with a loss of experienced, expert nurses, is described as a “perfect storm” as “nurses who are fewer in number with less experience, will be expected to care for sicker, more complex patients within an environment of greater technological complexity and economic pressures” (Orsolini-Hain & Malone, 2007, p. 158). An integrative review of succession planning in general noted eight articles that identified the importance of succession planning in healthcare compared to succession planning in business, however, no best practice framework for succession planning was identified (Carriere, Muise, Cummings, & Newburn-Cook, 2009). A study by Gillespie identified evidence linking the quality of care provided by the perioperative nurse to the perioperative nurses’ level of expertise (Gillespie, Chaboyer, Wallis, & Werder, 2011). Several researchers have studied the linkage between nurse’s level of expertise and patient outcomes. Wong identified a positive relationship between leadership process variables and patient outcome variables through a systematic review of the literature. Outcome variables showing a positive relationship with leadership process variables included those associated with lower patient mortality, reduced medication errors, and hospital acquired infections among others (Wong, Cummings, & Ducharme, 2013).

Just prior to 2011, many people questioned whether a nursing shortage was looming on the horizon. An economic downturn resulted in many nurses delaying retirement, continuing to remain in the work force. In 2011, the American Association of Colleges of Nursing (AACN) published talking points regarding the impact of the economy on the nursing shortage (“Impact of the economy,” 2011). Although there is mention that the economic recession provided temporary recovery from the nursing shortage, AACN cautioned that a significant nursing

shortage was still on the horizon ("Impact of the economy," 2011). Then in 2014, the AACN published a Nursing Shortage Fact Sheet that provided additional information and updates regarding the nursing shortage ("Nursing shortage fact sheet," 2014). The fact sheet notes that nursing enrollments will not keep pace to meet the growing demand for nursing services due to multiple contributing factors. These factors included creation and implementation of the Patient Protection and Affordable Care Act of 2010, a shortage of nursing faculty, nurse retirements, more complex care needs of an aging population and decreased job satisfaction in nursing due to insufficient staffing. The AACN notes that these factors are leading to high nurse turnover and vacancy rates ("Nursing shortage fact sheet," 2014). With economic recovery, the nursing shortage abatement was short lived and the AACN continued to predict a nursing shortage.

However, shortly after the release of the AACN Nursing Shortage Fact Sheet, the AACN released the Health Resources and Services Administration (HRSA) Report on Nursing Workforce Projections through 2025 ("HRSA Report," 2015). The report indicated that the supply of nurses would be sufficient to meet demand projections over the next ten years. The projections were made through the use of a simulation model but HRSA qualified their statement by noting that confounding variables may cause under-estimated demand ("HRSA Report," 2015). The HRSA report contradicted the majority of existing literature. Perioperative literature makes a different case from the HRSA Report as evidenced by Hader et al.

A study that combined survey results from the Bureau of Labor Statistics and the American Hospital Association (AHA) that was conducted in 2008 and 2010 indicates that due to the recession there was a decrease in hiring nurses despite nurse attrition due to retirements. The outcome from the hiring decrease may have adversely affected long-term succession planning for nurse leader positions (Benson, 2012). Additionally, there is literature noting that succession planning research to verify the effectiveness of methods and models was needed and

that succession planning in nursing needs to begin as early as high school to keep the pipeline full (Griffith, 2012).

Strategies for retaining nurses to alleviate the nursing shortage continued to be debated. Ritter discusses retention of mature experienced nurses, who work in a healthy work environment, or those who work in a magnet organization. However, long-term solutions, such as succession planning, are absent from the discussion (Ritter, 2011). Interestingly, a Gallup Poll survey of leaders across a spectrum of professions and roles identified an exacerbation of the shortage of bedside nurses if more nurses moved into nursing leadership positions. The survey results also questioned if nurses wanted to be in a leadership role (Khoury & Blizzard, 2011).

Although Griffith and Ritter discussed the need for strategies to improve the nursing shortage, they did not equate the shortage with an outcome of organizational performance. A study using 2008 AHA Annual Survey data was used to identify hospitals with and without succession planning. The survey results indicated that 72.6% of hospitals had succession planning and of those who had succession planning, the organizations exhibited positive performance, hence these organizations may be perceived as more stable and more efficient organizations (Kim, 2012). Trepanier and Crenshaw looked at succession planning from a business perspective and noted that failure to use succession planning may result in poor organizational performance and staff turnover, further aggravating the nursing shortage (Trepanier & Crenshaw, 2013).

Finally, the review of the literature cites the importance of utilizing succession planning to maintain a pipeline of emerging leaders, but evidence is limited on what strategies provide best practices (Titzer, Phillips, Tooley, Hall, & Shirey, 2013). The need for succession planning is evident in the literature, however; the numbers of studies that are specific to the perioperative environment is quite limited.

Succession planning to grow novice nurses into expert nurses and nurse leaders will take time and hence the need to act now. Patricia Benner identifies at least a five-year span of time to traverse the continuum from novice nursing practice to expert nursing practice (Benner, 1984). Benner studied the lived experiences of the nurse's knowledge attainment and utilized the Dreyfus Model of Skill Acquisition to identify the nurses' level of knowledge on the novice to expert continuum (Benner, 1984). Mentoring is one strategy that helps novice nurses to develop skills that help them to move to the next level on Benner's novice to expert continuum and may contribute to career satisfaction. Mariani studied mentoring relationships to determine if there was a positive effect on career satisfaction.

Mariani used Benner's theory as the underpinnings of her study. The nursing shortage, in both the clinical and educational arenas, is discussed in terms of needing to establish strategies, such as mentoring, that provide the nurse with career satisfaction, reduced stress, and ability to transition roles and use experiential learning. These strategies would provide a means to move from one level of skill acquisition to another while building ethical comportment (Mariani, 2012).

The significance lies in the skill development that is needed, not only to build on expert skills as a clinician, but also in mentoring a nurse to develop into a perioperative nurse leader. The loss of existing, expert perioperative nurse leaders who will be retiring and who have greater than twenty years of nursing leadership experience will take substantial time for development and growth of the skills required to lead in the perioperative environment. As far back as 1989, Bruning stated "to be credible, supervisors must be clinically competent in the operating room" and "must continually update their knowledge regarding recommended practices and standards, safety measures and clinical trends" (Bruning, 1989, p. 112D). According to Daly "nursing leadership can be usurped by non-nurse experts on nursing and implications for patient care can

be of concern where nursing leadership is weak or invisible” (Daly, Jackson, Rumsey, Patterson, & Davidson, 2015, p. 38).

Operating room leaders have not done enough in ensuring that there are successors in the pipeline to fill nurse leader positions in the perioperative environment as evidenced by the dire statistics that are noted in the literature. According to Marshall Goldsmith, “if you know what matters to you, it’s easier to commit to change” and “people only change when what they truly value is threatened” (Goldsmith, 2007, p. 32). The operating room leadership shortage is definitely threatened and the need for change is evident.

Section III – Scaffolding the Project

Theoretical Framework

Patricia Benner’s research regarding experiential learning provides the theoretical framework for this study. Benner’s theory is based on the Dreyfus Model of Skill Acquisition and is characterized by five stages of skill acquisition: novice, advanced beginner, competent, proficient and expert (Benner, 1984). Benner’s theory, known as the novice to expert model, is a middle range theory. Benner’s theory has been used widely because of its applicability to nursing practice, administration, research and education. Benner uses a qualitative, phenomenological, interpretative approach that draws conclusion from narrative accounts of lived experiences to draw meaning from events and situations. According to Benner, “knowledge development in an applied discipline consists of extending practical knowledge (know-how) through theory-based scientific investigations and through the charting of the existent “know-how” developed through clinical experience in the practice of that discipline” (Benner, 1984, p. 3).

Benner's theory of novice to expert is an extension of the Dreyfus model of skill acquisition that is based on situated performance and experiential learning. Stuart Dreyfus and Hubert Dreyfus, who were professors at the University of California, Berkeley, developed the model through the study of chess players, pilots, tank drivers and commanders (Benner, 1984). Benner, who was also a professor at the University of California, Berkeley, adapted the model to nursing and Stuart and Hubert Dreyfus served as consultants to three studies that Benner conducted between 1978 and 1997 (Benner, 2004).

The following are definitions of experiential learning and situated performance that are used in the Dreyfus model and Benner's theory. The concept of experiential learning is defined as "posing and testing questions in real situations that deviate from expectations based upon theory and principles" (Benner, 1984, p. 187). Situated performance is based on assessment of the outcomes of a situation as determined by consensual validation of expert judges using inter-rater agreement (Benner, 1984, p. 293).

The philosophic world-view that Benner espouses is based on different kinds of knowledge that exist in "knowing how" and "knowing that". "Knowing that" is knowledge that is established based on interactional causal relationships between events or theory based knowledge. "Knowing how" is knowledge or skill that is obtained without knowing that, also referred to as practical knowledge (Benner, 1984). Benner's research goal was to uncover meaning and knowledge embedded in nursing practice, and by doing so new knowledge and understanding would be promulgated (Butts & Rich, 2015).

Benner's theory of novice to expert is based on five competency levels of skill acquisition to include novice, advanced beginner, competent, proficient and expert. The novice nurse has no experience and performs nursing tasks in a rule-based context and does not deviate from practice rules. The advanced beginner nurse, who has less than two years of practice

experience, is beginning to identify experiences that provide meaning from situations. The competent nurse, who has two to three years of experience, is able to plan deliberately but lacks ability to prioritize and lacks flexibility. The proficient nurse, who has greater than three years of experience, is able to see situations more broadly and can anticipate needs based on past experiences. They can also recognize nuances in situations and can use maxims to guide decisions. Finally, the expert nurse, who has generally greater than five years of experience, relies on intuition, pattern recognition and analytical skill to solve problems and prioritize critical situations quickly (Butts & Rich, 2015). The competencies are not linear across all knowledge areas. A nurse can be at a different level of competency based on the situation and what particular experiential learning has occurred in their situation (Benner, 1984).

Benner used her research of expert competencies to classify nursing practice into seven domains: the helping role, the teaching-coaching role, the diagnostic and monitoring role, the therapeutic interventions and regimens role, the monitoring and ensuring quality health practices role and organizational role and work role competencies (Butts & Rich, 2015, p. 475-476). Finally, Benner's theory is situational, contextual and interpretive based on the lived experiences of the nurse and the patient relationship. Uncovering the meanings embedded in the nurses' work gets at the heart of her theory.

Benner's theory is applicable in practice, research, administration, and education. Her theory is used extensively in organizations to develop mentorship programs, clinical ladders, curriculum development and as a nursing model to guide practice (Butts & Rich, 2015). The theory also offers new insights as it is also cited outside of nursing as a career development framework for academic libraries (Hall-Ellis & Grealy, 2013). I located several studies that utilized Benner's theory, which have implications for this project and are discussed in relation to the nursing shortage and succession planning.

Cathcart studied the lived experience of nurse managers at Brigham and Women's Hospital in Boston utilizing a qualitative, interpretive, phenomenology approach. The theoretical underpinnings for this study utilized Benner's research regarding experiential learning and the Dreyfus Model of Skill Acquisition was used as a framework. The authors were interested in how nurse managers learn skilled practical knowledge or how nurse leaders can best support managers who are learning skilled practical knowledge. They asked nurse managers to narratively describe the ways that they developed or learned skilled practical knowledge and ethical comportment embedded in their daily leadership practice. The study was one part of a broader nursing leadership development initiative and the authors note that teaching someone to be an effective nurse manager involves more than teaching them business, management and leadership skills. Thirty-two nurse managers participated in the study; however, the article highlighted one narrative that was felt to be representative of how a new nurse manager described the experiential learning and ethical comportment that helped him to learn skilled practical knowledge. The highlighted narrative in this study provided an example of how new nurse managers first rely on rules and policy prior to moving to practice that relies on situational learning and critical thinking. The authors conclude that narrative reflection provides a valuable tool that enables nurse managers to identify experiential learning as lessons in understanding the complexity and importance of leadership practices, practical knowledge, skill and ethical comportment (Cathcart, Greenspan, & Quin, 2010).

Mariani studied the effect of participating in a mentoring relationship on career satisfaction of registered nurses and on their intent to stay in the nursing profession as well as the relationship between career satisfaction and intent to stay in nursing. The rationale for the study focused on mentoring as one strategy that may help to increase recruitment and retention of nurses in order to address the nursing shortage. This study employed a quantitative combination

of a descriptive comparative and correlational design. The authors were interested in the phenomena of mentoring with an independent variable of participating or not participating in mentoring. The dependent variables were career satisfaction and intent to stay in the nursing profession. A written survey using a national, random sample resulted in 173 usable participants. Descriptive and inferential statistics were used to analyze the data. Benner's theory provided a framework to discuss the mentoring relationship that occurs with novice and expert nurses. Peplau's theory was used as the framework for discussing the interpersonal relationship that occurs in mentoring relationships. The authors' own newly developed research instrument, the Mariani Nursing Career Satisfaction Scale was used to measure career satisfaction due to inability locating a valid and reliable tool to measure nurse career satisfaction. The results of the study showed no statistically significant effect of mentoring on career satisfaction or intent to stay in the nursing profession, however, there was a statistically significant effect of career satisfaction and intent to stay in nursing. The study results indicated that although statistically significant results were not present related to mentoring and career satisfaction, mentoring relationships in nursing were prevalent and as a result were most likely valued by nursing. The authors suggest that "mentoring as a strategy may help bridge the gap between novice and expert practice". Mentoring may also "contribute to career satisfaction and retention of nurses in order to help alleviate the nursing shortage as well as provide an opportunity to groom future nursing leaders" (Mariani, 2012).

Weidman studied the lived experiences of eight clinical nurse experts who transitioned to novice nurse educators. The purpose of the study was to describe the nurse educator's transition experiences. None of the novice nurse educators had any formal educational theory or training in teaching in an academic setting. The study sought to understand novice nurse educator's feelings regarding their orientation, mentoring, competency, coping skills and barriers. The

rationale for this study included the shortage of faculty in nursing programs and schools supplementing faculty without teaching experience and formal education theory. Additionally, the National League of Nursing's position statement that nursing schools should employ experts in nursing education, to advance nursing education, served as another rationale for this study. The study design was qualitative with a phenomenological method and utilized seven interview questions along with a demographic survey that was administered to a convenience sample of eight (Weidman, 2013). The theoretical under-pinning was Patricia Benner's novice to expert theory. The expert clinical nurse in this study transitioning to the novice nurse educator supports the premise in Benner's theory that one's level in the Dreyfus Model of Skill Acquisition can change based on the nurse's role. The study results elicited themes around participants having a positive desire to share nursing expertise through teaching. Participant feelings of stress were also present related to not having educational theory or not having expertise in the teaching role. And finally, participants who were not assigned a mentor felt less competent and exhibited more feelings of stress (Weidman, 2013). The findings suggest a need to provide additional support to the novice nurse educator in the form of the transitioning process and providing mentoring assistance to the novice nurse educator. The additional support may help to provide an alternative solution to staffing the faculty shortage. The author also stresses the responsibility of the expert nurse to self-identify what support mechanisms are needed and provided whenever this nurse enters into a different novice role. The shift from expert to novice requires learning new information starting from a rule based situational experience and as such the expert can become frustrated and experience stress (Weidman, 2013).

Mentoring relationships are noted and culled out explicitly in Mariani and Weidman's studies. These mentoring relationships are noted as prevalent in nursing, valued by nursing as well as important to novice nurses in particular. Although not mentioned explicitly, Cathcart

does so implicitly when discussing the importance of a manager's experiential learning and making connections to the competency of nurses on their staff (Mariani, 2012, Weidman, 2013, Cathcart et al., 2010). The nursing shortage in both the clinical and educational arenas is also discussed in terms of needing to establish strategies that provide the nurse with career satisfaction, reduced stress, ability to transition roles, and use experiential learning as a means to move from one level of skill acquisition to another, while building ethical comportment. Again, these concepts are explicit in all studies except for Cathcart et al where there is reference to a study in which nurse managers reported "significant work-life imbalance, having mostly bad days at work, little support and emotional and physical exhaustion" (Cathcart et al., 2010, p. 441). It is difficult to understand how these attributes would not cause nurses to leave the profession and so it is implied that these things would contribute to an already existing and future nursing shortage.

Project Purpose and Objectives

The purposes of this study were to 1.) determine if there is a relationship between succession planning and the identification of future perioperative leaders; 2.) determine if there is a relationship between mentoring for leadership and the identification of future leaders; 3.) understand the current state of leadership in the operating room; and 4.) determine what methods are being used to identify perioperative nurse leaders.

Identification of these objectives will contribute to the already existing body of knowledge regarding succession planning strategies and associated outcomes.

Methodology and Sample

I utilized a mixed-method, quantitative, descriptive survey design with a modified qualitative, grounded theory approach. I designed a survey for the quantitative portion of the survey using *Qualtrics Insight Platform*. The survey contained questions using ordinal level data based on five point Likert- style questions about the extent of succession planning in the organization. Dichotomous and nominal data questions regarding demographics and specific questions about the organization environment as well as respondent time for retirement were also designed. Additionally, the survey contained open-ended questions about the process of succession planning using situational, contextual and/or interpretive statements from study participants just, as Benner would intend. These questions were designed for the qualitative portion of the survey.

The target population was comprised of operating room managers and/or directors in a hospital environment. The target population was obtained from the database of the Association of periOperative Registered Nurses (AORN). AORN membership encompasses over 41,000 members, of which an exact number of operating room managers and directors are an unknown subset of this population. The sample was a convenience sample and consisted of whatever numbers of surveys were received over a two-month period of time, beginning from the point in time that the survey was sent to respondents by AORN. The survey dates were November 11, 2016 to January 11, 2017.

Inclusion criteria included operating room managers and/or directors who work in acute care or tertiary hospitals or medical centers, and who consented to complete the survey. Exclusion criteria included ambulatory surgery centers, office based surgery centers and vice presidents of surgery.

Investigational review board (IRB) approval for the study was obtained from Otterbein University and the AORN Research Committee. The AORN Research Committee serves as a “resource and consultant to AORN regarding perioperative research by reviewing and approving/disapproving all research studies requesting access to the AORN membership data” (Association of periOperative Registered Nurses, n.d., p. Nursing Research Committee). I collaborated with the AORN Director, Evidence-Based Perioperative Practice throughout the process of submission of materials to the research committee. A cover letter, abstract, literature review, methodology, data management methods, data analysis, limitations, dissemination plan, and IRB approval from Otterbein University was sent to the committee for review. Additionally, my curriculum vitae (CV), contact information and letter of support from my program advisor were sent to the committee.

Once approval was granted, I generated a recruitment letter that was modified to fit an email that was then sent to potential respondents via an electronic request. A link to the survey was embedded in the recruitment email. In addition to IRB approvals, protection of human subjects was provided within the survey through two questions that provided participant consent and addressed reading the cover letter and answering in the affirmative to voluntary participation in the study. Withdrawal from the study at anytime without penalty and ability to skip any questions were provided as options to participants. The request for participation was sent by AORN to potential respondents who held a title of manager or director in a hospital environment as designated in the AORN database classification. I worked with the AORN Business Intelligence Manager to ensure that my target population was identified and matched to the AORN database.

Approximately 10,000 managers/directors met the defined target population. One additional research study with a similar target population was being implemented during the

same time period so the pool of candidates was split to avoid compromising either study and to avoid survey fatigue for the members. Two reminders were sent to the potential participants during the period the survey was open. A total of 3935 survey requests were sent to potential participants with a delivery rate of 99.6%. A total survey completion rate returned was 209 surveys for a return rate of 5.3%.

Section IV – Outcome Analysis Plan

Instrument, Validity and Reliability

I was unable to locate a survey instrument in the literature that measures outcomes on succession planning. However, Sherman et al identified the need for succession planning, through the use of a survey tool, in conjunction with OR Manager magazine (Sherman et al., 2014). There are a vast number of articles that identify the importance of succession planning, however, I was unable to identify any studies regarding outcomes of succession planning. As a result, I developed a survey to identify if there is a relationship between succession planning with mentoring for leadership and the identification of future perioperative leaders in the hospital perioperative environment. The independent variable was an answer to a survey question about whether succession planning existed in the organization, using a yes or no answer. The dependent variables were answers to a question regarding if a future perioperative leader has been identified, and if identified are they being mentored for the role, using a yes or no answer.

The research questions included 1) whether or not there is a relationship between formal succession planning and the identification of future perioperative leaders, 2) whether or not there is a relationship between mentoring for leadership and identification of future perioperative leaders, 3) what strategies are being used to recruit perioperative leaders, 4) how potential leaders are identified, 5) what methods are used to provide mentorship to potential perioperative

leaders, 6) what is the current state of leadership and succession planning in the operating room, 7) what are the most important components of succession planning, and 8) what is the impact if perioperative nurse leader positions are not filled?

I was unable to identify a tool for measuring the outcome variable since I was unable to identify any studies regarding outcomes of succession planning. Survey instructions were standardized to be clear and reliable and content validity of the survey questions were validated with the DNP project advisors and piloted with a few people in the OR for survey clarity.

Internal threats to validity include factors related to attributes of the organization such as whether the organization was deemed to have obtained Magnet, Truven, Baldwin or Fortune 100 status. Additionally, organizations that are level 1 trauma centers may be more likely to have formal succession planning processes and may be mentoring a future perioperative leader. External threats to validity include responses from ambulatory surgery centers and office based operating rooms. Although the survey was not sent to individuals in these settings, there was a possibility that if individuals have changed jobs since their last AORN membership classification, the survey may have been sent to them. Results may not be generalizable to these organizations. Finally, since the survey was sent to members of AORN, it is not generalizable to organizations whose perioperative leaders are not members of AORN. Appendix C contains a copy of the survey tool.

Data collected for descriptive statistics, include de-identified, demographic data. The data were scrubbed and analyzed using *SAS Institute Software (SAS)* to ensure that data was formatted appropriately for analysis. Descriptive measures include sample size, measures of central tendency, frequencies, standard deviation, range and variability. Inferential measures include correlation coefficients between the independent and dependent variables using a Pearson Chi Square correlation.

Demographic survey data collected include gender, age, race, ethnicity, organization location, based on state, size of the organization, based on number of beds, number of operating rooms, Magnet designation, and Truven, Baldwin or Fortune 100 designation. Respondents were asked to state their educational level, if they were a nurse, how many years of experience they have working in the role of a nurse and how many years of experience they have working in the perioperative environment. Perioperative leaders were asked to state the number of years in which they have worked in the role of a perioperative leader. Respondents were also asked if a formal succession planning process is being used in their organization based on a five point Likert scale, if a successor has been identified, who is being mentored for a perioperative leader role and the number of years in which they plan to retire.

In addition to the quantitative, descriptive data that was collected, the survey contained seven open-ended questions. These questions describe the experience of succession planning and identifying potential leaders, the degree of difficulty recruiting nursing leaders and what strategies are being utilized to recruit perioperative nurse leaders. Additionally, respondents were asked what factors or indicators are being impacted currently or will be impacted if perioperative nurse leader positions are not filled. The qualitative portion of the survey was analyzed using *NVivo*, a qualitative electronic software program. The data were coded, categorized and analyzed for emerging themes.

A successful project was defined as a project that results in survey returns in a sufficient quantity to enable data analysis of quantitative data and provides an answer to the research questions. A power analysis to determine sample size was completed in Minitab. The number of surveys needed was $n=194$. Returned surveys were $n=209$. Additionally, a successful project may identify the clinical significance of succession planning in the perioperative environment.

Qualitative data analysis describes/explains the real world experiences of perioperative leaders related to perioperative leader vacancies and succession planning.

Barriers that were overcome include one resubmission of investigational review board (IRB) approval that was due to survey question modification. Additional barriers included the seasonal timeframe that the survey was distributed. This timeframe encompassed a period of three major holidays. Finally, the second reminder to potential participants was date keyed incorrectly but through close inspection, was identified and corrected within a week of discovery. Survey return and identification of results may have been a barrier or may have been facilitated, depending on respondents' desire to participate and to eventually come to know survey results once disseminated. The AORN research committee facilitated approval as the study has implication for future strategy direction in ensuring that perioperative leader position pipelines remain full.

Timeline and Budget

The timeline for initial submission to Otterbein University IRB was the week of July 25, 2016. The research grant application letter of inquiry for an AORN research grant was completed by August 14, 2016. Potential monies awarded would have been utilized to cover the primary investigator salary, statistical consultant fees, materials and any miscellaneous costs. The deadline for submission for 2016 had passed and was not available.

Submission of the proposal to AORN Research Committee was planned for the week of August 15, 2016 to correspond to a due date of September 1, 2016. Proposals are due the first of each month. Due to the additional time for Otterbein University IRB re-approval the submission to AORN Research Committee occurred on September 30, 2016 to correspond to an October 1, 2016 due date.

Approval from the AORN Research Committee was estimated to be 4-6 weeks and would occur approximately the week of November 10, 2016. The actual approval was on October 17, 2016. The Director, Evidence-Based Perioperative Practice sent an e-mail notifying me that my request for using the AORN database for my study was approved. Surveys were then sent to members of AORN, who met the target population definition on November 11, 2016. Completion time period for survey returns was over a two month time period. The overall delay pushed this project back approximately one month. Survey close date was originally estimated to be December 12, 2016 but due to the approximately one month delay, the survey close date was January 11, 2017. This added two additional holidays during the two-month survey time period, which may have affected the number of survey returns. Data analysis and conclusion of the DNP project completion remained at March 1, 2017.

Project budget included an estimate of primary investigator and statistical consultant time of approximately 128 hours of survey preparation, data scrubbing, and data analysis and data compilation. Actual time was 90 hours. Approximate total hourly cost for the project was estimated at \$9,856.00. Actual cost for time, if paid, was \$8620.00. Material duplication of approximately 6 collated copies of the DNP proposal for dissemination to AORN Research Committee and DNP committee members was estimated at approximately 210 pages and a total cost of \$30.00. This cost was not needed and therefore deferred. Recruitment inducements were not offered. A student copy of NVivo was purchased for a cost of \$103.00. Total project cost was estimated to be \$8723.00.

Analysis and Outcome Evaluation

Survey respondent (n=203) geographic location was analyzed based on the state in which they were employed. There was a wide distribution of responses. There were a total of 42 states

and one response from outside the United States (U.S) represented. The states were grouped according to the U.S. census regions. The largest percentage, nearly one third of responses, was from the South Atlantic and East North Central regions of the U.S. Table 1 provides the geographic location of survey respondents.

Female respondents, not surprisingly, made up greater than ninety percent of all survey participants. Race distribution was primarily of Caucasian race. Hospital bed size was distributed fairly evenly with most responses evenly split between 300 beds or less and 300 beds or more. The majority of respondents were noted to be from hospitals with trauma designation level 1-3 and a small number of critical access hospitals. There were 38% of respondents who indicated that their hospital did not have a trauma level designation. The number of operating rooms was split between those that had 12 or fewer and those who had greater than 12 operating rooms. Approximately two-thirds of the hospitals did not have Magnet, Truven, Baldrige or Fortune 100 designation.

Greater than 90%, of survey responses indicated that their highest level of education was bachelor degree or higher. All respondents were registered nurses and greater than 85% also had bachelor degrees or higher. Responses to the extent of succession planning, based on a five point Likert scale, indicated an absence of succession planning in 62 percent of the organizations. Only 14.83 percent of respondents indicated that formal succession planning was present throughout their organization. Remaining respondents indicated that there were pockets of mostly informal succession planning in some departments of the organization. Identification of future perioperative leaders was noted as present in 47% of responses and 88% of those were being mentored for a future perioperative leader role.

Interestingly, almost 28% of respondents indicated plans to retire within five years. Just over 10% of these individuals indicated plans to retire in 1-3 years. However, the direr statistic

indicated that just over 43% planned to retire in 7-9 years. The mean age of respondents was 51.88 years of age. The mean RN experience in practice was 26.9 years with a mean OR experience practice time of 21.52 years. OR experience in leadership practice time mean was 10.63 years. Over 50% of respondents had over 20 years of experience in the OR; however, compared with the number of years of leadership experience the majority of respondents had less than 20 years experience. Those organizations that have identified a perioperative leader have done so for a mean of 2.14 years and have mentored that individual for 1.79 years. Table 2 and Table 3 provide complete respondent characteristics.

The purpose of this study was to understand if there is a relationship between succession planning and the identification of future perioperative leaders. An additional purpose was to understand if there was a relationship between mentoring for leadership and identification of future perioperative leaders. A Pearson Chi-Square was calculated for the key variables of succession planning and identification of perioperative leaders and resulted in a statistically significant relationship. The p value was < 0.0001 ($n=197$). Those individuals who indicated that future leaders had been identified also indicated that a succession planning process was present in their organization. Table 4 provides the Pearson Chi-Square calculation.

A Pearson Chi-Square for the key variables of mentoring for leadership and identification of future leaders could not be calculated due to the way in which the survey question was structured. The majority of respondents who had identified a future perioperative leader were mentoring this individual. Where there was not a leader identified they would not be correspondingly mentored and so a Pearson Chi-Square could not be determined.

Additionally, the purposes of this study were to understand the current state of leadership in the operating room and what methods are being used to maintain or identify perioperative

nurse leaders. A series of open-ended survey questions were asked of respondents and the data were analyzed qualitatively to identify themes related to this purpose.

Seven open-ended questions were coded into nodes depicting the broad theme represented by the question. Responses from each broad theme was then analyzed and further coded into child nodes as emerging sub-themes were identified. The seven nodes included recruitment strategies, ease of recruitment, how to identify potential perioperative leaders, how to provide mentorship to potential perioperative leaders, the most important components of a succession plan, metric impact for unfilled perioperative nurse leader role, and additional comments regarding succession planning. A total of 72 child nodes or sub-themes emerged from the seven major nodes or themes. The 72 additional emerging sub -themes contained a total of 1100 respondent comments. *Figure 2* depicts the succession planning mind map with key variables and the seven major nodes or themes.

Figure 3 provides a hierarchy map for the same seven major nodes or themes. The size of the box within each major theme indicates the magnitude of the comments around that sub-theme. Word clouds were also constructed for each major theme, again showing the most prominent and frequently used words stated in the comments. Word cloud examples are provided in *figure 4* and *figure 5*.

The recruitment strategy theme provided respondent comments regarding what may be considered common strategy examples such as benefits, financial incentives including signing bonuses, certification pay, leadership classes and conferences, and tuition reimbursement, and residency programs. One respondent stated, “ *sign on bonuses, relocation reimbursement, leadership education [internal programs, conferences, AONE Manager Institute] and continued education reimbursement*”.

Another respondent stated:

Recruitment focus begins with the nursing programs. Perioperative nursing is not taught in [the] nursing curriculum; therefore, our organization is negotiating with programs to re-instate a perioperative clinical education curriculum. This is our plan to recruit the brightest nursing students and mentor students into future nursing leaders.

The largest number of comments however noted that recruitment strategies were not present for perioperative leaders. Besides the word “*none*” which was stated 56 times and the word, “*unknown*”, which was stated another 15 times, one respondent provided “*Sadly none*”. Additionally, one respondent stated “*I am seeing a trend to place non-RN’s in leadership roles such as Director roles.*”

Engagement and mentoring of current staff was the next largest sub-theme under recruitment strategies. Respondents had many comments related to developing and growing existing nurses, through progressive responsibility and project involvement, in the department. An example stated was, “*My process is to hire staff [who] have varied interests, and grow staff that show leadership skills, through charge opportunities, committee involvement, and team leadership.*” Mentoring novice leaders by assigning progressive leadership projects, engagement in a charge nurse role and shadowing was noted as strategies to develop and mentor future leaders. This sub-theme was prominent as was formal leadership classes and continuing education of novice nurses. Comments such as “*looking within the organization for potential candidates, mentoring, and providing leadership classes,*” “*leadership residency, intensive mentoring,*” and “*We have several nurses with leadership qualities. We are mentoring them. They rotate charge position*”, are several statements provided by survey respondents.

Figure 4 depicts a word cloud for the theme of ease of recruitment of perioperative leaders. There were a total of 37% of the comments stating that perioperative leaders are difficult to recruit and another 28% of the comments described recruitment of perioperative

leaders as very difficult to recruit. Several comments note that prolonged periods of time, from many months to over a year or more, occurred before a perioperative leader was located and hired. Reports of interim leaders from external agencies who were utilized in these roles prior to finding a permanent replacement were noted to be several years. Comments include, *“difficult- we had an agency director for about one year, currently have an agency SPD manager”*, *“difficult- and when an individual is hired into the position, [his or her] time in the role has been less than 3 years”*, and *“when the need is urgent, we have had difficulty, up to two years.”* Most comments indicate that it is easier to try to recruit and mentor an individual from within the department than to try to recruit externally as noted by one respondent who stated, *“Very challenging. We recruit/promote from within and backfill vacated roles.”* Differences in interest are also noted with certain generational groups. Individuals who are from a millennial generation are noted as being more interested in work life balance. Because leadership roles are generally exempt positions and require more time commitment than staff roles, recruiting an individual from a millennial generation into these roles has been difficult. This sub-theme was noted by one respondent stating, *“find that to recruit or retain perioperative leaders is difficult. The main issue is the generational gap, with the generation of millennials. The millennials are looking more for life/work [balance] or for higher pay after being trained.”* Another comment stated, *“younger nurses do not seem to want the responsibility or hours.”* Some respondents noted that leadership role interest was greater in individuals from the baby-boomer generation as described by this comment.

We have longevity in our OR; however, no one is stepping up into leadership roles. It pretty much goes in a pecking order, the oldest nurses (who are set to retire in 7-9 years) taking the lead and the nurses below usually don't rock the boat.

Finally, there was a respondent who stated, *“extremely difficult. often see national searches, and again, the positions [are] being filled with non-RNs.”*

A word cloud describing how future perioperative leaders were identified resulted in 20% of respondent comments indicating that they used observation of staff that exhibited leadership qualities as a means of identifying future leaders. Leadership qualities that were noted include emotional intelligence, conflict resolution, critical thinking skill, participation and engagement in department initiatives, strong interpersonal and communication skill, and a strong knowledge base in perioperative nursing practice. Comments from several respondents include the following quotes.

Through my own course of identifying potential leaders, I monitor, evaluate, and provide feedback to those that have a desire to learn, grow, and take opportunities to lead in programs. [I observe] by watching their work ethic, how they work with others, critical thinking skills, desire to become a leader, ability to lead with small projects and groups.

Another 13% of respondent comments indicated that they used observation to identify individuals who were role models and informal leaders in the department and who have a strong focus on quality and safety. This comment provides an example, *“I look for people who will lead their staff, stand up for the AORN standards, stand up for their staff against doctors when appropriate, as well as lead the doctors and organization to improve patient outcomes while supporting staff.”* Nineteen percent of the comments from this major theme indicated the importance for potential leaders to self identify and voice an interest and desire to be in a future leadership role. Some comments include, *“demonstrated desire and demonstrated skills”, “staff who show an interest”,* and this comment that seems to encompass both observation and self-identification of interest in a leadership role.

Although there is no formal succession planning within the organization, as the OR manager I actively have open dialogue with staff nurses during formal evaluation to assess whether staff is open to advancing into a leadership role. These individuals are then observed informally to identify strengths and weaknesses.

Included in this sub-theme was participation in continual learning. *Figure 5* illustrates these concepts in a word cloud.

Explore diagrams provide a visual connection of each sub-theme with its major theme and is an additional method of visually displaying qualitative data. *Figure 6* shows the sub-themed comments regarding how respondents mentor future perioperative leaders that they have identified. There were 26% of the comments from respondents indicating that they provided formal educational classes, attendance at professional conferences and encouragement to participate in professional organizations to identified future leaders as a mentoring strategy. Respondents stated these comments.

[A] formal mentorship program-includes regular meetings, shadowing or walking in my shoes, encouragement to join or participate in [a] professional organization, attend leadership conferences and training. [sic]

There is a hospital wide program that accepts several future leader nurses. It is a year long class and happens once a year

Like anything else, excellent leadership can be learned. I think that leadership training is important. Most are not born leaders.

The comments appear to provide support for building novice leadership skill.

Encouragement of potential future leaders was noted as a mentoring strategy in 30% of respondents, as well as providing increasing levels of responsibility. The provision of increasing levels of responsibility provides observation opportunity to determine appropriateness of actions

with coaching, guiding and providing feedback for improved performance to the novice future leader thereby building leadership skill. Respondents stated these comments.

[I] encourage [staff to develop] goals. Everyone is different, depending on their level of experience but mentor through encouraging PI projects, taking on charge responsibilities, become a team leader, and joining a committee. I like to stay involved in staff development, by personally coaching, and then providing feedback when able. I support a safe culture where mistakes are not punished but investigated for system weaknesses.

The other leaders and myself take them under our wings and guide them. It is not looked at as a formal mentoring.”

Daily meetings and interactions with leaders who were mentoring individuals who were one level under them were frequently cited as a mentoring strategy in another 20% of respondents. Respondents stated, “*once they are identified mentors are assigned to lead them through the leadership pathway*” and “*formally paired with a mentor, have frequent contact with their 1 up, establish and encourage informal relationships and links*”. Rationale for these statements may be related to making sure individuals who provide mentoring are in positions that would be able to provide the mentee with promotion opportunity into leadership positions. Additionally, pairing novices with an experienced mentor who is willing to guide and support them as they develop their leadership skills was noted as very important.

Figure 7 provides sub-themes around what respondents believe are the most important components of a succession plan. Candidate identification was the most frequent comment with 26% of comments reflecting statements such as, “*properly identifying the right candidates with leadership potential*”, “*identifying future leaders, providing opportunities for growth*” and “*identifying staff that have the desire and vision to become leaders and involving them in all*

phases of the management role” and “identify the informal leaders in the department and mentor them.” Mentoring the identified potential leader was frequently paired with identification of that individual.

The next most frequent sub-theme responses were having a succession plan and executing on the plan, which was noted from 19% of respondents. Many of the associated comments noted an absence of succession planning as depicted by the following comment, *“we could make the transition easier if we had any ‘plan’ and we could engage the younger generation who tends to only stay in a job for 1-3 years.”* Finally, there were 14% of respondents who indicated the importance of having individuals who were willing to mentor future novice leaders such as *“leaders willing to mentor and nurses with a desire to be leaders”, and “leaders who are willing to have a novice’s back and support them through the learning.”* Another 12% cited resources as being important including support for protected time to implement the plan and mentor future leaders. One respondent stated, *“allowing the time and productivity to mentor effectively. Most organizations will not allow the overlap necessary to properly train a successor.”* If there is any connection between willingness to mentor and having protected time to mentor is unknown.

Respondents were asked to comment on the theme of what metrics are impacted or would be impacted if perioperative leader positions were unfilled. The majority of responses, 31%, indicated that metrics impacted include those metrics that are associated with all four quadrants of the scorecard including quality, service, and financial and work-life quadrants. Respondents noted that all quadrants would be negatively impacted if perioperative leader positions were unfilled. Specific examples included compromised patient safety, patient harm, reduced efficiency, increased infection rates, reduced patient, physician and staff satisfaction, increased staff turnover, burnout, increased vacancy rates, loss of surgeon volume and reduced revenue.

The two largest categories of metrics impacted were in the quality and work-life quadrants with 52% of comments in these combined quadrants. One respondent provided this comment.

The work to grow OR resources to meet demand is dependent on nursing leadership.

Growing OR volume, adding new programs, recruiting and retaining qualified staff are all dependent on competent leadership. Often times the value of a skilled leader of a program becomes more apparent in their absence than when they are fulfilling the role successfully.

Another respondent wrote this comment.

[We would have] complete and utter chaos- we are in a world of massive changes that are soon to be on our doorstep with healthcare reform [and] shrinking labor forces as the boomers face retirement. The leaders of tomorrow must be able to position their departments to navigate through rough waters that lie [ahead due to] shrinking reimbursement dollars, more competition for patients and workers, and technology advancements.

Also noted was the potential for decisions to be made without perioperative nursing input leading to a loss of foundational knowledge. There were several comments fearing that individuals would be placed into perioperative leader roles that are not qualified to be in that role, resulting in a lack of mentors for future novice leaders. Additionally, unqualified individuals may not know what they don't know and as a result important metrics may not have the focus that is needed for quality outcomes to occur.

The final survey question provided an opportunity for respondents to comment about succession planning in their organizations. There were 63% of the additional comments regarding succession planning which primarily noted the absence of succession planning in their organizations and yet respondents noted that succession planning was essential and critical to

identifying future leaders. Comments noting a lack of succession planning include, “*recently lost 1/3 of staff due to [a] new hospital opening in [the] community, no succession plans in place, attempting to create one now, but it is too late. Lots of staff burnout, multiple 18 hour shifts*”, “*the leadership in the organization is constantly changing. There has yet to be a structured learning plan for succession in perioperative areas. There are few resources available to facilitate succession.*” Comments also focused on identifying and mentoring future perioperative leaders with many citing impending future retirements.

We need it desperately because I am planning on retiring or at least stepping down within the next year, however our OR has a small number of nurses most of which are in their 50s and 60s and they do not want to take on the responsibility. It is very hard to recruit younger nurses.

Finally, some comments were related to positions remaining vacant for prolonged periods. A small number of comments indicated that they were observing non-RN’s being recruited to fill vacant perioperative leader roles, either because perioperative leaders were not identified, not interested in the role or not available. Fifteen percent of respondents commented on the positive attributes of succession planning in their organizations. A few respondents noted that they have seen successes from succession planning but their programs did have opportunity for improvement. One respondent noted “*our organization is doing a great job with high reliability, nursing leadership development, ongoing education for new leaders, and accountability for leaders to be looking at each staff member’s development goals.*”

Conclusion and Recommendations

There is a significant relationship identified between succession planning and identification of future perioperative leaders. Respondents in this survey identified the

importance of succession planning in identifying future perioperative leaders. Although there was not a significant relationship identified between mentoring for leadership and identification of future perioperative leaders, respondents did note the importance and value of mentoring relationships in the ongoing development of the novice leader. Additionally, identification of future perioperative leaders occurred primarily from internal staff through observation of individuals who exhibited leadership qualities and who voiced a desire to become future leaders. However, the majority of respondents indicated that succession planning was missing in their organizations and over half had not identified future perioperative leaders. But of those who had identified future perioperative leaders, the identified leaders were being mentored 88% of the time. These mentoring relationships help individuals to develop interpersonal relationships, amongst other skills, that may aid in building a bridge between novice and expert leadership practice.

The direst statistic, however, is related to retirement time of respondents combined with the age demographic. Over 43% of respondents noted having plans to retire within the next nine years, most of whom have greater than twenty years of perioperative experience. Sixty-five percent of respondents are age 50 or older. The loss of these perioperative leaders combined with organizations that may not have a succession planning process in place and, who may not have identified a future perioperative leader, puts these organizations at risk to suffer negative impacts to quality, service, work-life and financial quadrant metrics.

Application of the findings of this study to clinical practice is needed. Novice nurses need mentors who are experts and can coach, guide, coordinate and encourage. Expert perioperative leaders need to identify internal future leaders, and design recruitment strategies to attract individuals to leadership positions. Once future perioperative leaders are identified, these novice leaders need to be mentored and encouraged as they become acclimated to their new role.

Most importantly, organizations must invest in and develop a succession planning strategy that takes into consideration appropriate resources to implement the plan.

Succession planning as a means to identify future perioperative leaders is a way to pay it forward. Organizations that use succession planning may be able to ensure that they have a pipeline of future leaders at all levels of the organization. Although this study may have applicability to hospitals in general, the study results may or may not be transferable to organizations that perform surgical services in which managers or directors are not members of AORN, in an ambulatory surgery center or in office-based surgery settings or non-healthcare organizations.

Future research studies are needed to not only replicate results from this study but to provide additional studies in settings outside of the hospital. Future research may provide identification of additional strategies that are important to ensuring that organizations have the right resources at the right time resulting in positive outcomes for patients. Incorporation of other research studies that are applicable to this topic is also important. Practice should rely on evidence so that patients benefit from interventions that more than likely will lead to positive quality outcomes.

Application to education provides a linkage from research to practice. Dissemination of findings to students in all levels of ongoing education, practitioners and administrators is imperative. The novice to expert mid-level theory can provide a framework to create a mentorship program from which concepts can be organized and then disseminated. Learning skilled practical knowledge while building ethical comportment can assist the future novice perioperative leader, who relies on rules and policies to develop into an expert perioperative leader who is able to use situated learning and critical thinking.

Finally, this study contributes to the already existing body of knowledge regarding succession planning as a strategy to identify future perioperative leaders. Additionally, this study contributes to the existing body of knowledge and associated outcomes related to the concept of mentoring.

Summary

This study provided both quantitative and qualitative data that supports the significance of the relationship of succession planning and the identification of future perioperative leaders. Succession planning as a concrete strategy may improve the identification and mentoring of perioperative future leaders, ensuring an adequate pipeline for these roles and assistance with alleviation of the nursing shortage. Although succession planning has been identified as important to the majority of respondents from this survey, the majority notes that there is a lack of succession planning. Methods used to recruit or identify future perioperative leaders, mentor them for future roles and to identify impacts to the organization if future perioperative leader positions are not identified and filled was also explored. Respondents cited potential negative outcomes should perioperative leader roles not be filled.

Succession planning takes time, energy and resources. Mentoring also takes time, energy and resources. There must be individuals who are willing to step up into future perioperative leader roles and there must be individuals who are willing to provide mentoring relationships to novice perioperative leaders. Experiential learning guided by mentors who encourage and coach novices to become expert perioperative leaders will provide a legacy to ensure positive outcomes in the surgical environment.

Access, quality, safety, equality, efficiency and cost of surgical care are important concerns of the IOM. Ensuring that there is a pipeline of future perioperative leaders, most of

whom come from a pipeline of perioperative registered nurses is critical to all of the concerns of the IOM. Organizations need to implement and support programs that provide succession-planning strategies. The use of succession planning and the future of quality surgical care may be interrelated.

References

- AORN. (2015). *Perioperative nursing succession planning: Theoretical learning, clinical opportunities, and residencies* [White paper]. Denver, CO: Association of periOperative registered nurses.
- AORN position statement on one perioperative registered nurse circulator dedicated to every patient undergoing an operative or other invasive procedure. (2014). Retrieved from <https://www.aorn.org/guidelines/clinical-resources/position-statements>
- Association of periOperative Registered Nurses. (n.d.).
<http://www.aorn.org/community/committees-and-task-forces>
- Ball, K., Doyle, D., & Oocumma, N. I. (2015). Nursing shortages in the OR: Solutions for new models of education. *AORN Journal*, 101(1), 115-136.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Benner, P. (2004, June). Using the Dreyfus model of skill acquisition to describe and interpret skill acquisition and clinical judgment in nursing practice and education. *Bulletin of Science, Technology & Society*, 24(3), 188-199.
- Benson, A. (2012). Labor market trends among registered nurses: 2008-2011. *Policy, Politics, & Nursing Practice*, 13(4), 205-213.
- Berwick, D. M. (2002). A user's manual for the IOM's quality chasm report. Retrieved from <http://content.healthaffairs.org/content/21/3/80.full.html>
- Bruning, L. M. (1989, May). OR supervisors-What makes them tick. *Nursing Management*, 20(5), 112A-112H.
- Butts, J. B., & Rich, K. L. (2015). *Philosophies and theories for advanced nursing practice* (2nd ed.). Burlington, MA: Jones & Bartlett Learning.

- Carriere, B. K., Muise, M., Cummings, G., & Newburn-Cook, C. (2009, December). Healthcare succession planning An integrative review. *The Journal of Nursing Administration, 39*, 548-555.
- Cathcart, E. B., Greenspan, M., & Quin, M. (2010). The making of a nurse manager: the role of experiential learning in leadership development. *Journal of Nursing Management, 18*, 440-447.
- Daly, J., Jackson, D., Rumsey, M., Patterson, K., & Davidson, P. M. (2015, October). Building nursing leadership capacity: An australian snapshot. *Nurse Leader, 36-39*.
- Gillespie, B. M., Chaboyer, W., Wallis, M., & Werder, H. (2011, July). Education and experience make a difference: Results of a predictor study. *AORN Journal, 94*(1), 78-90.
- Goldsmith, M. (2007). *What got you here won't get you there*. New York, NY: Hachette .
- Grant, R. (2016). The US is running out of nurses. Retrieved from <http://www.theatlantic.com/health/archive/2016/02/nursing-shortage/459741/>
- Griffith, M. B. (2012). Effective succession planning in nursing: A review of the literature. *Journal of Nursing Management, 20*, 900-911.
- HRSA report on nursing workforce projections through 2025. (2015). Retrieved from <http://www.aacn.nche.edu/media-relations/HRSA-Nursing-Workforce-Projections.pdf>
- Hader, R., Saver, C., & Steltzer, T. (2006, July). No time to lose. *Nursing Management, 23-48*.
- Hall-Ellis, S. D., & Grealy, D. S. (2013, November). The Dreyfus model of skill acquisition: A career development framework for succession planning and management in academic libraries. *College & Research Libraries, 587-603*.
- Hickey, J. V., & Brosnan, C. A. (2012). *Evaluation of health care quality in advanced practice nursing*. New York, NY: Springer.

Impact of the economy on the nursing shortage. (2011). Retrieved from

<http://www.aacn.nche.edu/Economy.pdf>

Khoury, C. M., & Blizzard, R. (2011, July/August). Nursing leadership from bedside to boardroom A gallup national survey of opinion leaders. *Journal of Nursing Administration, 41*(7/8), 299-305.

Kim, T. H. (2012, January-February). Succession planning in hospitals and the association with organizational performance. *Nursing Economic\$, 30*(1), 14-20.

Mariani, B. (2012). The effect of mentoring on career satisfaction of registered nurses and intent to stay in the nursing profession. *Nursing Research and Practice, 2012*, 1-9.

<http://dx.doi.org/10.1155/2012/168278>

Messina, B. A., Ianniciello, J. M., & Escallier, L. A. (2011, August). Opening the doors to the OR: Providing students with perioperative clinical experiences. *AORN Journal, 94*(2), 180-188.

NCBI Bookshelf Website. (2001). <https://www.ncbi.nlm.nih.gov/books/NBK222273/>

Nursing shortage fact sheet. (2014). Retrieved from <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage>

Orsolini-Hain, L., & Malone, R. E. (2007, August). Examining the impending gap in clinical nursing expertise. *Policy, Politics, & Nursing Practice, 8*(3), 158-169.

Ritter, D. (2011). The relationship between healthy work environments and retention of nurses in a hospital setting. *Journal of Nursing Management, 19*, 27-32.

Sherman, R. O., Patterson, P., Avitable, T., & Dahle, J. (2014, July-August). Perioperative nurse leader perspectives on succession planning A call to action. *Nursing Economics\$, 32*(4), 186-203.

Stevens, H. P. (2008, Summer). Total quality management now applies to managing talent. *The Journal for Quality & Participation*, 15-18.

Table potatoes and sweet potatoes excluding french fries and chips. (2012). Retrieved from www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/agriculture-and-food-market-information-by-region/united-states-and-mexico/market-intelligence/table-potatoes-and-sweet-potatoes-excluding-french-fries-and-chips/?id=1410083148481

The future of nursing: Leading change, advancing health. (2010). Retrieved from <http://www.nap.edu/catalog/12956/the-future-of-nursing-leading-change-advancing-health>

The future of nursing: Leading change, advancing health. (2011). Washington, DC: The National Academies Press.

Titzer, J., Phillips, T., Tooley, S., Hall, N., & Shirey, M. (2013). Nurse manager succession planning: synthesis of the evidence. *Journal of Nursing Management*, 21, 971-979.

Trepanier, S., & Crenshaw, J. T. (2013). Succession planning: a call to action for nurse executives. *Journal of Nursing Management*, 21, 980-985.

Weidman, N. A. (2013). The lived experience of the transition of the clinical nurse expert to the novice nurse educator. *Teaching and Learning in Nursing*, 8, 102-109.

Wong, C. A., Cummings, G. G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: A systematic review update. *Journal of Nursing Management*, 21, 709-724.

Table 1

Geographic Location of Survey Respondents based on United States Census Regions ("Table potatoes," 2012, p. 3)

Region	Frequency	Percent
New England (New Hampshire, Vermont, Maine, Connecticut, Rhode Island, Massachusetts)	13	6.40
Mid-Atlantic (New Jersey, Pennsylvania, New York)	23	11.33
South Atlantic (West Virginia, Delaware, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, Florida)	40	19.70
East North Central (Wisconsin, Michigan, Illinois, Indiana, Ohio)	36	17.73
West North Central (North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, Missouri)	17	8.37
East South Central (Kentucky, Tennessee, Mississippi, Alabama)	8	3.95
West South Central (Oklahoma, Arkansas, Texas, Louisiana)	21	10.35
Mountain (Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico)	28	13.79
Pacific (Alaska, Washington, Oregon, California, Hawaii)	16	7.88
Outside the United States	1	0.49
Total	203	100

Table 2

<i>Respondent Characteristics (N=209)</i>				
Variable	Characteristic	Frequency	Percentage	(N)
Gender	Male	15	7.18	209
	Female	194	92.82	
Race	African American	7	3.38	204
	American Indian	0	0.00	
	Asian	9	4.35	
	Caucasian	179	86.47	
	Hispanic	6	2.90	
	Other	6	2.90	
Bed Size	<100	45	22.06	204
	100-299	66	32.35	
	300-599	58	28.43	
	600-999	26	12.75	
	>1000	9	4.41	
Trauma Designation	1	39	19.21	203
	2	41	20.20	
	3	27	13.30	
	Critical Access	18	8.87	
	None	78	38.42	
OR Size	1-5	46	22.66	203
	6-12	62	30.54	
	13-20	35	17.24	
	21-30	24	11.82	
	>30	36	17.73	
Magnet, Truven, Baldrige or Fortune 100 Designation	Yes	73	36.32	201
	No	128	63.68	
Highest Level of Education	Diploma	5	2.46	203
	Associate	14	6.90	
	Bachelor	79	38.92	
	Master	96	47.29	
	Doctorate	9	4.43	
Registered Nurse	Yes	203	100	203
	No	0	0	
Highest Level of Nursing Education	Diploma	10	4.93	203
	Associate	19	9.36	
	Bachelor	103	50.74	
	Master	64	31.53	
	Doctorate	7	3.45	
Organizational Succession Plan	Yes	83	41.71	199
	No	116	58.29	
Extent of Succession Planning	None	129	61.72	209
	Informal, limited to OR	5	2.39	
	Informal, present outside the OR	2	0.96	
	Informal, throughout the organization	2	0.96	
	Formal, limited to the OR	2	0.96	
	Formal, throughout the organization	31	14.83	
		40	19.14	
Future Perioperative Leaders Identified	Yes	94	47.00	200
	No	106	53.00	
Future Perioperative Leaders being Mentored	Yes	82	88.17	93
	No	11	11.83	
Plans to Retire in five years	Yes	54	27.55	196
	No	142	72.47	
Number of Years Planning to Retire	1-3	20	10.15	197
	4-6	32	16.24	
	7-9	33	16.75	
	>9	112	56.85	

Table 3

Additional Respondent Characteristics (N=209)

Variable	Frequency	Percentage	(N)	Mean	Median	Mode	Range	S.D.
Age			205	51.88	54	55	30-70	8.55
30-39	20	9.76						
40-49	52	25.37						
50-59	92	44.88						
60-70	41	20.00						
RN Years Practice			194	26.9	29.5	30	3-48	10.15
1-10	15	7.73						
11-20	38	19.59						
21-30	63	32.47						
31-40	68	35.05						
41-50	10	5.15						
Operating Room Years of Practice			201	21.52	21	25	0-48	10.58
1-10	36	17.91						
11-20	62	30.85						
21-30	61	30.35						
31-40	39	19.40						
41-50	3	1.49						
Operating Room Leader Years of Practice			199	10.63	10	10	1-35	8.14
1-10	122	61.31						
11-20	57	28.64						
21-30	3	1.51						
31-40								
Years Perioperative Leader has been identified			87	2.14	2	1	0.5-15	2.29
0-3	76	87.36						
4-6	6	6.9						
7-10	3	3.45						
>10	2	2.3						
Years Mentored			76	1.79	1	1	0.12-12	1.91
<1	21	27.63						
1-3	46	60.53						
4-6	7	9.21						
>6	2	2.63						

Table 4

Pearson Chi-Square for Key Variables of Succession Planning and Identification of Perioperative Leaders

Future Leaders Identified	Succession Planning Present		Total
	No	Yes	
<i>Frequency</i>			
<i>Percent</i>			
<i>Row Percent</i>			
<i>Column Percent</i>			
No	88	15	103
	44.67	7.61	52.28
	85.44	14.56	
	75.86	18.52	
Yes	28	66	94
	14.21	33.50	47.72
	29.79	70.21	
	24.14	81.48	
Total	116	81	197
	58.88	41.12	100.00
Missing=12			
Pearson Chi-Square =			
62.8656			
DF=1			
P-Value= <. 0001			
Likelihood Ratio Chi-Square			
= 66.8457			

Doyle Balanced Scorecard Cost/Quality Outcomes Model



Figure 1. Doyle Balanced Scorecard Cost/Quality Outcomes Model

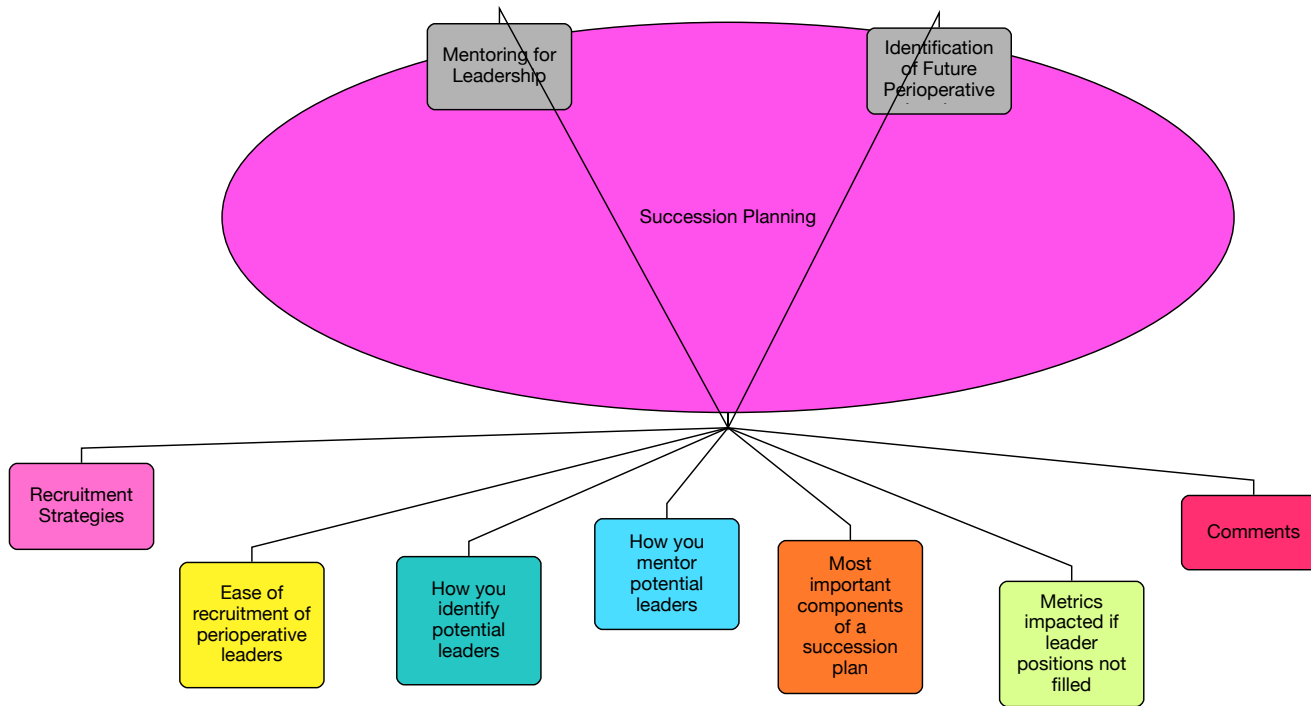


Figure 2. Succession Planning Mind Map for Key Variables

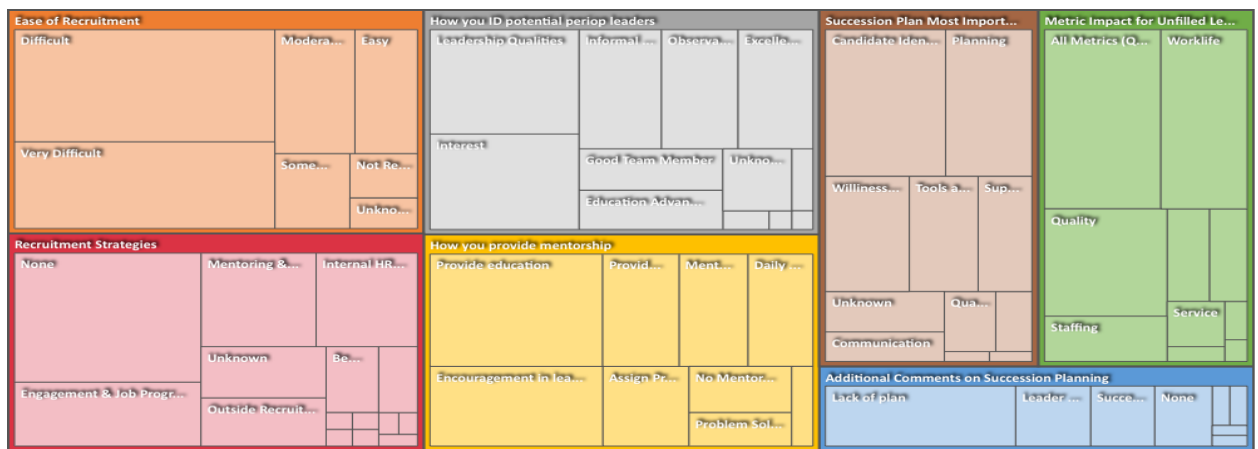


Figure 3. Hierarchy Map

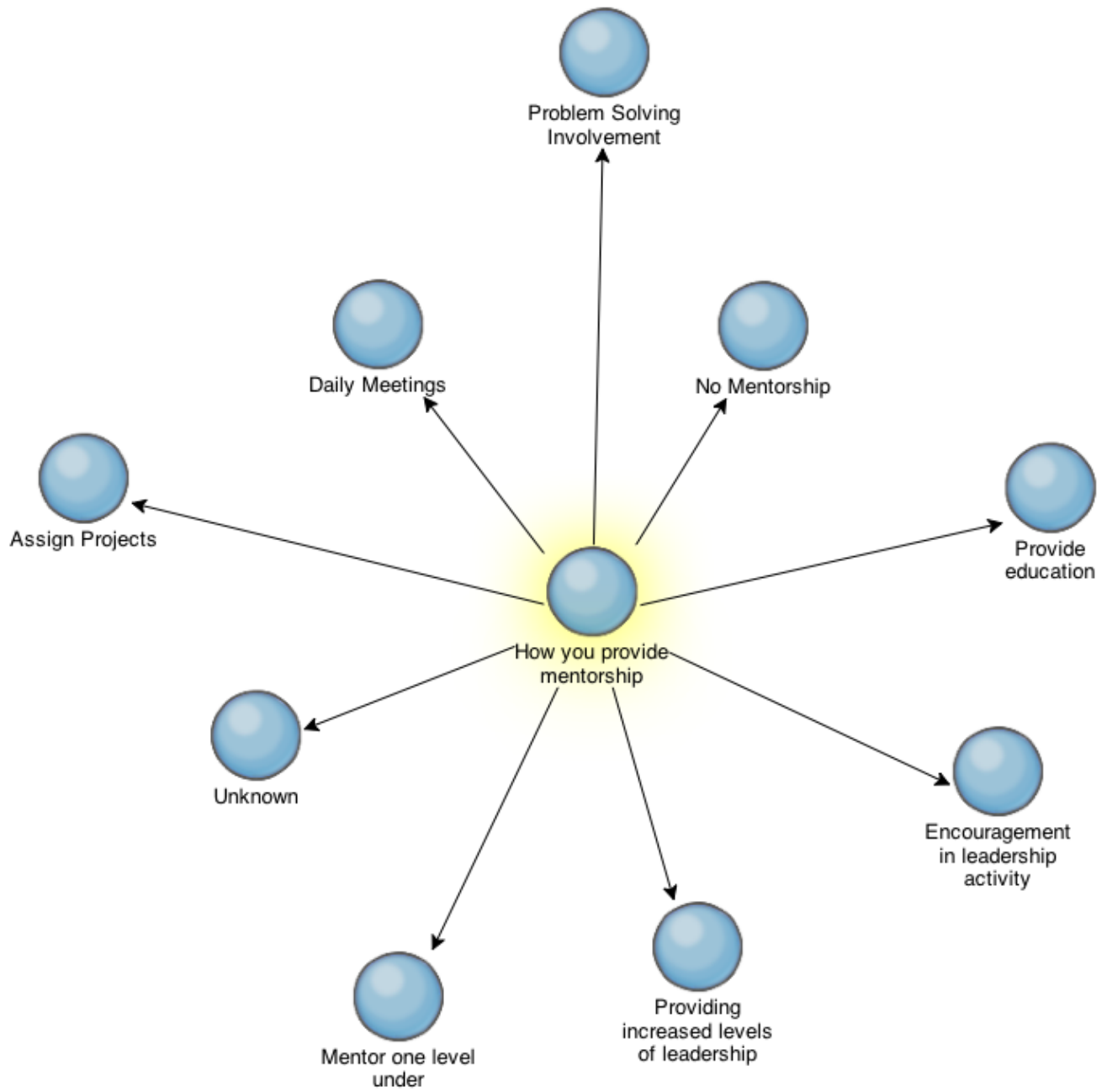


Figure 6. Explore Diagram-How mentorship is provided

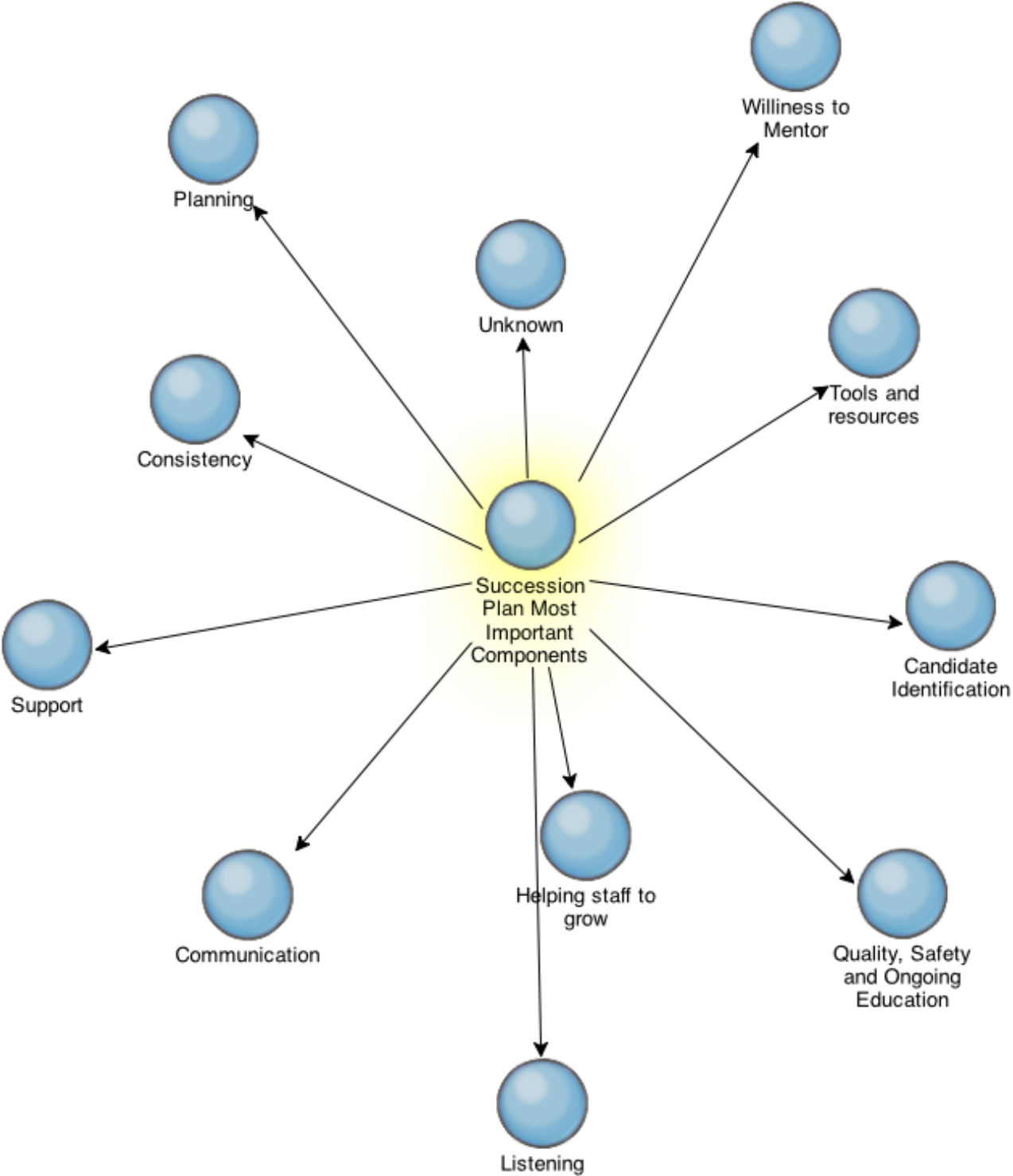


Figure 7. Explore Diagram-Most important components of a succession plan

Appendix A

Cover Letter

Dear Potential Participant,

Thank you for agreeing to participate in a study to understand the current state of leadership in the operating room and what methods are being used to maintain or identify perioperative leadership positions. This study seeks to understand if there is a relationship between succession planning and mentoring for leadership and the identification of future perioperative leaders.

Your participation is strictly voluntary. Your confidentiality will be strictly maintained by reporting of aggregate, group data only. You are free to terminate your participation at any time without penalty and can choose to skip any questions during the survey that you do not want to answer. While there are no direct benefits to you for your participation in this study, there are benefits to perioperative nursing through increasing knowledge about succession planning. There is no compensation made for your willingness to complete the survey. There is essentially no undue risk or discomfort expected.

Approximately ten minutes will be required of you to complete the survey. The principal investigator is **Donna J Doyle MS, RN, CNOR, NE-BC**, who is a doctoral student and is completing this study in partial fulfillment of the Doctor of Nursing Practice (DNP) degree. The principal investigator may be contacted at **Donna.Doyle@OtterbeinUniversity.edu**. The faculty advisor is **Patricia Keane, PhD** and may be contacted at **PKeane@OtterbeinUniversity.edu**. You may contact either individual should you have further questions.

Study results will be submitted for publication to the AORN Journal and will contribute to the already existing body of knowledge regarding succession planning strategies and associated outcomes. Again, thank you for agreeing to participate in this important study.

Appendix B

OTTERBEIN UNIVERSITY INSTITUTIONAL REVIEW BOARD

RESEARCH SUMMARY SHEETS

Be specific about exactly what subjects will experience when they participate in your research, and about the protections that have been included to safeguard them. Careful attention to the following may help facilitate the review process.

1. In a sentence or two, describe the background and purpose of the research.

The purpose of this study is to identify if there is a relationship between succession planning and mentoring for leadership and the identification of future perioperative leaders. Additionally the purposes of this study are to understand the current state of leadership in the operating room and what methods are being used to maintain or identify perioperative nurse leaders.

2. Briefly describe each procedure or manipulation to be implemented that will impact subjects included within the study.

A descriptive, correlational survey using mixed method, quantitative and qualitative design framework will be used.

3. What measures or observations will be taken in the study? If any questionnaires, tests, or other instruments are used, provide a brief description and include a copy for review.

Participants will complete a survey using demographic questions, Likert-style questions, and dichotomous questions and open-ended questions.

See Attached Appendix C

4. Who will be the subjects in this study? How will they be solicited or contacted?

The subjects in this study are operating room managers and directors, who are members of the Association of periOperative Nurses (AORN) and work in a hospital environment. Respondents will be recruited and surveyed over a two month time period through their AORN membership. Respondents who respond to the survey during this time period will be the sample. The survey letter invitation will be sent to a sample of AORN members after IRB approval is obtained from Otterbein University and the AORN Research Committee.

5. What steps will be taken to insure that each subject's participation is voluntary? What, if any inducements will be offered to the subjects for their participation?

Completion of the survey is voluntary; a complete statement about consent is written in the cover letter. The on-line survey will include two statements affirming consent and ability to withdraw from the study (See appendices A and C). There will be no inducements. Survey data will be group results with participant demographics de-identified and aggregated.

6. If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subject or society?

There are no individual risks or benefits involved in the study. However, knowledge of how perioperative leaders plan for succession and identify future leaders will benefit perioperative leaders in developing succession planning and mentoring programs.

- | | | |
|-----|---|----------------------|
| 7. | Approximately how much time will be demanded of the subject? | <u>10 minutes</u> |
| | | Yes No |
| 8. | Will the subjects encounter the possibility of psychological, social, physical or legal risk? If yes, please describe. | <u>NO</u> |
| 9. | Will any stress to subjects be involved? | <u>No</u> |
| 10. | Will the subjects be deceived or misled in any way? | <u>No</u> |
| 11. | Will there be a request for information which subjects might consider to be personal or sensitive? If yes, please describe.

Demographic data such as age, gender, race, ethnicity may be considered personal by some respondents | <u>Yes</u> |
| 12. | Will the subjects be presented with materials which they might consider to be offensive, threatening, or degrading? If so, please describe. | <u>No</u> |
| 13. | a. Under federal law 45CFR 46.116.d.1-4 informed consent may be waived if the research involves no more than minimal risk to the subjects. (Please see Guidelines for Submission of Protocols for definition of minimal risk.) Will a written consent form be used? If so, please include the form. If no, please answer b.

The on-line survey will include a line affirming consent

See Appendix A and C | <u>Yes</u> |
| 14. | b. Will you insure that the subjects give their verbal consent prior to participating? | <u>N/A</u> |
| 15. | If you are recruiting students who are participating for either fulfillment of a course requirement or for extra credit, will an alternative assignment be provided for those students who do not wish to participate? | <u>N/A</u> |
| 16. | Other than for class requirement or for extra credit, will the fact that a subject did or did not participate in a specific experiment or study be shared with a supervisor, teacher or employer? | <u>N/A</u> |
| 17. | Will subjects' contributions to the research (data base) be kept confidential? | <u>Yes</u> |
| 18. | Will any data from files or archival data be used? | <u>No</u> |

Appendix C

Survey Questions for DNP Proposal

Consent statements:

I have read the cover letter and voluntarily consent to participate. Yes
I understand that I may withdraw at anytime without penalty and can choose to skip any questions I not want to answer. Yes

Demographic Data

1. Gender: Male, Female or Other
2. Age: Age in years
3. Race: African American, American Indian, Asian, Caucasian, Hispanic or Other
4. State: State in which the respondent's organization is located
5. Organization Bed Size: <100 beds, 100-299 beds, 300-599 beds, 600-999 beds, >1000 beds
6. Trauma Level Designation: Level 1, Level 2, Level 3, Critical Access or No designation
7. Number of Operating Rooms: 1-5, 6-12, 13-20, 21-30, >30
8. Magnet, Truven, Baldrige or Fortune 100 designation: yes or no
9. Highest level of education attained: Diploma, Associate Degree, Bachelors Degree, Masters Degree or Doctorate
10. Registered Nurse: yes or no
11. Highest level of nursing education attained: Diploma, Associate Degree, Bachelors Degree, Masters Degree or Doctorate
12. Years experience as a registered nurse: experience in any specialty

13. Years experience working in the operating room: total years experience in the operating room

14. Years experience in leadership role in the operating room: total years experience in leadership in the operating room

15. Is there a succession planning process in your organization? Yes or no

If yes: How many years has there been a succession planning process in your organization?

16. What is the extent of succession planning in your organization? None, Informal, limited to the operating room, Informal, present in departments outside of the operating room, Formal but limited to the operating room or Formal throughout the organization

17. Have future perioperative leaders been identified? Yes or no

If yes: How long has a future perioperative leader been identified?

18. If so, are they being mentored for perioperative leader roles? Yes or no

If yes: How long have you been mentoring the identified future perioperative leader?

19. Do you have plans to retire in the next 5 years? Yes or no

20. How many years in the future do you plan to retire? 1-3 years, 4-6 years, 7-9 years, >9 years.

Open-ended Questions

1. What strategies are being utilized to recruit perioperative leaders?
2. How difficult or easy is it to recruit perioperative leaders?
3. How do you identify potential perioperative leaders?
4. How do you provide mentorship to potential perioperative leaders?
5. What are the most important components of a productive succession plan?

1. What factors, indicators or metrics are being impacted currently or will be impacted if perioperative nurse leader positions are not filled?
2. Please provide any additional comments regarding succession planning in your organization.

Abstract

Aim: The aim of this study is to determine if there is a relationship between succession planning and mentoring for leadership and the identification of future perioperative leaders. Additionally, the purposes of this study are to understand the current state of leadership in the operating room and what methods are being used to maintain or identify perioperative nurse leaders.

Background: An impending nursing shortage is expected to occur in the next decade, particularly within the specialty of perioperative practice and leadership. Providing access to surgical care is a major challenge for meeting the nation's health needs and is a concern of the Institute of Medicine (IOM). Perioperative registered nurse orientation involves almost a year of competency-based mentoring and training while the perioperative nurse leader orientation may take even longer. The nursing shortage combined with the extensive training needed for leadership positions may contribute to a reduction of active operating rooms during the time period that nurses are undergoing training. The inability to staff operating rooms will in turn have a negative effect for the remaining five concerns of the IOM aims of quality, safety, equality, efficiency and cost. Solutions to successfully close the gap between the supply and demand of perioperative nurses and nurse leaders need to be identified. Although succession planning and mentoring for perioperative nurse leadership position is recommended, it is not known if there is a relationship between succession planning and mentoring for leadership and the identification of future perioperative leaders.

Evaluation and Theoretical Underpinning: An extensive review of the literature was conducted, included scholarly, peer reviewed journal articles focused on succession

planning in the perioperative environment as well as a review of articles related to succession planning in the healthcare and business environments. Patricia Benner's Novice to Expert theory is used as the underpinnings for this study.

Methods: A descriptive, correlational survey using mixed methods, with a quantitative and qualitative design will be used. The target population is operating room managers and directors, who are members of AORN and who work in a hospital environment. A sample size will be determined by power analysis and will be recruited and surveyed over a two month time period. Survey responses received during this time period will be analyzed and compiled using quantitative, descriptive methods. Qualitative methods will be used to code, categorize and identify emerging themes using a qualitative software program. Respondents will be surveyed after IRB approval is obtained from Otterbein University and the AORN Research Committee. Surveys will be sent to prospective respondents by AORN, using the AORN database. Surveys received within a two-month time period will be used for the project.

Key Words: succession planning, succession planning in nursing, succession planning in perioperative nursing, succession planning in the operating room, talent management, and succession planning in the perioperative environment combined with the term nursing shortage

INSTITUTIONAL REVIEW BOARD
RESEARCH INVOLVING HUMAN SUBJECTS
OTTERBEIN UNIVERSITY

- Original Review
- Continuing Review
- Five-Year Review
- Amendment

ACTION OF THE INSTITUTIONAL REVIEW BOARD

With regard to the employment of human subjects in the proposed research:

HS # 16/17-02

Keane & Doyle: The Relationship Between Succession Planning and Mentoring ...

THE INSTITUTIONAL REVIEW BOARD HAS TAKEN THE FOLLOWING ACTION:

- Approved
- Disapproved
- Approved with Stipulations*
- Waiver of Written Consent Granted
- Deferred

*Stipulations stated by the IRB have been met by the investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the college, signed consent forms are to be transferred to the Institutional Review Board for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the IRB, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: 23 August 2016

Signed: 
Chairperson

OC HS Form AF

A small comment: Under "gender," you might want to include "other" — in addition to Male and Female.

Appendix D

Procedural Change Addendum to IRB Approval dated 23 August 2016

I am respectfully requesting to make the following changes to the IRB approval dated 23 August 2016.

The changes relate to adding an additional question to Questions #15, #17 and #18 if the respondent answers affirmative to each of these questions. Appendix C indicates the additional questions in bold font. The rationale for these additions is to provide continuous survey data that is needed for the data analysis portion of the study, specifically for the ability to use a Pearson Product Moment Correlation and Chi Square test in the data analysis.

Additionally, I have added the term “other” under “gender” in addition to male and female categories as suggested by the IRB approval dated 23 August 2016. No other changes are anticipated at this time.

Thank you for your consideration.

Otterbein University Mail - Fwd: IRB changes approved

<https://mail.google.com/mail/u/2/?ui=2&ik=870106dc2c>

Doyle, Donna <donna.doyle@otterbein.edu>

Fwd: IRB changes approved

1 message

Keane, Patricia <pkeane@otterbein.edu>
To: Donna Doyle <donna.doyle@otterbein.edu>

Mon, Sep 26, 2016 at 7:33 AM

----- Forwarded message -----

From: **Miller, Kelly** <kMiller@otterbein.edu>
Date: Wed, Sep 14, 2016 at 10:21 AM
Subject: IRB changes approved
To: Patricia Keane <pkeane@otterbein.edu>
Cc: Robert Kraft <rkraft@otterbein.edu>

Good morning, Dr. Keane.

On Dr. Kraft's behalf, I wanted to let you know the changes you submitted yesterday for IRB HS #16/17-02 were approved.

Have a good day!

Kelly Miller

Academic Administrative Assistant
Department of Psychology
Otterbein University
614.823.1615
kMiller@otterbein.edu

--
Patricia Keane, PhD
Director, Graduate Programs in Nursing