


2017

# Losing New Graduate Bedside Nurses, a Practice Improvement Initiative

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# Walden University

College of Health Sciences

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Walden University  
2017

Abstract

Losing New Graduate Bedside Nurses: A Practice Improvement Initiative

by

Beverly Miller

MS, Walden University, 2014

BS, University of South Carolina, 2011

Project Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Nursing Practice

Walden University

August 2017

## Abstract

New graduate nurses (NGNs) at bedside are faced with numerous challenges, which prompt them to leave jobs in their first year. The transition from being a student to competent nurse requires a NGN to have the necessary skills and experience. Subsequently, hospitals continue to face shortages of staff because of high turnover and low retention levels. Nonetheless, evidence from reviewed literature has indicated that the use of residency programs can increase NGNs' stay at bedside, improve retention, reduce costs of operations, and return employees' turnover. The purpose of this quality improvement project was to identify the likelihood of NGNs remaining at bedside after participating in a 52 week NGN residency program in the critical care units at Palmetto Health hospital. When a hospital recruits and retains NGNs at the bedside, the quality of life among patients is improved. Benner's theory of novice to expert was utilized to understand professional growth of nurses. Data were collected from the human resource department of the 18 nurses who initially participated in the residency program to compare retention rates before and after its implementation. The project initiative was based on a quantitative non-experimental comparison design. Based on the evidence from the human resource department, there was a 14% improvement in nurse retention 3 months after the implementation of the NGN residency program. A statewide adoption of NGN residency programs was recommended to help improve retention and enhance NGNs' professional improvement and quality of care. The implementation of NGN residency program also demonstrated implications for social change through increasing retention, building nurse competency, and enhancing quality of care delivered.

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## Dedication

This project is dedicated to my loving husband, Horace Miller, and my children, Ethan, Grace, and Damyia, who served as my inspiration and personal driving force to reach the finish line. Without their love, support, encouragement, and assistance, reaching my goal would not have been possible.

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## Section 1: Overview of the Evidence-Based Project

### **Introduction**

Being a new graduate nurse (NGN) in any critical care environment is a challenge for hospitals, especially for the NGN's first year. According to Friedman, Delaney, Schmidt, Quinn, and Macyk (2014), retention of NGNs in the first year of employment is low and ranges from 25% to 64%. Similarly, Kovner, Brewer, Fatehi, and Jun (2014) established that approximately 17.5% of NGNs leave their first job within 1 year of employment, and one third of registered nurses (RNs) usually leave their jobs within a period of 2 years. Some researchers have suggested that the initial experience of becoming an NGN can be challenging, thus leading to job dissatisfaction and high nurse turnover rates (Duchscher & Cowin, 2004). An increase in nurse turnover can result in decreased patient access, quality of care, and patient safety, leading to adversarial patient outcomes. Concurrently, nurse turnover may have a spillover effect on the other RNs by the accumulative workload.

When nurses experience such problems, the health care organizations are also affected adversely through replacement costs and higher recruitment. Thus, RNs leaving their jobs during their first year of employment not only affects the quality of care, but also causes costly implications for health care organizations. The purpose of the DNP project was to identify the likelihood of NGNs remaining at bedside after participating in a NGN residency program. The residency program is an effective tool that health care facilities can use to reduce financial costs incurred in recruitment and hiring of new nurses after the previous ones have left employment. Undertaking the project initiative

would increase NGNs' retention rates in the health care facility, hence improving quality of care offered. Section 1 presents the background, the problem, the purpose of the project, project objectives, the project-focused question, the significance of the project to the field of nursing, implications for social change, and the project's assumptions and limitations.

### **Background/Context**

Nurse retention in the United States is a major concern to health care institutions and is attributed to the shortage of nursing workforce (El-Jardali, Merhi, Jamal, Dumit, & Mouro, 2009). Jones and Gates (2007) established that if no action is taken to remedy the low nursing retention rates, the nursing shortage will further increase. Other researchers argued that failure to retain a single nurse can cost the institution more than \$60,000 (Jones & Gates, 2007). Additionally, poor retention rates lead to a high patient-to-nurse ratio. As a result, patients are likely to receive poor quality care, which is accompanied by increased health care costs that are channeled at training NGNs. Jones (2008) argued that poor retention is accompanied by various hidden costs used for advertising for new positions and hiring of NGNs. With the forecast of 587,000 new nursing jobs to be created by the end of 2016, the nursing shortage in the United States was expected to increase (Aiken, Cheung, & Olds, 2009). (Aiken et al. (2009) estimated that the nursing shortage may increase to 1 million by 2020.

Palmetto Health Richland Hospital is located in South Carolina, and it is a 649-bed regional community teaching medical center. The center has over 225,000 patients and more than 4,200 medical and dental staff and other employees. In addition, it

provides over 900 specialty and primary health care services. The medical center also provides behavioral care, oncology, cardiology, orthopedics, obstetrics, robotic-assisted surgery and trauma, and neonatology. The facility operates a 52-week residency program that consists of quality classes, simulation, core curriculum, one-on-one skills validation, professional development, and hands-on application with clinical mentors. The new residency program at Palmetto Health Richland needs improvement to increase retention of NGNs. The current residency program at the medical center does not sufficiently provide the required competencies necessary for the novice nurse to be responsible for caring for real patients. The improvement and implementation of the nurse residency program in the medical center was expected to enhance improved competency and increase retention for the first year of employment.

### **Problem Statement**

Lack of retention of clinical NGNs is a major problem facing Palmetto Health Richland Hospital. The turnover rate at 1 year of employment at Palmetto Health Richland Hospital is currently 15%, as compared to the national nursing turnover rate at greater than 16% (Li & Jones, 2013). One reason the NGNs had given for leaving bedside practice is that they only use the job to obtain the minimum experience necessary to advance their careers as nurse practitioners (NPs), certified RN anesthetists (CRNAs), or to become travel nurses. According to Tellez and Seago (2013), the higher salary ranges and autonomy provided by the advanced nurse positions make them more attractive than those of bedside nursing. Lack of retention is also caused by health care executives' view of nursing staff as an expense and financial liability, rather than an asset

that attracts patients to the facility (Nevidjon & Erickson, 2000). Nurse burnout is another factor that affects retention of Palmetto Health's NGNs. Hayes et al. (2012) argued that most of the nurses work overtime and are understaffed to meet the needs of their units. Other factors that affect Palmetto Health's nurse retention include unsatisfactory salaries and lack of time with patients (Hayes et al., 2012).

The challenges associated with clinical NGNs' roles such as long working hours, unfavorable work shifts, low motivation, and poor work conditions often lead to a high turnover during the initial year, causing excessive losses to hospitals considering the high cost incurred in training nurses. In addition, poor nurse retention also limits the capacity of hospitals to render efficient services due to the loss of nurses who seek better job prospects. Health care facilities have used several strategies to mitigate the problem of losing NGNs during the initial phase of their careers. According to Reem, Kitsantas, and Maddox (2014), the residency program is one of the main strategies that hospitals have employed to enhance adaptability and retention of NGNs. Other measures for retention include the creation of favorable work conditions, use of preceptors, and provision of professional support (Twibell et al., 2012).

### **Purpose Statement**

The purpose of conducting the project initiative was to evaluate the impact of Palmetto Health's nurse residency program on nursing retention. Recruiting and retaining NGNs at the bedside was necessary to improve the quality of life in terms of safety of patients and proper care. The goal of the project was to ensure that NGNs remain at the bedside after participating in an NGN residency program and subsequently retain the



NGNs in the facility to enhance the delivery of service in the institution. The project measured the level of the nurses' retention after the new support program was implemented in the facility. The implementation of the residency program at the facility was expected to help increase the retention rate of the NGNs, thus improving care for patients.

### **Project Objectives**

The objective of the project was to increase the retention rate to 95% of NGNs within the first year after implementation of the residency program. The facility was experiencing a low retention rate of 70% in spite of the retention initiatives in existence. Thus, implementation of a residency program was expected to increase the retention rate and improve the quality of care for patients.

### **Nature of Project**

Data were obtained from the nursing education, human resources (HR), and Palmetto Health nursing research departments. Data were collected 3 months before implementation of the program and 3 months after implementation of the residency program. Data collected before and after the implementation of the residency program were compared to determine the impact of the residency program on the retention rate.

### **Project Question**

The question for the DNP project was as follows: What is the effect of a NGN residency program for bedside NGNs on the retention rate 3 months after program implementation?

### **Significance of the Project**

Nurse residency programs are necessary because of the need for improved nursing competency, recruitment into and retention within the profession, and continuity of professional values. In addition, retention of the nurses can improve patients' outcomes and reduce burnout and fatigue, which results from inadequate staffing in hospitals (Mihyin & Jones, 2010). By establishing the supportive elements embedded with nurse residency programs, hospitals are expected to be in a position to overcome problems that force NGNs to leave employment during the first year of employment. In the long run, adoption of nurse residency programs by different hospitals may reduce the shortage currently in the nursing sector. Therefore, the residency program ought to be the initial step in a health care organization's retention strategy.

One of the major problems that health care institutions in the United States currently face is the high turnover of NGNs, which happens for number of reasons. The primary reasons include high patient acuity, the stress-related issues, lack of support systems, and poor training (Mihyin & Jones, 2010). To ensure NGNs remain at the bedside, the Institute of Medicine (as cited in Kirkland, 2015) encouraged hospitals and other facilities to provide nurse residency programs for NGNs in order to offer support to this group. The goal of the DNP project initiative was to prepare NGNs and to equip them with skills required to provide safe and secure patient care. Additionally, the program could also significantly enhance nurses' confidence and competence when dealing with patients.

## **Reduction of the Gaps**

The American Association of Colleges of Nursing (AACN, 2016) has contended that the development and implementation of residency programs in hospitals can facilitate the transition of NGNs from being novice learners to more competent care providers. Additionally, a residency program can improve the NGNs' perception of their satisfaction, communication abilities, and competence levels. The U.S. nurse turnover rate was 16.5% as of 2015 and was anticipated to increase in the next decade (Mazurenko, Gupte, & Shan, 2015). Working for long hours subsequently culminates into job stress, which leads to burnout and consequently to further turnover. The incorporation of a residency program has the capability to increase clinical competence and decrease turnover, thus raising the retention rates (Welding, 2011). The implication is that new nurse residency programs are designed and implemented not only to increase retention, but also to provide crucial tools to enhance the NGN's success and productivity. Outcomes of successful nursing residency programs have shown that retention rates can be increased by 95% among NGNs and lead to a reduction in the reported turnover rates of more than 30% (Welding, 2011).

## **Implications for Social Change in Practice**

The DNP project would have implications for the facility and the unit. A decrease in the costs of training after the implementation of the residency program was expected. Newly licensed nurses' decisions to remain in or leave their position have effects on the nursing profession on numerous levels. When nurses are satisfied, they are likely to remain at the bedside, and patients will be content with care (Mihyin & Jones, 2010).

Subsequently, a positive cycle develops in which the patient can express gratitude, thus encouraging the NGN to continue providing care for the patient. The evaluation of the effect of the residency program on job retention of NGNs provided relevant recommendations for the health care sector.

Implementation of a residency program would equip NGNs with experience, skills, and improved competence levels. Thus, having an experienced nurse with skills at the bedside would enhance communication with patients and family members, improving the quality of care. A confident and competent NGN is likely to be a better workmate and an appropriate replacement for retiring nurses. The implementation of the residency program was expected to have a positive effect on the current nursing shortage being experienced in the United States because more nurses would be retained. In the long term, a culture of developing and effectively implementing residency programs for NGNs would be established, leading to satisfied staff and low turnover.

### **Definition of Terms**

*Nurse residency programs:* Programs in a hospital setting that are designed and implemented to help in the transition of NGNs from being graduates to licensed nurses (Park & Jones, 2010).

*Nurse resident (NR):* All staff nurses who have completed an associate's degree in nursing, completed and passed certification, and participated in a residency program (Kovner et al., 2014). Kirkland (2015) noted that NRs have to be licensed, and those who have started working cannot be referred to NGNs.

*New graduate nurse (NGN):* A person who has just graduated from a nursing school with an associate's degree or a bachelor's degree and has never been employed in a hospital (Kirkland, 2015).

*Retention rate:* Retaining the newly licensed RNs by the hospital for 1 year after being employed. Kirkland (2015) referred retention as the act of keeping staff employed in an organization.

*Turnover rate:* The rate at which NGNs leave the workplace during the first year of employment. Kovner et al. (2014) noted that although there is no agreed definition of RN turnover, it is used to mean the ability by a nurse to leave employment voluntarily or involuntarily. Thus, turnover is the number of NGNs leaving their hospital employment before 12 months post residency (Trepanier, Early, Ulrich, & Cherry, 2012).

### **Assumptions, Limitations, and Delimitations**

#### **Assumptions**

The primary assumption was that NGNs have knowledge on the importance of residency programs and they would be willing to participate in the project initiative. The second assumption was that NGNs lack adequate skills, competency, and self-confidence to remain at the bedside and provide quality health care. It was assumed that the implementation of the residency program would help retain the NGN at the bedside.

It was also assumed that the participant's gender would not have a significant effect on the NGN's perceptions and attitudes. The assumption was based on the supposition that both male and female NGNs undergo the same challenges during their first year of employment. Lastly, it was assumed that some of the NGNs enter the nursing

sector with the intent of staying at the bedside for a short period in order to meet certain criteria to be eligible for enrollment in specific graduate programs.

### **Limitations**

The project initiative was limited to a small sample of NGNs in one health care facility that needed to improve the retention of NGNs at the bedside. The implication is that the results may not be generalizable beyond the NGNs in the health facility population from which the sample was drawn. As a result of the project's duration (9 months), a significant number of the participants may not be available for the three points of data collection. In addition, others may not have been willing or available to participate in the evaluation stage of testing of the effectiveness of residency programs. The shortcoming would not have a negative impact on the project's success and such incidents were not to be considered, but rather neglected.

### **Delimitations**

The project was restricted to NGNs in the health facility, implying that the project was restricted to new nurses in Palmetto Health Richland Hospital, a teaching hospital. The residency program did not involve experienced nurses because they would affect the findings of the project through the inclusion of their personal clinical judgment. The residency program was an opportunity for the facility to implement an initiative that would increase retention levels of NGNs. The program lasted for 6 months, and the project took 9 months.

## Summary

In spite of the high demand for nurses in the United States, the number of NGNs leaving employment before the end of their first year is very high. However, nurses who participate in residency programs are more likely to remain at the bedside. Some of the reasons why NGNs leave within their first year of employment in nursing hospitals include long working hours, unfavorable work shifts, low motivation, poor work conditions, and absence of support of transition programs for NGNs. Thus, NGNs deserve more recognition, supportive transition, skill development, emotional support, better salaries, and opportunities to take ownership in the workplace. Additionally, high retention rates of nurses at the bedside can improve the nurses' level of satisfaction. Successful implementation of the residency program can significantly improve the quality of life among patients by ensuring that NGNs remain at the bedside. The project initiative would impact the role of the nurse residency program by identifying its importance to NGNs competences and factors influencing NGNs retention rates.

## Section 2: Review of Scholarly Evidence and Theoretical and Conceptual Framework

### **Introduction**

The purpose of this DNP project was to evaluate the effect of residency programs on NGNs retention. In this chapter, a review of literature pertinent to retention and turnover of NGNs, impact of residency programs, and NGNs' reasons for leaving or staying in nursing practice is provided. The method, databases, and key words used to search the literature have been described. Selected literature was examined, synthesized, critiqued, and summarized. Finally, gaps in the literature are identified, and descriptions of how the project initiative adds value to nursing science are carried out.

### **Literature Search Strategy**

Evidence was sourced from past literature relating the relationship between nurse retention, nurse turnover, and residency programs. Journal articles were retrieved from PubMed (MEDLINE), the Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, Web of Science, and Ovid Nursing Journals Full Text and evaluated using literature published from 2010 to 2016. Words searched to retrieve the supportive literature for the project included *new graduate nurse support*, *the transition to clinical competence*, *new nurse's residency programs*, *retention of new graduate nurses*, and *implementation of residency programs for new graduate nurses*. Inclusion criteria included the following: (a) written in the English language; (b) in full text; (c) peer-reviewed and scholarly journals; (d) connection with residency programs and NGN retention; and (e) turnover for NGNs. Exclusion criteria included literature that was not



published in English and not related to the topic. Intervention studies that focused around nurse residency programs but did not mention NGNs were also excluded.

A total of 20 articles were obtained in the initial search. However, after the 20 articles were reviewed, the number was reduced to 15 as a result of irrelevance to PICOT statement. Thus, a total of 15 appropriate articles were used in this EBP project. Upon completion of this comprehensive literature search, three themes emerged from the review: (a) nurse retention, (b) factors influencing retention of NGNs in the United States, and (c) the role of residency programs in improving confidence, competence, and retention of NGNs.

### **Specific Literature**

#### **Nurse Retention**

Trepanier et al. (2012) performed a cost-benefit analysis in order to assess the economic outcomes associated with a new graduate RN (NGRN) residency program. In the study contract, labor usage data and turnover rate data from a multisite health care corporation were utilized, which used a sample of 524 NGRNs. Findings showed that the incorporation of a new graduate residency program resulted in a reduction in the turnover rate from 36.08% to 6.41% in a 12-month period. In addition, the contract labor usage decreased to \$5,490 from \$19,099 per average daily census (Trepanier et al., 2012). Based on the cost-benefit analyses, the findings have suggested an average of net savings of between \$10 and \$50 per patient every day in comparison to traditional methods of new nurses' orientation. Other than using a large sample of 524 NGNs, the study provided statistical evidence to support the economic viability of residency programs

(Trepanier et al., 2012). Thus, the study is relevant to the study because it showed the cost-effectiveness of residency programs after they have been implemented. Therefore, the incorporation of an NGRN residency program was recommended because it provides a cost-effective innovative approach. Health care facilities must value nurse residency programs as investments rather than an expense to the organization.

The demand for nurses in the U.S. nursing sector requires the immediate employment of NGNs into acute care hospitals even without considering their competency and skills. Subsequently, hospitals must develop sound plans in order to maintain the safety of patients and optimal quality of care. Goode, Lynn, Krsek, and Bednash (2009) have established that nurse residency programs are an important requirement for nursing because the turnover costs for NGNs are higher compared to experienced RNs' as a result of the amount of supervision and education required. Goode et al. found statistically significant increases in NGRNs' confidence in their skills within a period of 3 months after completing a residency program. The nurses were also able to communicate effectively with patients, team members, and their families, and stress levels and need to leave employment declined. Within a period of 6 months, turnover rates also continued to decline at a rate of 12% (Goode et al., 2009). For NGNs who completed the 12-month residency program, the turnover rate dropped further to 5.7% (Goode et al., 2009). The findings of this study can be used in the project to show that successful incorporation of a residency program can result in improved skills and abilities among the residents and better communication with patients, care team, and families.

Kramer, Maguire, Halfer, Brewer, and Schmalenberg (2013) undertook a study to establish if new nurse residency programs reflected the professional socialization process. In the study, residency facilitators across 34 magnet hospitals completed residency program questionnaires. A total of 907 NGNs and experienced nurses, educators, and nurse managers in 20 magnet hospitals were interviewed (Kramer et al., 2013). The study established that residency programs for nurses resulted in experience acquisition, skill improvement, and reflective practice sessions, which resulted in the retention of the nurses (Kramer et al., 2013). The study is one of the many examples that have indicated that residency programs can effectively improve the skills and experiences of NGNs. The strength of the research study is that it was conducted across 34 magnet hospitals.

Both NGNs and experienced nurses tend to be satisfied with bedside nursing if they are supported and encouraged by the hospital management and other staff members. Anderson, Allen, Linden, and Gibbs (2009) measured job satisfaction and engagement perceptions of 90 NGNs after completion of interactive residency modules. They provided trends associated to satisfiers (teamwork and patients' outcomes) and dissatisfiers, including lack of teamwork, staff schedules, and disrespect from physicians' perspectives. After the implementation of the program, the retention rates of first and second-year nurses were consistent with other studies related to residency programming (Anderson et al., 2009). The strengths of the study are the use of mixed qualitative and quantitative design and a large sample of 90 NGNs. The findings can be applied to show that unnecessary turnover within 1 year of employment affects the nursing staff, organizational finances, and patient care.

Hillman and Foster (2011) aimed to identify the benefits derived from the new graduate residency program by evaluating organizational commitment, clinical decision-making, work satisfaction, and skill development throughout and after residency. In addition, resident retention and associated cost savings were compared. Hillman and Foster identified adoption and implementation of the transition programs and change of culture as major issues faced by health care institutions. Before the development of the transition program for the NGNs, the 1-year retention rate was 50%. After the program had been in use for 5 years, retention of NGNs increased to 72.5%, leading to major cost savings to the hospital (Hillman & Foster, 2011). The study has shown how residency programs can increase retention rates and cost savings to the setting of the program. The findings of the study can be used to provide best practices for retention of NGNs at bedside of the targeted hospital.

In order to address nurse recruitment and retention problems, health care institutions have increased the number of NGNs in their hiring pools and have concurrently well-known orientation programs for those nurses. Chandler (2012) has contended that transition from being a student is shocking, confusing, and traumatic. Such challenges need to be solved quickly to ensure retention of the NGNs in the health care facilities. Chandler investigated first-year nurses' experiences when making the transition from college to practice. A sample of 36 nurses with baccalaureate and associate degrees was used in the study, and the findings identified three themes: "(1) they were there for me; (2) there are no stupid questions; and (3) nurturing the seeds" (Chandler, 2012, p. 105). The findings established that all the first-year nurses were

aware of the support they required in order to be successful and remain at the bedside.

The weakness with the research was the failure to state what kind of factors affected NGNs during their first year of employment (Chandler, 2012). The findings can be used to show that an effective process that provides support to the nurses is necessary because of its potential benefits. The findings of the study can also be used in the project to determine the perspectives NGNs have towards residency programs.

The expectation of most hospitals is for NGNs to transition quickly from being students to nurses. Welding (2011) noted that NGNs face numerous challenges, including inadequate skills and lack of the ability to connect their classroom experiences to everyday clinical practices. Moreover, transitioning to bedside roles remains a major hurdle that compels NGNs to leave employment in the first and second years of employment. Many nursing leaders are implementing transition programs to maintain efficient nursing residency programs that can produce competent bedside nurses. The goals and design of the graduate nurse residency program by institutions is to increase leadership, competence, and job satisfaction, and eventually minimize turnover (Welding, 2011). Welding established that patient care outcomes were significantly improved after the implementation of a nurse residency program for NGNs, in comparison to those who did not receive the same support. The study was based on the Western Pennsylvania Medical Center Nursing Residency Program to show how nursing residency reduced nurses' turnover, and increased clinical competence. The study was conducted for a period of 1 year and the findings demonstrated the effect that a supportive practice setting for NGNs has on the profession of nursing and to the patient population (Welding, 2011).

The findings are relevant to this study because as a DNP student, I can relate the residency program implemented in this project to the Western Pennsylvania Medical Center Nursing Residency Program in terms of importance of residency programs.

### **Factors Influencing Retention of NGNs**

The recruitment and retention of new nurses to work in a complex and high-stress environment of acute care hospitals is challenging. There are abundant data on the bedside RN, but limited studies exploring the perceptions related to why RNs may decide to leave clinical nursing (Welding, 2011). However, MacKusick and Minick (2010) implemented a phenomenological study to offer an in-depth understanding of the reasons why nurses leave clinical practice. Lack of support from management and peer staff and exhaustion and fatigue were the major reasons that drove nurses away from the workplace (MacKusick & Minick, 2010). The unfavorable workplace was also established by new RNs to be a major reason as to why they left employment. For example, new RNs were ignored or told to toughen up in order to make better nurses. The implication is that lack of support hindered NGNs from remaining at the bedside (MacKusick & Minick, 2010). Nevertheless, the study's findings can be used in this project to show that lack of collaboration between staff and physicians, aggressive treatment, and lack of respect for family and patients are other factors that drive new RNs from the bedside.

Washington (2011) hypothesized that transitioning from student to professional nurse coupled with stress were the major factors that resulted in work stress of NGNs, ultimately manifesting as performance anxiety. Performance anxiety is an unexplainable,

uncomfortable feeling, which is stimulated cognitively as a result of the external or internal threat to the body (Washington, 2011). The implication is that performance anxiety is a personal fear of interacting or evaluation and observation in the workplace. The study established that performance anxiety was a major reason as to why NGNs did not feel experienced, competent, and successful at the bedside (Washington, 2011). Therefore, in order to promote the transition of NGNs, hospitals must provide constant observation and evaluations as a way of determining progress. At the end of the 6-month study, findings indicated that NGNs who enrolled to be part of the orientation remained at the bedside while those who did not enroll were more likely to leave the employment (Washington, 2011). The study is relevant to this project because it indicated that even a 6-month residency program can increase retention rate among NGNs.

### **The Role of Residency Programs**

Glynn and Silva (2013) used a qualitative design to carry out interviews among eight NGNs to evaluate the effectiveness of the nurse residency program. The graduates expected to acquire new knowledge and skills, including the ability to improve patients' outcomes and interventions. The NGNs anticipated assistance to develop confidence and competence in their practice (Glynn & Silva, 2013). The study examined the experiences of NGNs enrolled for an internship program in a 200-bed community hospital. Three themes emerged in the interviews: (a) help with role transition, (b) becoming more proficient, and (c) the acquirement of new skills and knowledge in a specialty area (Glynn & Silva, 2013). The study is applicable in this project because findings can be

used as a basis for showing the effectiveness of residency programs for NGNs in improving retention rates.

Adams et al. (2015) investigated how residency programs for NGNs' in critical care can be improved based on recommendations provided by nurse residents and stakeholders' perceptions and experiences. The study was carried out among 34 NGNs and 18 staff nurses and preceptors. After 3 months of a program that incorporated practicum and classroom learning components, the NGNs provided feedback that indicated that the program improved their communication and competency skills (Adams et al., 2015). Some of the NGNs even noted that they were willing to extend their stay in order to acquire the necessary skills and knowledge that would enable them to practice independently. Adams et al. concluded that NGNs must undergo transition through a residency program for at least 6 months and up to a maximum of 12 months. The primary strength of this study was the use of 34 participants, 12 focus groups, and 18 preceptors and staff partners. Thus, the richness of the focus group outcomes made the outcomes of the study reliable, and the findings can be applied in the project because the targeted hospital is planning to establish a residency program for NGNs.

Spector and Echternacht (2011) reviewed modules required for experiential learning during the transition of NGNs to competent and skilled nurses. The modules established were informatics, quality improvement, evidence-based practice, teamwork and communication, and patient-centered care (Spector & Echternacht, 2011). In this literature review, it was found that development of national, standardized residency programs was required to ensure effective transition of all newly licensed nursing



graduates to the professional practice. In addition, absence of a standardized program in nursing resulted into high turnover rates among NGNs and issues related to patient safety. Thus, the study provides best practices that can be used in increasing NGNs retention rates, which makes it significant to this project initiative.

Confidence is necessary to promote effective engagement of nurses in the workplace. However, NGNs lack the necessary confidence, which may compel them to leave their nursing career during their first year of employment. Pfaff, Baxter, Jack, and Ploeg (2014) explored NGN confidence in inter-professional collaboration by using a sample of 514 NGNs from Ontario, Canada. Pfaff et al. noted that quantitative outcomes suggested different factors that resulted in a positive relationship with NGNs confidence in inter-professional collaboration. The factors were satisfaction with the team, the number of team strategies, accessibility and availability of the educator, and the presence and accessibility of the manager. Furthermore, the qualitative phase provided support to the quantitative findings by showing that factors, including experience, opportunities to collaborate, supportive relationships, knowledge, and respect affected NGNs confidence levels. Therefore, NGNs have low confidence levels because they lack knowledge and experience, are not able to balance practice development, and they were affected by communication challenges. In order for NGNs to remain at the bedside, it is the responsibility of health care facilities to provide organizational support and encourage NGNs development. The study was based on a meta-analysis of 26 research and nonresearching reports, which is the highest level of evidence we have currently. The study is applicable to the project because the findings highlight that intervention

programs that offer support for inter-professional collaboration are necessary, as they equip nurses with essential skills, knowledge, and experiences, which instill nurse confidence.

Ulrich et al. (2010) noted that NGNs face numerous challenges that force them to leave, however, the integration of residency programs can be effective tools for retention. Ulrich et al. hypothesized that the implementation of a structured, clinical immersion RN residency was beneficial to both organizations and NGNs because retention, competence, and confidence were improved. The research was conducted over a 10-year period using a sample of more than 6,000 NGNs who had completed the RN-residency program. The concepts measured were the turnover intent, autonomy, confidence, satisfaction, and competence. Findings indicated that self-confidence and competence were accelerated (Ulrich et al., 2010). In addition, the NGNs were satisfied with their jobs after joining the residency programs, while turnover intent declined. When nurses were satisfied, patients were also contented, which resulted in positive outcomes, productivity, profitability, and safety outcomes. For example, one of the hospitals experienced a decline in the turnover rate from 35% to 5.36% within a period of 12 months after the residency program implementation (Ulrich et al., 2010). Thus, NGNs' competence and retention can be enhanced using residency programs. The primary strengths of the study were that it was conducted for a period of more than 10 years and over 6,000 NGNs were used, which makes the findings more reliable and relevant for this study. Moreover, the longitudinal study provided persuasive evidence that integration of a structured, immersion RN residency that comprises of guided opportunities and classroom instruction to develop

nursing skills, professional guidance, support, and engagement of stakeholders continues to be beneficial to hospitals.

### **General Literature**

The development of confident and competent NGNs who remain at the bedside has emerged as a major challenge to the nursing profession. The NGNs lack adequate safety and quality competencies, in addition to their limited accompanying skills, knowledge, and attitude, which are necessary for a successful nursing career (Spector & Echternacht, 2011; Ulrich et al., 2010). According to Mihyun and Jones (2010), in order to address nurse recruitment and retention issues, a majority of the hospitals around the United States have doubled the number of NGNs recruits and subsequently formed orientation programs. The relevance of this study is that structured orientation programs can facilitate NGNs shift from novice to advanced beginner. Furthermore, Mihyun and Jones established that transition or orientation programs promote competency and confidence level of new nurses, thus increasing nurse retention. Thus, nurse resident programs can be implemented in hospitals to promote NGNs retention, reduce turnover, realize patient and job satisfaction, and improve return on investment.

The utilization of orientation guidelines that have integrated weekly clinical objectives provides a road map for the orientation process. Effective and successful programs are based on the active learning process, which is required to promote skills and knowledge acquisition. Zaleski (2015) established that orientation programs increased the competence of NGNs and retention rates after the nurses completed the training. Although the study is applicable to the project, its drawback was its limitation to

NGNs in the emergency department. The study is significant to the current project as the findings have indicated that NGN orientation program can minimize turnover and enhance the acquisition of competencies and leadership skills.

Friedman, Cooper, Click, and Fitzpatrick (2011) carried out a retrospective descriptive evaluation and collected data from nurses to calculate the financial impact of residency programs. Two groups of NGNs were compared prior and after the implementation of a specialized pediatric orientation program (Pediatric Nurse Fellowship Program [PNFP]). The data were collected between 2005 and 2010, and a sample of 77 new graduate resident nurses was used. The primary limitation was that the study was focused more on specialized pediatric orientation for new resident nurses, rather than bedside nurses. The study is applicable to this project because the finding established that specialized PNFP critical care orientation program decreased turnover and increased retention.

Theisen and Sandau (2013) undertook a critical review of the literature with the aim of identifying cognitive competencies and offering suggestions on how to apply them to NGNs during the transition period from novice practitioner to advanced beginner. From the 26 studies reviewed, the six areas that NGNs lacked competence were identified as specific situations, stress management, critical thinking, organization, leadership, and communication (Theisen & Sandau, 2013). The strength of the study was the use of multiple research studies to determine the competence of NGNs. The study is significant to this project because it provided areas of competence that NGNs lacked and required

improvement. Moreover, it was concluded that a nurse residency program should be used in the transition to provide support and education during the first year of practice.

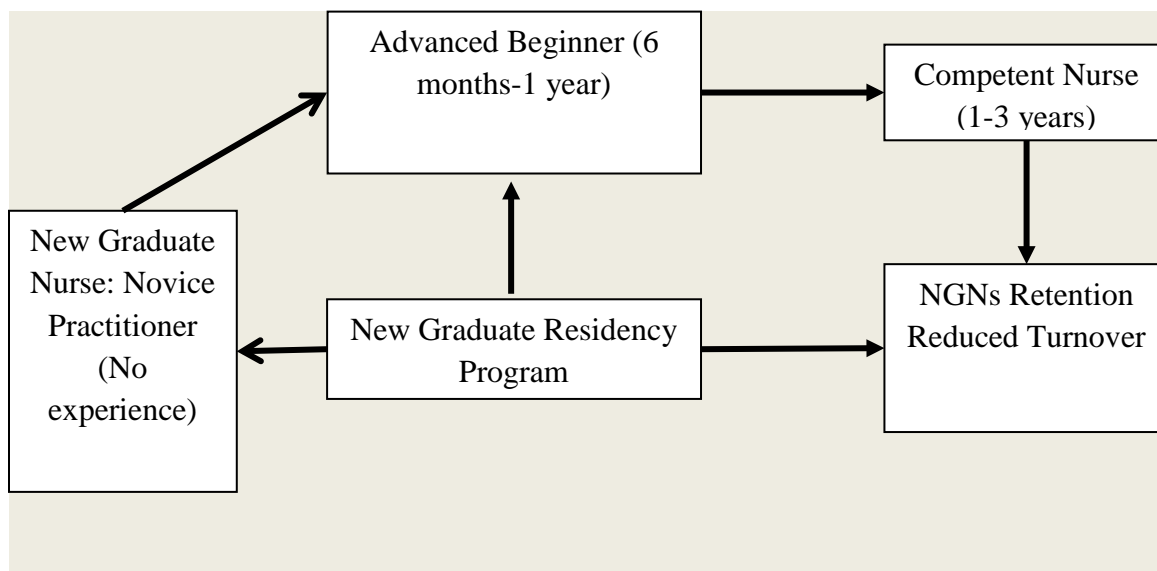
To the field of nursing, the project is of relevance given that currently the retention of NGNs ranges from 25% to 64% during their first year of employment (Friedman et al., 2014). In addition, Kovner et al. (2014) estimated that 17.5% of NGNs tend to leave their first job because of high patient burnout, stress, poor training, and lack of support (Mihyin & Jones, 2010). The Institute of Medicine has, however, recommended the implementation of nurse residency programs to accommodate NGNs and provide them with necessary skills, support, and competence (Kirkland, 2015). The high turnover experienced in the industry compels nurses to work for extra hours, and this may result in work-related stress and burnout. Subsequently, the nurses are challenged in terms of providing quality health care to the patients in need of these services.

Prompted by the increased shortages in nursing sector, new ways are being explored to discover the means to be used to attract future nurses and enhance their motivation. For instance, Hudock (2015) conducted a review to determine the cost effectiveness and retention success of these initiatives. The study established that when NGNs undergo residency programs, they increase competence and confidence, which subsequently lead to empowerment and job satisfaction. Completion of the residency programs can make NGNs feel supported and part of the nursing community (Hudock, 2015). The findings of this article are relevant because they have established that orientation and transition programs are necessary because they encourage retention, and

cut down costs associated with nurses' high turnover. The programs provide NGNs with tools that assist them to effectively graduate from being college students to a successful and respected NR, hence achievements in the nursing field.

### **Theoretical and Conceptual Framework**

In general, NGNS face many challenges during the transition from students in an academic setting to being recognized as newly licensed nurses. After obtaining the license to practice as an RN, the NGNs are still novice and lack ability to translate empirical knowledge into clinical excellence. However, NGNs are expected to provide quality care and remain at the bedside in spite of their skills, knowledge, and competencies. Thus, the demands placed on NGNs at the bedside may overwhelm the novice clinician, making them struggle with time management, a heavier patient load compared to when being a student nurse, and clinical judgment. Benner's (1984) novice to expert theoretical model was applied to guide the project. The five stages identified in the model are novice practitioner, advanced beginner, competent, proficient, and lastly expert nursing professional (Figure 1).



*Figure 1.* Benner's novice to expert theory and NGNs retention.

Benner (1984) noted that experience-based skill acquisition among people is quicker and safe if it is founded on a sound education base. The theory supported the need for a residency program for NRNs to build their skills, competencies, and experiences in order to enable retention, and reduce turnover. Benner's theory provides an outline of the different stages professional development encounters from the entry level of practice to gaining the necessary clinical excellence.

Benner (1984) noted that each nurse grows through the five stages individually. Nonetheless, in order to acquire the necessary skills and experiences, it takes NGNs longer period compared to when a residency program is implemented in the hospital. Therefore, in order to increase the possibility of NGNs staying with the organization through the different stages of development, it is imperative for a program that provides support be implemented. Nurse residency programs align with this model because they have been recognized for their positive impact on employee's competence, job

satisfaction, and confidence while at the same time improving recruitment, retention, turnover rates, and cost for the employer (Chandler, 2012; Hillman & Foster, 2011).

In the *novice stage*, the NGN has no background experience required to provide care at bedside nursing. The nurses have difficulty using evidence based information and prioritizing it. An *advanced beginner* is an NGN with experience and skills required to see the demands of a situation (Refer Figure 1). At this stage, the nurse has developed some experience and competency required in a clinical setting. In the *competent stage*, the nurse exhibits mastery of the situation via the organization of tasks and time management. The NGNs at this stage demonstrate deliberate and conscious planning. In the *proficient stage*, the nurse has the necessary skills and experience and gets involved with patients and their families. In the *expert stage*, the nurse has an understanding of the responses of the patients and can make necessary decisions (Benner, 2001).

According to Benner (2001), both novices and advanced beginners require specific rules which are necessary to guide their actions. The NGNs in this project were at these stages, and it is where the residency program was implemented to enhance retention of the nurses. In addition, it is at the advanced beginners when the new nurses can begin to develop time management and critical thinking skills. The program can provide clinical instruction to the NGNs and experienced RNs to lead by example. Thus, acquisition of these skills at beginner level would give the new nurse confidence and competence upon entering the bedside nursing.

Benner's theory of skill acquisition comprises five major concepts, also referred to as the stages of progression in nursing development. The research indicated that nurses



tend to advance through different stages after they experience various clinical events and patients. Such experiences are used in future decision making, which determines whether the nurse should remain at the bedside or leave employment. As shown in Figure 1, the transition from novice to an advanced beginner can easily be enhanced by the residency program. The nurse residency program to be implemented would be used to help the NGNs transit from being a student nurse into a professional nurse. The application of this model is to ensure effective implementation of the residency program in the chosen health facility. There were no NGNs residency programs available to me, when I began my nursing career in a critical care unit. The transition from classroom was overwhelming. I have observed many NGNs continue to struggle with this transition. The DNP student role allows research and comparison of NGNs programs and their impact on future nursing.

### **Summary**

The literature reviewed has identified the presence of a gap in knowledge and experience especially when a student nurse from a nursing school starts to work as a professional nurse. Transitions programs are designed to assist the NGNs to learn how to work in the real nursing world. Because of their limited skills and experiences, NGNs at bedside face a number of challenges, hence the need for residency programs. From the literature review, the findings of past studies have established that NGNs experience challenges, which can be solved using residency programs. The implementation of the residency program cannot only improve retention of NGNs at the bedside, but also reduce turnover rates, and increase competency and confidence skills. Bedside nurse retention

continues to be a challenge for many organizations. Despite bedside nursing being highly involving both emotionally, and physically, bedside nurses feel that they are being overworked and underpaid. Unnecessary turnover has effects on the nursing staff, organizational finances, and patient outcomes and care. Current evidence indicates that improved transition process of NGNs through the implementation of residency programs for NGNs enhances cost savings and retention. Benner's theory clearly identifies the levels of nursing practice, as nurses continue to transition. The development of the project empowers the educators and management to utilize strategies in supporting their NGNs as they develop from novice to expert.

## Section 3: Methodology

### **Introduction**

The purpose of carrying out this project initiative was to evaluate effect of Palmetto Health's nurse residency program on nurse retention. The findings were applied to answer the following question: What are the effects of NGN residency program on the retention rate of bedside NGNs? The aim of Section 3 of the DNP project is to discuss project design, population targeted, sample and sampling technique, ethical considerations, and data analysis methods to be utilized. The ability to recruit and retain NGNs at the bedside is crucial for the quality of life improvement in the facility in terms of safety of patients and proper care.

### **Project Design/Methods**

Selecting the appropriate project design is essential in evaluating the effects of NGN residency programs on the retention of nurses at the bedside. The project initiative used a quantitative comparison design to compare data collected 3 months before the implementation of the critical care program and 3 months after the residency program has been implemented. Thus, the project initiative was based on a non-experimental, quantitative design that involves the collection of retrospective and prospective data related to the retention rate of NGNs. The data collected prior to the revised residency program was collected retrospectively and compared to the prospective data collected after the implementation of the revised residency program to establish the residency program's impact on the retention rate of bedside NGNs.

### **Population and Sampling**

The practice setting for the DNP project initiative was a teaching hospital with six different campuses that hire over 30 NGNs per year. Palmetto Health Richland Hospital is a 649-bed regional community teaching medical center. The project initiative was conducted in the critical department, which admits more than 50 patients per day and has approximately 60 critical care patients. Patients admitted to the critical care units have different diagnoses, including heart failure, sepsis, respiratory distress, end-stage renal disease, suicide attempts, end-stage liver disease, alcohol withdrawal, abdominal surgeries, and pneumonia. The nurse-to-patient ratio in the unit is usually 1:2. Retention data were collected directly from human resources.

### **Data Collection**

An approval from the Walden University Institutional Review Board (IRB) was sought for the data collection process to begin. Retention data related to NGN who complete the residency program were acquired from the human resources department of the academic medical center with the assistance of the nurse research department. After the Nursing Research and Program Development administrator approved the human resources department to release data for this project, the DNP student contacted HR through e-mail and phone to schedule an appointment to gather retention and demographic data of bedside nurses.

The HR department provided data that included the retention rates of NGNs 3 months prior to the implementation of the revised residency program and 3 months after the NGNs completed the revised residency program. Additional data included the NGNs'

age, level of education, and years of experience at the bedside. The HR department provided the information in a link on the institution's intranet that could only be accessed by using my institutional password. The data were downloaded into a Microsoft Excel spreadsheet for analysis (Appendix A). The data would be kept on a password-protected computer that is stored in a locked private office.

### **Human Protection and Ethical Considerations**

IRB approval was sought before data collection begins. The DNP student collected all data from the human resource department and only shared with the critical care and research departments. There was no need to ask for consent because the data were deidentified and there was no risk of collecting personal information. All data collected were retained and not shared with other stakeholders. Confidentiality, anonymity, and privacy was maintained as required by the Research Ethics Board. The collected and analyzed data were stored on in a secure encrypted password-protected computer. Additionally, the computer and all documents were stored in a locked file cabinet and kept in a locked private office.

### **Data Analysis**

A comparative analysis was done to identify differences in the retention rates of NGNs prior to and after completion of the revised residency program. To analyze the findings, Microsoft Excel was utilized to compute descriptive statistics related to the demographic data collected and retention rates. Retention of NGNs in the facility was measured by the number of nurse graduates who were still employed within the facility after 6 months. A complete demographic analysis would entail the quantification of data

and analysis of trends. Cumulative percentages in this project were conducted on participants' demographic, including nursing experience at the bedside, the level of education, and age.

### **Project Evaluation Plan**

The bearing of evaluation was utilized in the project to show the improvement in nursing retention, delivery of health care, and patient outcomes. The NGNs residency program would initiate improvements intended to enhance NGNs skills, resources, and confidence. Formative evaluation was undertaken throughout the capstone project to make sure that all the project activities were carried out effectively and to satisfaction. Formative evaluation is carried out in order to improve a project by evaluating the delivery of the project and the impact on quality improvement (Kingston & Nash, 2011). In this case, the evaluation was to improve the DNP project's performance and design. Formative evaluation was conducted in proactive, clarificative, and interactive assessments. For instance, at the proproject evaluation, the literature was reviewed to understand the need for the project. The clarificative evaluation entailed making clear the theory of change in regard to what the project is based on. After permission was secured from the IRB and the academic facility, the DNP student liaised with the human resource department to be provided with the necessary data. The data were collected by DNP student and a comparative quantitative analysis carried out to establish the retention rates after the residency program was implemented.

## Summary

In this section, methods and procedures used by the DNP student in this project are described. The DNP project initiative was conducted in a teaching hospital with six different campuses to determine the effects of NGN residency program on the retention rate of bedside NGNs. The data were collected before the revised residency program was implemented and compared to prospective data collected 3 months after the revised residency program was implemented. A quantitative comparison research design was utilized in this project, while data were collected through the use of retention rates before and after implementation of the nursing residency program. Both retrospective and prospective data on retention rate of NGNs were used to realize the objective of the project initiative. Before data were collected, approval from the IRB was sought. Data were protected by being stored in a password-protected computer and kept in a private room under lock and key. A comparative analysis was applied to establish whether the revised residency program has any significant effects on retention rates. The goal of evaluating the Palmetto Health's NGNs residency program was improving nursing knowledge, proficiency, and increasing the desire for the NGNs to remain at the bedside. The project initiative would help provide the organization with the valuable information to improve NGN retention and identify measures to support them.

## Section 4: Findings and Recommendations

### **Introduction**

Nurse turnover is a major problem in the U.S. health care sector and has been linked with the ineffective transition of NGNs from nursing school into professional practice. As of 2013, the practice site, Palmetto Health Richland Hospital, had a nurse turnover rate of 15 % at 1 year of employment (Li & Jones, 2013). The purpose of this quality improvement (QI) project was to assess the impact of an NGN residency program for bedside NGNs on the retention rate 3 months after implementation. Data for this QI project were sought from Palmetto Health Richland Hospital's human resources department after approval from the Walden University IRB. The data collected included retention rates, turnover rates, and the NGNs' demographic characteristics including age and level of experience from 2014 to 2017. This section provides a comprehensive discussion of the data analysis results, the implications of the findings, and project recommendations. Section 4 also presents the contribution of the doctoral project team, strengths, limitations, implications, and recommendations. A comprehensive summary of the findings and recommendations of the project is also provided at the end of the section.

### **Findings and Implications**

The question for the DNP project was this: What is the effect of a NGN residency program for bedside NGNs on the retention rate 3 months after program implementation? The objective of the project was to increase the retention rate to 95% of NGNs within the first year after implementation of the residency program.



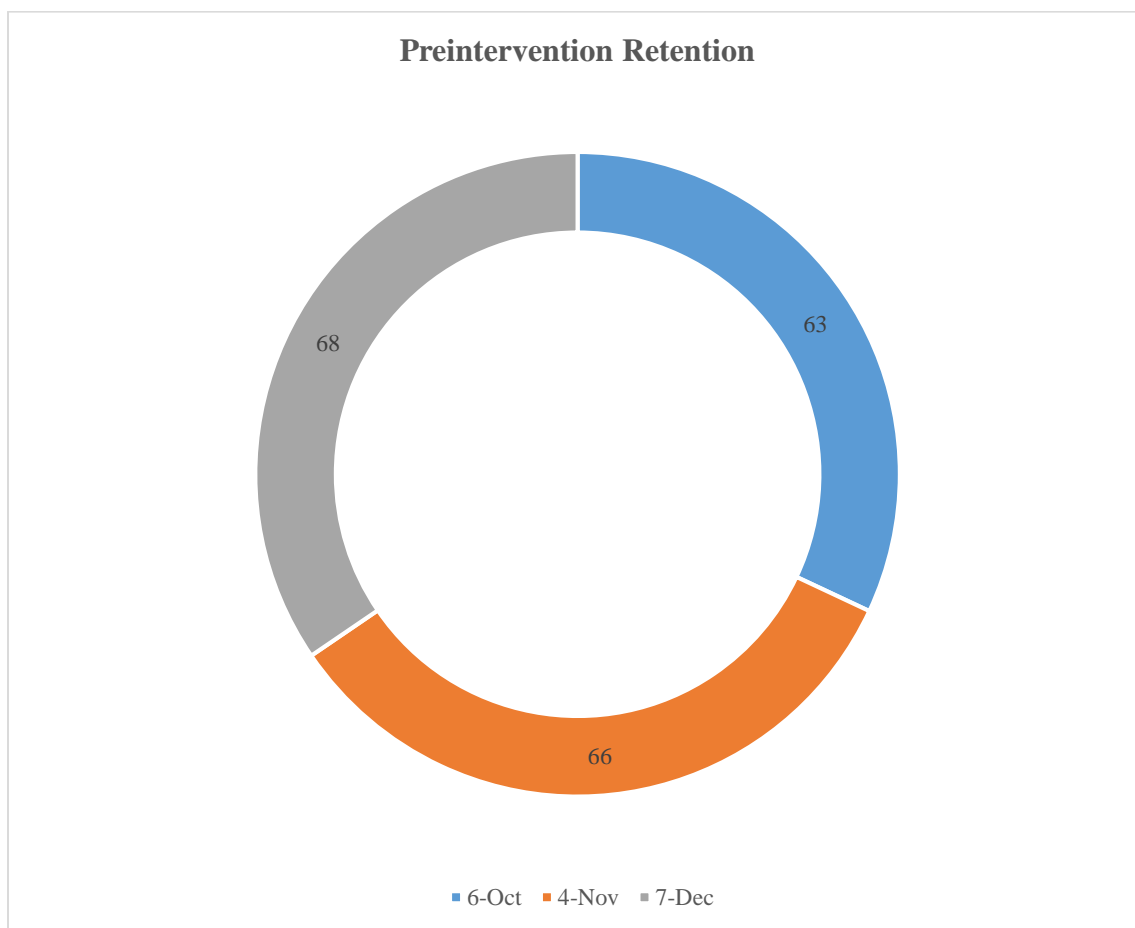
Data analysis was conducted by comparing the retention and turnover rates of NGNs at the hospital before and after the implementation of the NGN residency program. The participants included graduate nurses who were recruited at Palmetto Health Richland Hospital from October 2014 to 2017 (Table 1). The NGNs who were recruited in October 2014 were comprised of four ADN and two BSN nurses ages 22 to 35 years. On November 4, 2014, one ADN and three BSN nurses were recruited, while the NGNs who were enrolled in December 2014 consisted of three ADN and four BSN nurses. The ages of the participants who were recruited in November and December varied between 21 and 32 years. The nurse retention rates at Palmetto Health Richland Hospital in the 3 months before the implementation of the NGN residency program were slightly above average. However, there was a positively increasing trend in nurse retention from 63% in October, through 66% in November 2014, to 68% in December 2014.

Table 1

*Retention Rates 3 Months Before NGN Residency Program*

New Graduate Hires 2014 Month	Number of New Graduate Hires 2014	Age	Years of Experience	Education Level	Retention Rates %
October	6	22-35	0-9Mos	4 ADN/2 BSN	63
November	4	21-28	0-9Mos	1 ADN/3 BSN	66
December	7	24-32	0-9Mos	3 ADN/4 BSN	68

Figure 2 shows a pie chart of the preintervention retention rates at Palmetto Health Richland Hospital between October and December 2014.



*Figure 2.* Preintervention retention rate.

In total, 18 NGNs (12 BSN and six ADN) joined the NGN residency program. After the implementation of the residency program, the nurse retention rate increased by 14%. All the preintervention participants had 0 to 9 months of experience. The NGN residency program was implemented for 52 weeks and consisted of simulation quality classes, one-on-one skills validation, core curriculum, hands-on application with mentors, and professional development. The NGNs were aged 23 to 39 years and had 0 to 6 months clinical experience. Three months after the implementation of the NGN residency program, the nurse retention rate at the hospital increased to 82% (Table 2).

Table 2

*Retention Rates 3 Months After Residency Program*

New Graduate Hires 2014	Age	Years of Experience	Education Level	Retention Rates %
18 New Graduate Nurses enrolled in the 52 week residency program	23-39	0-6Mos	12 BSN/6 ADN	82

Based on the data provided by the HR department at Palmetto Health Richland Hospital, there was a slight increase in the NGNs' turnover rate from 15.74% in 2014 to 15.93% in 2015. However, the turnover rate of NGNs followed a decreasing trend in 2016 (14.35%) and 2017 (13.55%). The turnover rates of Palmetto Health Richland Hospital were lower than the rate of 16.5% that was reported in the literature review (Mazurenko et al., 2015). As indicated in Table 3, the NGNs' retention rate increased with reducing turnover rates. In contrast with the nurse turnover, the retention rate slightly reduced from between 2014 (84.26%) and 2015 (84.07%). However, the nurse retention rate improved by approximately 1% in 2017 (86.45%) from 85.65% in 2016 (Table 3). These results of this QI project indicated that the nurse turnover and retention rates at Palmetto Health Richland Hospital were indirectly proportional. Specifically, an improvement in retention automatically led to a reduction in the nurse turnover rate.

Table 3

*Nurse Retention and Turnover from 2014 to 2017*

Fiscal Year	Turnover	Retention
FY14	15.74%	84.26%
FY15	15.93%	84.07%
FY16	14.35%	85.65%
FYTD17 (Annualized)	13.55%	86.45%

The findings of this QI project were anticipated based on evidence from previous studies located in the literature review. The high turnover rates among clinical NGNs has been linked to the NGNs' perceptions of nursing as an opportunity to acquire experience and advance into NPs, travel nurses, or CRNAs (Li & Jones, 2013). Nurse turnover has also been associated with burnout, lucrative advanced nursing positions, unsatisfactory salaries, unfavorable working shifts, lack of motivation, and unfavorable working conditions (Hayes et al., 2012). High turnover and low retention of clinical NGNs cause significant financial losses and reduce hospitals' ability to provide efficient care services (Hayes et al., 2012). Thus, there is a need for hospitals to adopt strategies that can help reduce nurse turnover rate and improve retention to ensure consistent care delivery and prevent loss of vital clinical experience.

Research has indicated that establishment of residency programs for NGNs can contribute to improving retention and decrease retention of nurses (Reem et al., 2014). There is a gap in practice regarding NGNs' knowledge, experience, and ability to effectively transition from nursing school into professional practice (Welding, 2011). Based on the results of this QI project, the major impacts of NGN residency programs on health care institutions include reduction of health care costs, increased retention,

improvement of satisfaction, enhancement of skills, and acquisition of experience (Kramer et al., 2013). The evidence collected in this QI project supported the adoption of NGN residency programs by hospitals to increase retention (Trepanier et al., 2012).

In addition to improving nurse retention and reducing turnover rates, nurse residency programs have also been found to be cost-effective if implemented appropriately (Trepanier et al., 2012). Using a cost-benefit analysis (CBA) approach, Trepanier et al. (2012) evaluated the economic outcomes that are associated with NGN residency program based on turnover rate and labor usage data. It was found that NGN residency programs decreased nurse turnover rate by approximately 30% over a 1-year period. In addition, the study indicated that NGN residency programs could lead to savings of health care costs of \$10 to \$50 per patient daily (Trepanier et al., 2012).

Goode et al. (2009) also provided evidence supporting the utilization of NGN residency programs to promote nurse retention. Due to the amount of supervision and education involved in NGN residency programs, the economic costs resulting from nurse turnover are substantial (Goode et al., 2009). After implementing an NGN intervention, Goode et al. reported significant improvements in nurses' confidence with their skills and communication with patients' families and team members within 3 months. In addition, the NGN program significantly reduced the nurses' stress levels and reduced their desire to leave employment (Goode et al., 2009).

The evidence that was used in this QI project indicated that NGN residency programs have the potential to affect satisfaction and professional socialization processes between nurses and both colleagues and patients (Anderson et al., 2009; Hillman &

Foster, 2011; Kramer et al., 2013). Regarding socialization, Kramer et al. (2013) found that NGN residency programs facilitated the acquisition of experience, enhanced nursing skills, and promoted reflective sessions, which promote nurse retention. In addition, NGNs and experienced nurses tend to have more satisfaction with bedside nursing when they receive adequate support and encouragement by staff and the hospital management (Kramer et al., 2013). Thus, the implementation of NGN residency program in hospitals improves the nurses' satisfaction levels and increases their likelihood of retention.

The findings of this QI project are similar to Anderson et al.'s (2009), who evaluated the impact of residency modules on nurses' perceptions of engagement and satisfaction with clinical practice. Anderson et al. analyzed trends in factors that caused both satisfaction and dissatisfaction among NGNs. The results indicated that nurse residency programs were effective in enhancing retention of nurses through improvement of satisfaction and engagement (Anderson et al., 2009). Research has demonstrated that nurse residency programs can effectively promote clinical decision-making and organizational commitment (Hillman & Foster, 2011). In addition to cost savings, satisfaction, and skill development, nurse residency programs also lead to positive change in culture and the development of transition programs to assist NGNs to easily transition to professional practice (Hillman & Foster, 2011). Findings indicated that NGN residency programs could increase nurse retention by up to 22% over a 5-year period (Hillman & Foster, 2011).

The effectiveness of residency programs has led to the growth of NGN residency programs nationally with health care institutions aiming to ensure high nurse retention to

cope with the current shortage of RNs (Chandler, 2012). It was anticipated that NGN residency programs would equip NGNs with the necessary experience and improve their satisfaction, thus minimizing the likelihood of turnover. According to Chandler (2012), most NGNs find it difficult to transition into professional practice because of lack of confidence and experience to address clinical practice issues. Thus, it is important for health care institutions to identify the challenges facing NGNs to prevent nurse turnover quickly. Based on Chandler, all NGNs acknowledge that they require support and encouragement by staff and hospital management to ensure effective transition into practice and successful operation at the bedside. Thus, health care institutions should establish NGN residency and other transition programs that provide support and guidance to NGNs.

Though effective in promoting retention and reducing nurse turnover, NGN residency programs are also faced with various challenges including inadequate skills and inability to incorporate classroom knowledge into clinical practice (Welding, 2011). It is the expectation of all health care institutions that NGNs transition quickly and more effectively into practice (Welding, 2011). However, as evidenced by this QI project, the positive impacts of NGN residency programs are experienced over a long duration. Thus, health care institutions should invest in long-term NGN residency programs to ensure the improvement of retention over longer durations. In addition, health care institutions should engage in the development of continuous support mechanisms to keep NGNs engaged in care longer. While challenges to the effective transition of NGNs still exist, it

is important to ensure that NGNs are provided with adequate support and encouragement to reduce the prevalence of nurse turnover.

### **Implications for Clinical Practice**

The U.S. health care sector is currently experiencing a shortage of RNs, which is expected to further worsen with the aging nursing population and increasing patient needs. The shortage of RNs is compounded by the inability of universities and colleges to produce nurses at a rate that can effectively meet the increasing demand (Hudock, 2015). To address the current shortage of RNs in health care, it is important for health care institutions to recruit and successfully retain NGNs. However, there is a high rate of nurse turnover from U.S. hospitals, which is caused by long working hours, high patient acuity, lack of motivation, stress, unfavorable work shifts, lack of support systems, unfavorable work conditions, and inadequate training (Mihyin & Jones, 2010; Reem et al., 2014). The adoption of transition programs such as the current project can facilitate effective orientation of NGNs into practice, thus improving the likelihood of retention. Nurse residency programs can be important to organizations when recruiting staff members with no prior experience (Welding, 2011). By offering transition programs, new employees can develop a lasting impression of the organization, thus improving their understanding of the organization's goals and values (Welding, 2011). Though research has produced little evidence about the barriers to effective transition into professional practice, it is evident that NGN residency programs improve satisfaction and retention, while also mitigating the causes of nurse turnover (Mihyin & Jones, 2010). Based on the findings of this QI project, the implementation of NGN residency programs in hospitals



can promote the acquisition of vital practice experience, unit socialization, skill enhancement, and reduce the rate of nurse turnover over a 1-year or shorter period.

Nurse residency programs can also have an impact on management and patient safety in organizations and health care institutions. According to Kingston and Nash (2011), health care facilities are evaluated based on the quality of care they provide. Research also indicated a strong association between patient safety and adequate staffing in hospitals (Welding, 2011). In addition to high recruitment and training costs, nurse turnover can also cause significant human costs (Welding, 2011). The existence of more NGNs in hospitals in relation to experienced nurses has also been found to cause negative patient outcomes that in turn lead to decreased patient satisfaction (Hillman & Foster, 2011). Thus, the implementation of a NGN residency program can provide nurses with the adequate orientation and preparation towards the provision of safe health care, hence improving patient outcome.

### **Implications for Policy**

The implications of the findings of this project for policy are based on the use of NGN residency programs to mitigate nurse turnover and promote seamless transition into professional practice. According to Chandler (2012), all health care organizations federal and state boards and accrediting bodies should collaborate to ensure an effective transition of NGNs into practice after completing their prelicensure degree programs. Based on Benner's (1984) theory, the adoption of an NGN program can help NGNs become advanced beginners before starting clinical practice. According to Hillman and Foster (2011), more experienced nurses starting their careers work without frustrations

and stress, hence, decreasing the nurse turnover rate. However, to date, no guidelines have been developed to guide the orientation and transition of NGNs into professional practice. Thus, it is important for stakeholders in the U.S. health care sector to participate in the development of effective evidence-based guidelines for NGN residency programs. The development of evidence-based guidelines to direct nurse residency programs can help employers and nurses to successfully implement NGN residency programs, hence, ensuring that all NGNs receive adequate orientation and training while transitioning into professional practice. Using the guidelines, nurses can also identify best practices relating to the orientation of NGNs and reducing nurse retention (Reem et al., 2014). In addition, the guidelines can be used as a standard for all RNs in the United States during the transition into practice.

### **Implications for Future Research**

Following the close association between NGN residency programs and nurse retention, this QI project has various implications for nursing research. First, there is inadequate evidence in the literature on the impacts of educational and NGN residency programs specific themes such as NGNs' satisfaction, work environment, and scheduling in health care institutions that lead to the successful implementation of NGN programs. Thus, future research should focus on primary quantitative studies that analyze the association between factors such as NGNs' satisfaction, extrinsic rewards, hospital environment, and scheduling that influence the success of NGN residency programs. The information gained from these studies would increase nursing knowledge regarding the impact of NGNs on nurse turnover and facilitate the development and successful

implementation of NGN residency programs that address specific factors that only affect retention. Palmetto Health Richland Hospital has developed processes to monitor the nurse retention and turnover rates after every financial year. Based on the results of the results of this QI project, the hospital is on track to achieve significant retention rates that are consistent with previously set goals. However, to effectively validate the effectiveness of the project, there is need for continuous research and evaluation of the impacts of factors such as the duration of NGN residency and other external factors on retention.

### **Implications for Positive Social Change**

The implications of the project for positive social change are based on the impact of residency programs on care quality and safety. The findings of the current project indicate that the implementation of the residency program increased retention and reduced turnover among nurses at Palmetto Health Richland Hospital. Many hospitals have turned to residency programs to address nurse turnover and impart valuable skills to NGNs to facilitate a seamless transition into practice (Welding, 2011). By maintaining the residency program, Palmetto Health Richland Hospital can significantly improve retention and produce more competent bedside nurses. Though nurse residency programs do not reduce turnover rates instantly, they provide a platform for addressing issues facing NGNs (Chandler, 2012). Thus, an evidence-based nurse residency program can be used as a means of identifying and addressing staff and patients' needs in health care institutions. In addition, nurse residency programs can facilitate mentorship of NGNs to

ensure seamless transition and adaptation into professional nursing practice (Chandler, 2012).

Nurse residency programs are focused on equipping NGNs with clinical skills and promoting nurse satisfaction that subsequently improves patient outcomes (Goode et al., 2009). Through effective collaboration between nurse and organizational leaders, preceptors, and educators, residency programs can lead to the creation of conducive work environments for patients and nurses. In the evaluation of this QI project, it was determined that the NGN residency program has the potential to address the shortage of nurses that is facing the health care sector. According to Kirkland (2015), the provision of safe, quality and efficient care is the foundation of social change in practice. Social change in practice is achieved by the development of a positive work environment that is conducive for both patients and nurses (Goode et al., 2009). The implementation of this QI project in practice may translate to improved nurse retention, which would lead to improved patient outcomes at the hospital. In addition, this QI project can also lead to the improvement of nurses' knowledge and dedication to professional practice. Because, residency programs are learning-oriented, the implementation of the current project can result in substantial improvement in patient outcomes and a reduction in the mortality rate.

### **Recommendations**

The current health care sector is currently experiencing a shortage of RNs and an increasing demand for health care. With the passing of the Affordable Care Act in 2010, experts estimate that the number of RNs is not sufficient to address the growing demand

for health care (Zaleski, 2015). However, research indicates that the turnover rates among NGNs in U.S. hospitals are still high despite numerous efforts to try to address the problem (El-Jardali et al., 2009). While various strategies have been developed to facilitate effective transition into practice, researchers have found that some NGNs leave their positions as early as a few months after being employed (Mihyin & Jones, 2010). In addition to being new in the health care industry, NGN residency programs also lack sufficient backing from data and research on already implemented programs (Welding, 2011). As a result, many NPs and administrators do not have adequate understanding of NGN residency programs and their effects on transition into practice. Thus, health care institutions should develop educational programs for NGNs to improve their understanding of NGN residency programs and their importance to effective transition into practice.

This QI project demonstrated that NGN residency programs are cost-effective and can increase retention of NGNs while reducing the nurse turnover rate (Goode et al., 2009). The major benefits of NGN residency programs include improvement of satisfaction, enhancement of skills, acquisition of experience, and cost reductions in hospitals (Zaleski, 2015). Based on the findings from this project various recommendations have been made regarding the adoption and implementation of NGN residency programs for improving retention. First, statewide adoption of NGN residency programs is recommended due to their cost-effectiveness and potential benefits to nurses' professional improvement and care delivery. The incorporation of NGN programs in health care can also lead to other benefits including improved skills and communication

between nurses and family members, patients, and colleagues (Goode et al., 2009). Thus, hospitals should invest in developing effective NGN residency programs to increase the likelihood of nurse retention.

This QI project identified the need for a support system for NGNs to provide continuous encouragement and motivate NGNs to engage in clinical practice. Health care institutions should ensure that NGN residency programs provide adequate support to NGNs to improve nurse retention. The project also established that NGN residency programs play a significant role in equipping NGNs with the requisite knowledge, knowledge, and abilities for successful professional practice. Thus, in addition to implementing NGN residency programs, health care institutions should also ensure that the appropriate curriculum and modules are included in the program.

Based on the effectiveness of NGN residency programs in promoting nurse retention and improving patient outcomes, health care institutions should also focus on developing evidence-based clinical guidelines to direct effective nurse residency. The practice guidelines can provide health care institutions with a framework for implementing NGN residency programs and ensure all NGNs receive adequate training and orientation while transitioning to professional practice. In addition, the clinical guidelines would facilitate the identification of best practices and act as a standard for nurse residency in all health care institutions in the United States. Though there are no guidelines for nurse residency in the United States, the development and implementation of such guidelines can effectively promote the orientation of nurses, promote retention, and enhance patient outcomes.

Based on the findings of this QI project, it is important for nursing schools to collaborate with health care institutions to ensure all NGNs are provided with adequate support while in residency period to ensure retention and effective transition into practice. However, future studies should be focused on evaluating the turnover and retention rates for this specific group of nurses longitudinally to assess the long-term impacts of nurse residency on NGNs and the health care sector. Also, future studies should consider including former NGN participants to get a comprehensive perspective regarding the leading causes of nurse turnover and the main challenges facing NGNs in the residency period.

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

#### **Strengths**

The QI project had various strengths. One major strength was that the project improved nurse retention and facilitated a seamless transition of NGNs into professional practice. Regardless of the project outcomes, having an effective residency program in place at the hospital benefits the nurses, patients, and all the stakeholders. The NGN residency program also improved the integrity and accountability of the nurse educators who train NGNs while transitioning into practice. The QI project also facilitated a high level of engagement from nurse leaders and executive leadership at the hospital. The evidence and literature that was collected in the QI project was consistent with the needs of NGNs. Thus, the stakeholders have provided ongoing support for future studies on the effectiveness of the NGN residency program and the NGN's satisfaction with the program. Evidence from the literature review showed that NGN residency programs have

the potential to improve retention and patient outcomes (Theisen & Sandau, 2013). Thus, the adoption of competency-based residency programs can be used to address the gap in practice by training NGNs and improving their knowledge to perform clinical tasks in different health care settings.

The QI project has set a foundation for nursing and other leaders from outside the health sector to understand the importance of NGNs and create ways of attracting them to meet the growing shortage of nurses in the health care industry. According to Melnyk, Gallagher-Ford, Long, and Fineout-Overholt (2014), nurses are tasked with integrating evidence-based competencies into practice to reduce the cost of health care and enhance patient outcomes. This evidence-based project has provided valuable information regarding NGN residency programs and their effect on professional development and quality of care.

An additional strength of the QI project was the strong literature review which provided insightful information regarding NGN residency programs and their impact on nurse retention and care quality. Evidence indicates that most turnover occurs during the process of transition into professional practice (Washington, 2011). Using Benner's theory as a framework provided different perspectives of NGN residency and how it can be employed to reduce health care costs and promote patient outcomes.

### **Limitations**

One of the limitations of the project was the restricted scope caused by lack of participation by preceptors and NGNs who had formerly joined the NGN residency program. Thus, the primary causes of turnover among NGNs could not be effectively



addressed. A second limitation was the use of a non-experimental research approach. As a result, the impact of extraneous variables on the findings of the project initiative exists because the data was only based on one group of NGNs at Palmetto Health Richland Hospital. Though manipulation of data is easy in non-experimental designs, they cannot be used to determine cause and effect (Exadaktylos, Espín, & Branas-Garza, 2013). Thus, the generalizability of the findings of the project are limited (Mackey & Gass, 2015). A third limitation of the project was the small sample sizes of NGNs that were used to calculate nurse retention and turnover at Palmetto Health Richland Hospital. The use of a small sample sizes negatively affected the external validity of the project (Mackey & Gass, 2015). The use of a large sample size would have provided more accurate findings. A fourth limitation is based on the location in which it was undertaken. Palmetto Health Richland Hospital is a regional community teaching medical center that is in South Carolina, thus, the findings cannot be generalized to more general or urban populations.

### **Analysis of Self**

#### **As Scholar**

According to Melnyk et al. (2014), DNP graduates possess the knowledge and adequate preparation to identify, evaluate, and address practice issues that evolve using existing nursing theories and models. The DNP curriculum promotes accountability among graduate nurses as practitioners to use scientific approaches to meet the growing patient needs in the health care industry. The QI project was a scholarly undertaking that aimed to improve NPs' ability to incorporate knowledge to solve existing and new clinical practice problems and translate the evidence into different practice settings.

Throughout the current QI project, I have gained tremendous knowledge and experience that has contributed positively to my scholarly development. Through this QI project, I was able to identify a gap in practice that needs to be addressed to enhance care delivery in the health care industry. In addition, I identified an appropriate theory that guided the QI project and facilitated systematic evidence-based investigation of the problem of interest to establish existing trends in retention and burnout among NGNs. As a scholar, I was able to identify links between theory and practice and incorporated them into the QI project. The QI project facilitated improvement in knowledge and understanding of nursing and retention among NGNs through data collection, synthesis of literature, and knowledge integration. Thus, the QI project is consistent with the DNP Essentials I and III because I effectively identified a problem in practice and connected it with the scholarly project (AACN, 2011). The QI project significantly improved my ability to appraise various forms of literature and improved my knowledge to synthesize evidence for the development of the evidence-based scholarly project. The gained knowledge would enhance my capacity to analyze and develop best practices that relate to the nurse residency program in my current role. Additionally, the knowledge gained from this QI project would allow me to engage in activities that promote the advancement of nursing to improve professional nursing.

### **As Practitioner**

As health professionals, DNP nurses have the responsibility to perform oversight functions on all nurse residency programs. Thus, the QI project significantly contributed to my development as a NP. The project involved the recognition, understanding, and

adaptation of factors in the hospital that contribute to nurse turnover. In addition, the QI project involved the students' ability to identify and organizational barriers to nurse retention, and the adaptation of NGNs to external factors in the health care industry that contribute to nurse turnover. As a NP, the QI project enhanced my ability to develop interventions that help in the management of retention and turnover among NGNs. The development of evidence-based strategies to prevent nurse turnover would enable me to contribute to policy change in health care along with the improvement of the quality of care.

According to AACN (2011), the DNP program is meant to prepare nurse graduates to address the gap between education and clinical practice and to assume leadership roles in academic institutions and health care organizations. Through the QI project, I gained adequate knowledge that enabled me to employ nursing theories as frameworks for the development and evaluation of new nursing strategies and apply the knowledge in practice. The QI project has enabled me to mature as a NP and enhanced my commitment to improve my profession, promote positive patient outcomes, and develop effective interpersonal relationships with colleagues and patients. By effectively executing the stages of this scholarly project, I have developed adequate confidence to approach all stakeholders in my field and present effective strategies that can lead to improved health outcomes and reduced expenses by hospitals.

### **As Project Developer and Manager**

The role of a project developer is to manage and observe all the operations and tasks that occur during the implementation of a project. Thus, a project developer is

expected to understand all the dynamics of projects including the project goals and objectives and how these goals are achieved. In the QI project, I was tasked with the development of objectives and the implementation of changes in the program to achieve the anticipated outcomes. In collaboration with the team members, I constantly reviewed the resources that were needed to ensure the project proceeded well. As a project developer, the QI project has strengthened my leadership skills and enhanced my abilities to work in a team and achieve my personal goals. Also, the project provided me with the opportunity to employ critical thinking skills and apply nursing theory in designing strategies that help to improve the quality of care. As a project developer, I investigated the aspects of nurse turnover, retention, and nurse residency programs. In addition, I effectively collaborated with all stakeholders and considered their perspectives to determine organizational needs that needed to be addressed by the project.

Regarding my future professional development, I am dedicated to lifelong learning and achievement of social change in the health care sector and community. The QI project has contributed to my professional development both as a scholar and as a lifelong learner. Thus, I am adequately equipped with the requisite skills and knowledge to develop and evaluate potential solutions to existing clinical problems. I have gained an extensive understanding of how the current project addresses the existing gap and contributes to clinical practice.

Though the development of the QI project was challenging, the entire process provided me with a comprehensive view into the challenges of using evidence-based practices to address clinical problems. The QI project also enhanced my learning

experiences and provided me with varying insights into the process of solving practice issues using evidence-based interventions.

Overall, the QI project has changed my perceptions regarding the role of the DNP projects in the establishment of evidence-based strategies to address the ever-increasing patient needs in the health care sector. Despite few challenges that I encountered during the project, the positive impacts the DNP project has had on me as a scholar, NP, manager, and project developer far outweighs the negative impacts.

### **Conclusion and Summary**

The QI project involved the evaluation of Palmetto Health's nurse residency program on nurse retention among NGNs. The ability of health care institutions to recruit and retain nurses in practice is important in the improvement of care quality and promoting patient safety. Though the concept of nurse residency is new in the health care industry, it has the potential to improve nursing practice by reducing the nurse turnover rate, improving patient outcomes, and minimizing the cost of health care. Nurse residency programs are cost-effective and can facilitate the acquisition of experience, enhancement of skills, and promotion of satisfaction among patients and NGNs (Trepanier et al., 2012). The use of NGN residency programs to facilitate the transition of NGNs from nursing school to practice is new at Palmetto Health Richland Hospital and the health care sector in general. Nurse residency has been found to decrease the rate of nurse turnover by improving NGNs' satisfaction, improving competencies, and facilitating the acquisition of experience that is necessary for seamless transition into practice (Goode et al., 2009; Trepanier et al., 2012). However, NGN residency programs

are also faced with various challenges including inadequate training and inability to apply classroom knowledge into practice. There are various orientation programs for NGNs in previous literature. However, no specific program has been identified as being more effective in promoting retention of NGNs in the health care industry. As the shortage of RNs continues to grow, the importance of retention of NGNs becomes even more challenging due to the difficulties encountered when recruiting qualified nurses. Thus, further research on the role of specific factors in the success of NGN residency program is imperative.

The QI project has significantly contributed to my growth as a scholar, NP, project developer and as a manager. As a scholar, the QI project has enhanced my ability to identify and incorporate knowledge and theories to practice. In addition, I identified a gap in practice and reviewed evidence in support of NGN residency. As a NP, the project initiative has improved my ability to develop and evaluate nursing strategies that can help to reduce the turnover rate among NGNs. The QI project also developed me as a project developer by enhancing my leadership skills. In addition, the QI project enabled me to hone my critical thinking skills and employ nursing theory to enhance care safety and patient outcomes.

### Section 5: Dissemination Plan

The DNP student intends to disseminate the QI project to stakeholders using a poster (See Appendix B). The type of audiences during the dissemination of the QI project may include nurse leaders, NGNs, physicians, and nurse educators. The poster can also be disseminated in conferences.

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## Appendix B: Scholarly Product for Dissemination

### Losing New Graduate Bedside Nurses, a Practice Improvement Initiative

**Name:**

**Institution:**

#### Overview of the Evidence Based Project

**Background:** According to Friedman et al. (2014), retention of NGNs in the first year of employment is low and ranges from 25 percent to 64 percent. Approximately 17.5 percent of NGNs leave their first job within one year of employment, and one-third of registered nurses usually leave their jobs within a period of two years (Kovner, Brewer, Fatehi, & Jun, 2014). One reason the NGNs give for leaving bedside practice is that they only use the job to obtain the minimum experience necessary to advance their careers as Nurse Practitioners (NPs), Certified Registered Nurse Anesthetists (CRNAs), or to become travel nurses.

**Problem statement:** The turnover rate at one year of employment at Palmetto Health Richland Hospital is currently 15 percent, as compared to the national nursing turnover rate at greater than 16 percent (Li and Jones, 2013). Poor nurse retention also limits the capacity of hospitals to render efficient services due to the loss of nurses who seek better job prospects (Hayes et al., 2013).

**The purpose:** To identify the likelihood of new graduate nurses remaining at bedside after participating in a NGN residency program.

**The objective:** To increase the retention rate to 95 percent of NGNs within the first year after implementation of the residency program.

**The research question:** What is the effect of a NGN residency program for bedside NGNs on the retention rate three months after program implementation?

The DNP project would have implications for the facility and the unit. A decrease in the costs of training after the implementation of the residency program was expected. Newly licensed nurses' decisions to remain in or leave their position have effects on the nursing profession on numerous levels.

#### Theoretical and Conceptual Framework

Patricia Benner's Novice to Expert theoretical model was applied to guide the project (Benner, 1984). The five stages identified in the model are novice practitioner, advanced beginner, competent, proficient, and lastly expert nursing professional.

#### Findings and Recommendations

New Graduate Hires 2014	Age	Years of Experience	Education level	Retention rates
18 New Graduate Nurses enrolled in the 12 week residency program	23-39	0-6 months	12 BSN/6 ADN	82%

**Findings:** The nurse retention rates at Palmetto Health Richland Hospital was 63% in October, 66% in November, and 68% in December 2014. Three months after the implementation of the NGN residency program, the nurses retention rate at the hospital increased to 82%. Based on the data provided by the hospital's HR department, there was a slight increase in the NGNs' turnover rate from 15.74% in 2014 to 15.93% in 2015. However, the turnover rate of NGNs followed a decreasing trend in 2016 (14.35%) and 2017 (13.55%). Findings indicate that the nurse turnover and retention rates at Palmetto Health Richland Hospital are indirectly proportional. An improvement in retention automatically leads to a reduction in the nurse turnover rate.

**Recommendations:** Hospitals should invest in developing effective NGN residency programs to increase the likelihood of nurse retention. Healthcare institutions should also ensure that the appropriate curriculum and modules are included in the program. Nursing schools are recommended to collaborate with healthcare institutions to ensure all NGNs are provided with adequate support while in residency period.

#### Methodology

**Project Design:** The project initiative used a quantitative comparison design, to compare data collected three months before the implementation of the critical care program and three months after the residency program has been implemented. Thus, the project initiative was based on a non-experimental, quantitative design. The data collected prior to the revised residency program was collected retrospectively and compared to the prospective data collected after the implementation of the revised residency.

**Population and Sampling:** The project initiative was conducted in the Critical Department which admits more than 50 patients per day, and has approximately 60 critical care patients. The nurse-to-patient ratio in the unit is usually 1:2. Retention data were collected directly from human resources.

**Data Collection:** The HR department provided data that includes the retention rates of NGNs three months prior to the implementation of the revised residency program and three months after the NGNs completed the revised residency program. Additional data included the NGNs age, level of education and years of experience at the bedside.

**Data Analysis:** A comparative analysis was done to identify differences in the retention rates of NGNs prior to and after completion of the revised residency program. To analyze the findings, Microsoft Excel was utilized to compute descriptive statistics related to the demographic data collected and retention rates.

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#### Review of Scholarly Evidence

Studies show that the incorporation of a new graduate residency program resulted in a reduction in the turnover rate from 36.08 percent to 6.41 percent in a twelve-month period. In addition, the contract labor usage decreased to \$5,490 from \$19,099 per average daily census (Trepanier et al., 2012). Another study established that residency programs for nurses resulted in experience acquisition, skill improvement, and reflective practice sessions, which resulted in the retention of the nurses (Kramer et al., 2013). The recruitment and retention of new nurses to work in a complex and high-stress environment of acute care hospitals is challenging. The programs provide NGNs with tools that assist them to effectively graduate from being college students to a successful and respected NR, hence achievements in the nursing field. Completion of the residency programs can make NGNs feel supported and part of the nursing community (Hudock, 2015)

#### Findings and Recommendations

Month	Retention Rate
6th Oct	63%
7th Dec	66%
4th Nov	68%