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# Systematic Review of Nurse Residency Programs

Abiola Olatokunbo Ajanaku  
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# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Abiola Ajanaku

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University

2018

Abstract

Systematic Review of Nurse Residency Programs

by

Abiola Ajanaku

MS, Stevenson University, 2013

BSN, Towson University, 2008

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2018

## Abstract

The first 2 years of a new graduate nurses career can be stressful and traumatic. Many new graduates leave the profession within their first 2 years of employment.

Organizations have sought to implement programs that will promote new graduate job retention. Nurse residency programs (NRPs) are programs geared toward fostering and nurturing new graduates once they begin their nursing careers. Residency programs can last anywhere from 3 months to 1 year, depending on the nursing specialty. A key component in retaining new graduates is to facilitate a successful transition into nursing practice. This project served as a systematic review regarding the current state of NRPs and best practices to assure a successful implementation. A total of 44 articles met the inclusion criteria identified for the project. Analysis of each article used Melnyk and Fineout-Overholt's 7 levels of evidence. Benner's novice to expert theory served as the theoretical framework for this project. This systematic review revealed variety in the length and type of NRPs. Best practices include the usage of the University Health System Consortium (UHC)/ American Association of Colleges Nursing (AACN) or Vizient model. NRPs may differ in curriculum however each program supports the increase in NG retention and job satisfaction as well as new graduate improved competence and confidence. Assuring that new graduates receive a successful orientation and transition into practice will promote positive social change within the organization, improved new graduate competence, and, ultimately, quality patient outcomes.

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## Dedication

I would like to dedicate this to the past few years of my life. I have had several challenges good and bad but ultimately they have helped me reach this level of success. I would especially like to dedicate this to baby Newborn who is helping me daily.

## Acknowledgments

I would like to thank my significant other who has supported and encouraged me throughout this entire process. There has not been a day where he has not given me words of wisdom and the drive to make it through my process. My cousins, best friend, little sister and close skate family have been a driving force in helping me reach this point. They have assisted in elevating my mindset and guiding me as I have been working to accomplish my goals. They have also made sure I enjoyed myself regardless of how much work needed to be done.

I would also like to acknowledge Dr. Deborah Lewis and Dr. Diane Whitehead who have been by my side during this entire journey to assure success. Dr. Whitehead has often given me words of wisdom and assured I was comfortable in the process. She has helped me get past many obstacles without having a major breakdown. You both are the greatest!

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

### **Introduction**

Graduation from a registered nurse (RN) educational program and satisfactory completion of the National Council Licensure Examination for Registered Nurses (NCLEX-RN) allows a new graduate nurse (NGN) to seek employment as an RN. With the nursing profession being one of the largest segments of the U.S. health care workforce, approximately 5.5 million nurses work in the profession (National Council of State Boards of Nursing, 2017). RNs are expected to possess a certain knowledge base and skill set once they have graduated. However, transitioning from academia to professional practicing nurse can be a challenging experience. Many have questioned whether NGNs are prepared to care for the high-acuity patients in the practice setting (Letourneau & Fater, 2015).

Globally, researchers have identified a significant increase in nursing turnover and job dissatisfaction among NGNs (AL-Dossary, Kitsantas, & Maddox, 2013). In Maryland alone, the nursing shortage has become a concern for many professional organizations, hospitals, and other government health agencies (Daw & Terhaar, 2017, Yang, Lv, Zhou, Liu, & Mi, 2017). High levels of stress are associated with the inability of new nurses to properly transition from education into practice, leading to negative consequences such as increased turnover and potentially disastrous outcomes for patients (AL-Dossary et al., 2013, p. 1,024). A study conducted by the Agency for Healthcare Research and Quality (AHRQ) revealed that an increased workload coupled with the nursing shortage potentially presents a threat to the quality of care that patients receive

(Berkowitz, 2016). To aid in bridging this gap, many facilities have developed nurse residency programs (NRPs) (Poynton, Madden, Bowers, & Keefe, 2007). NRPs are different from traditional orientation and serve as an additive to the orientation that each new employee receives when they begin a new position. NRPs are designed and used to help with the development of NGNs in a supportive environment while increasing retention and decreasing the turnover rates in the new graduate (NG) population. Also, NRPs are created “to provide the NGN with the tools and resources for success in the practice setting” (Zinn, Guglielmi, Davis, & Moses, 2012, p. 654).

According to AL-Dossary et al. (2013), NRPs are identified as “formal contracts between the NGN and the employer, describing and defining activities” (p. 1025). NRPs are formal programs designed to provide the NG with mentoring, additional support, guidance, and time as they transition into practice residency programs are also used to aid in the development of skills acquisition, confidence and experience during the time of their transition (AL-Dossary et al., 2013). On the other hand, an orientation that is also received when the NGN begins working in the health care system is often detailed and includes a more general overview and welcome to the organization and its core values and beliefs. In comparison, NRPs may focus on “growing our own” and providing a detailed introduction to the specific unit and population of patients (Zinn et al., 2012, p. 654).

### **Problem Statement**

MacFarlane (2017) highlighted that approximately 10% of the nursing workforce in Baltimore, Maryland, and surrounding areas have left their positions at the U.S. Department of Veteran Affairs (VA) since January. In a recent public news brief, MacFarlane (2017) discussed the nationwide nursing shortage facing the VA. The reasons cited included competition from higher-paying private hospitals. As the country's largest integrated health care system, the number of patient visits and aging veterans is quickly rising. By 2018, 40,000 new nurses will be needed to maintain appropriate staffing levels to meet the various needs to the veteran population (MacFarlane, 2017).

With the aging of the current nursing population, it is necessary to assure that adequate and competent nurses are providing quality patient-centered care. The increased need for NGNs far exceeds the availability of experienced nurses. Approximately 30% to 60% of decreases in nursing retention are directly related to NGN turnover (D'ambra & Andrews, 2014; Hansen, 2014). Factors that contribute to decreases in retention include the fact that NGNs lack skills necessary to transition smoothly to providing care at the bedside (Zinn et al., 2012). This increase in RN turnover causes an inability of productive care teams, affecting positive patient outcomes

### **Purpose**

The purpose of this DNP project was to complete a systematic review of the literature related to NRPs and to make recommendations to my organization for implementing an NRP within the facility. I used systematic review to answer the project question: What is the available evidence on NRPs? I will use this systematic review to

submit recommendations based on current evidence for an NRP within an acute care facility.

Upon entry of newly licensed RNs into their first nursing roles, their ideas of how they will transition may vary. There are varying levels of preparation that each NGN will achieve with the completion of their educational requirements and successful completion of the NCLEX. With the successful completion of pre-employment requirements, new nurses often describe their first year in the nursing profession as difficult (Hatlevik, 2012). Hatlevik (2012) revealed that students, employers, and patients believe that there is a gap in the transition process of NGNs from student nurse to practicing clinical nurse. Identified is the shock that NGNs feel during their transitional period (Hatlevik, 2012).

With the call to action in 2010 by the Institute of Medicine (IOM), the presence of the gap has become increasingly evident among nurses in their first years of practice. In 2010, the IOM identified the need for additional support and educational assurances for NGNs. Included in this report were strategies to aid in the competence of NGNs. One particular approach, which has gained wide popularity, was a need for the implementation of NRPs. According to the IOM (2010), in conjunction with the Robert Wood Johnson Foundation (2011), NRPs in large and small health systems are needed to aid in the reduction of high turnover rates of new graduates (IOM/Robert Wood Johnson Foundation Report, 2011, p. 5). I completed a critical review of the literature to identify best practices associated with the successful implementation of NRPs. The practice-focused question was: What is the current evidence supporting the implementation of an NRP in an acute care facility?



## **Project Objectives**

My objectives of this DNP project were as follows:

1. Complete a systematic review of the literature on NRPs.
2. Submit recommendations based on current evidence for an NRP within an acute care facility.

## **Nature of Doctoral Project**

I explored the evidence available following a systematic format and present a systematic review on the NRPs. I used a systematic review to answer the project question: What is the available evidence on NRPs? This systematic review has been used to submit recommendations based on current evidence for an NRP within an acute care facility.

The summary of available evidence on NRPs has been utilized to develop recommendations for the development of an NRP at an acute care facility. I completed a systematic review by assessing online databases such as CINAHL, MEDLINE, OVID, and ProQuest. This systematic review will follow the guidelines outlined in the Walden University Manual for Systematic Review (Walden University, 2017).

## **Significance/Relevance to Practice**

The costs associated with turnover and lack of retention can be significant for an organization. The cost of replacing an NGN is estimated to range between \$49,000 and \$92,000 per NG. Furthermore, a decrease in turnover rates can also cause a reduction in patient costs per day (Trepanier, Early, Ulrich, & Cherry, 2012). Residency programs

(RP) provide the additional training needed for the transition from academia to their professional role to aid in decreasing high NGN turnover rates (AL-Dossary et al., 2014).

The stress experienced by NGNs associated with the heavy workload and new environment can lead to the increases in NGN turnover (Casey, Fink, Krugman & Propst, 2004). Health care organizations expectations differ drastically from what the NGN has become accustomed to in their previous educational and clinical experiences. The NGN is now responsible for a diverse group of patients whose care requirements can change from one minute to the next. The NGN must be able to critically think to provide the most appropriate care the patient may need. Potential exists for increased amounts of stress from the uncertainty of new policy and procedures in addition to the workflow of a new environment. NGNs are no longer sheltered, because they are in the clinical setting and are required to provide quality care for each resident for up to 12 hours per day. The change in longer hours alone can be paramount to the NGN.

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

With the aging population and mass exit of the baby boomer generation from the workforce due to reaching retirement age, there has been a significant effect on the nursing shortage. Approximately 75% of registered nurses are ages 50 to 64 years, and 55% of those nurses are planning to retire by 2020 (Cochran, 2017). A consistent RN workforce has been shown to decrease RN burnout and improves patient outcomes (AL-Dossary et al., 2014; Blevins, 2016; Bratt & Felzer, 2012; Hillman & Foster, 2011). Hospitals with NGN RPs have demonstrated the ability to maintain their RN workforce and decrease turnover (Blevins, 2016; Hillman & Foster, 2011).

When the organization focuses on assuring that the NG grows clinically and emotionally, it is streamlining the transition process and ultimately receiving a return on its investments (Cochran, 2017). With the organization providing a supportive, healthy work environment, it is providing the NGN with the necessities to be successful.

### **Summary**

To address a high turnover rate and increase low retention rates, organizations have been tasked with identifying potential attractive features to recruit and retain NGNs. The implementation of an NRP is one way to address the lack of retention within an organization. NRPs serve multiple purposes and assist in the transition of NGNs by helping them with adapting to a fast-pace environment in addition to the ability to critically think within their practice. I completed a literature review to evaluate the current body of knowledge available on NRPs.

## Section 2: Background and Context

### **Introduction**

Decreasing the consistently increasing percentages of NGN turnover has been an issue for some time. Many suggestions and ideas have been considered; however, one that has gained attention is the NRP. I explored the evidence available following a systematic format, and I presented a systematic review on the NRPs. The summary of available evidence on NRPs has been utilized to develop recommendations for the development of an NRP at an acute care facility.

An adequate orientation is imperative to the success of an NGN. Assuring that NGs experience a structured transition to practice is necessary when caring for the health of patients. For this project, Benner's theory, novice to expert (1982), served as the theoretical framework.

Benner's theory has aligned with nursing and nurses' transition to practice. Benner's novice to expert theory indicates that each NGN passes through 5 stages of knowledge: novice, advanced beginner, competent, proficient, and expert. Benner's theory provides lifelong learning for nurses by incorporating a strong theoretical foundation (Dumchin, 2010). Table 1 includes the definition of each stage of Benner's novice to expert theory and how it relates to the transition of a new nurse into practice.

Table 1

*Novice to Expert Theory*

Novice to expert	
Stage 1: Novice	- Some exposure to the environment. - Begins to formulate principles based on experiences and interactions.
Stage 2: Advanced beginner	- Some experience but not enough knowledge to understand.
Stage 3: Competent	- After the 2- to 3-year mark of experience develops organization and analytical skills.
Stage 4: Proficient	- Has a broader outlook on situations. - Decision-making skills have improved.
Stage 5: The Expert	- Relies more on experience and not rules and policies. - The performance level is more proficient and fluid.

*Adapted from:* Nursing theories: a companion to nursing theories and models. Retrieved April 24, 2017, from [http://currentnursing.com/nursing\\_theory/Patricia\\_Benner\\_From\\_Novice\\_to\\_Expert.html](http://currentnursing.com/nursing_theory/Patricia_Benner_From_Novice_to_Expert.html)

Benner's theory was derived from Dreyfus model of skill acquisition and modeled to evaluate the progression within nursing (Davis & Maisano, 2016). Benner's nursing theory has been used in all areas of nursing and has served as a guide to skill acquisition within the profession (Davis & Maisano, 2016). The model addresses the steps necessary in skill acquisition for professional practice.

### **Definition of Terms**

*New graduate* (NG): "A nurse in their first employment following the completion of registered nurse education in the United States" (American Nurses Credentialing Center, 2008, p. 41).

*Orientation:* When new staff members are introduced to the organization in addition to policy and procedures for the organization. This time leads into the preceptorship that addresses a regimen based on the chosen unit (L. Keldsen, personal communication, March 2017; Hansen, 2014).

*Residency program/internship/externship:* A structured program for preceptorship, internship, education, and orientation for NGNs with an emphasis on the transitional period from academia to professional nurse (Letourneau & Fater, 2015).

### **Relevance to Nursing Practice**

Before the idea of implementing NRPs gained attention, other options were explored to address high turnover rates within this population. For example, curriculum changes were implemented to produce a more reality-based experience (Medas, 2015). An additional intervention was the incorporation of nursing seminars within the first 2 years of their nursing courses. The purpose of these workshops was to aid in skill acquisition, formulating a nursing identity, and building character. Other interventions were the development of strategic clinical assignments. The purpose of this is to assure the clinical assignment aligns with the current curriculum in the classroom and to help the student focus on a topic of care rather than total patient care (Benner, 2012).

### **Development of NRP**

In 2010, the IOM identified the need for additional support and educational assurance for NGs and subsequently published a call to action. Included in this report were strategies to aid in the competence of graduates. One particular approach indicated a need for the implementation of NRPs: “RPs for new nurses in both hospitals and large

health systems, smaller facilities and community settings are needed to reduce the high turnover rates of new nurses” (IOM/Robert Wood Johnson Foundation Report, 2011, p. 5). The purpose of these types of programs was to provide the NG with additional support during the transition to institutional education. The change occurred by providing each graduate with several opportunities to improve their clinical skills and “thereby facilitate the transition to professional practice” (Letourneau & Fater, 2015, p. 96).

Goode, Lynn, Krsek, and Bednash (2009) stated that NGNs should not be allowed to enter into the nursing profession without attending an NRP or some form to aid in the transition to practice. Although each nurse has completed their educational requirements, many NGNs are ill prepared for the level of care needed in the health care setting (Letourneau & Fater, 2015). With the entrance of NGs into the profession, RNs face high patient acuity, nursing shortages, high RN turnover, burnout, and excessive overtime demands (Anderson, Hair, & Todero, 2012). A recent NCSBN study identified employers’ perceptions of NGs as inadequately prepared for practice (Letourneau & Fater, 2015). More than a decade ago, Casey et al. (2004) conducted a study on NGs. Data collected from 209 NGs occurred at 3-, 6-, and 12-month intervals (Laschinger, Finegan, & Wilk, 2009).

The common themes identified by those participants regarding their transition to practice include the following:

- Lack of confidence in skill performance, deficits in critical thinking and clinical knowledge.
- Relationship with peers and preceptors.

- Struggles with dependence on others yet wanting to be independent practitioners.
- Frustrations with work environments.
- Organization and priority- setting skills.
- Communication with physicians.

Fink et al. (2008) repeated this study as an update to the original study in 2004. Similar to the previous 2004 study, NGNs have expressed feelings of being overwhelmed and overworked with patient ratios, lack of organization skills, identifying their routines, and overall time management development.

Evidence shows that NRPs decrease nursing turnover, produce higher job satisfaction, and enhance patient safety and quality of care (Blevins, 2016; Bratt, Baernholdt, & Pruszynski, 2014). Halfer, Graff, and Sullivan (2008) discussed the organization cost based on the implementation of a residency program. According to Halfer et al. (2008), there are many financial benefits to organizations based on the success of a RP. Halfer et al. (2008) also indicated there was a decrease in the turnover rate of 12% within a 2-year period with a savings of \$44,000 per nurse. NRPs not only produce higher job satisfaction, but they also reduce turnover rates among nurse graduates.

### **Barriers to NRPs**

Although the implementation of NRPs has gained acceptance, several factors have hindered many organizations from incorporating NRPs. A major factor is the cost



associated with the implementation of an NRP. According to Fielder, Read, Lane, Hicks, and Jegier (2014), research shows that NRPs improve nursing retention rates, in addition to deepening the skill and knowledge levels of each participant. Nurses who are satisfied with their positions are more likely to remain at their institutions. However, those who are not satisfied with their transitions to practice often leave their institution, which increases high turnover rates. The average cost associated with turnover rates for an institution is \$856 million (Fielder et al., 2014). When NGNs leave their positions, the institutions have already lost on their investments. Once this happens, it is an uphill battle to identify the benefit of implementing an NRP that may cost the facility more than \$60,000 or more per NG.

In addition, with the baby boomer generation leaving the nursing profession at extremely high rates a burden has been placed on institutions to replace those nurses. Although the need to replace those who have left the profession is dire, many organizations lack the necessary tools to implement an NRP. According to Frantz and Weathers (2015), organizations lack the "infrastructure" needed to support the implementation of an NRP (p. 6.). For example, dedicated staff and reliable support services are needed to create and maintain a successful NRP (Frantz & Weathers, 2015, pg.6). According to Goode et al. (2009), another significant barrier to the implementation of an NRP is the expense associated with the program. Goode et al. (2009) highlighted that many organizations are unable to expand their budgets to meet the financial requirement necessary for the implementation of an NRP. Limiting the number of available spots within the program has been viewed as an option. However, organizations

also are unable to provide the costs necessary after the completion of an NRP (Goode et al., 2009). Ideally, hospital leadership expects NGs to be fully independent and educated when they arrive on the unit. NGs are often hired in high numbers to aid in combating the increasing nursing shortages. In addition, the lack of preceptor availability serves as a hindrance in the process of an NRP (Beecroft, Hernandez, and Reid, 2008).

### **Evaluation of an NRP**

Linus, Reeder, Bradley & Polis (2014) conducted a study at a large hospital organization in Southwest Pennsylvania to determine perceptions of nurse leaders on the effectiveness of a newly implemented NRP. Those surveyed included the director of nursing (DON), clinical nurse educator (CNE), and patient care managers (PCM). The participants of the study identified several benefits to the implementation of a residency program. According to Linus, Reeder, Bradley and Polis (2014), nurse leaders perceived that the implementation of a residency program is effective in assisting NGNs transitioning to professional nurse.

Trepanier et al. (2012) completed a cost-benefit analysis and were able to identify a significant reduction in nursing turnover rates. After attending a 1year- long RP, the turnover rates decreased from 36 % to 6 %. According to Zinn et al. (2012), the nursing shortage is expected to reach 500,000 by the year 2025. With the increases in the nursing shortage, RPs serves as a solution to resolving the problem (Trepanier et al., 2012). NGs account for a significant portion of the current nursing population totaling 10% (Blevins, 2016; Trepanier et al., 2012).

According to Cochran (2017), financial benefit is another avenue in determining the effectiveness of an NRP. The cost associated with NG turnover is estimated \$ 49,000- \$ 92,000 per NG (Cappell, Hoak, & Karo, 2013, p. 26). The cost for advertisement and recruitment is not included in the cost necessary to hire an NG. In addition, the cost necessary for those who serve as preceptors to teach NG isn't accounted for in the turnover cost associated with NG turnover. There is an estimated saving of \$10- \$50 per patient day over a two year period. With the implementation of an NRP decreasing turnover rates, this program more than covers the cost associated with its implementation (Cochran, 2017). Since NGNs remain at their current employer after attending NRPs, the repetitive costs associated with marketing and recruitment are non-existent.

Kowalski and Cross (2010) reviewed and discussed outcomes from a 1 year- long residency program at hospitals in Las Vegas, Nevada. This program improved clinical competency, the sense of decrease threat and an increase in the quality of communication and leadership skills (Kowalski & Cross, 2010). Turnover and retention rates often are utilized in determining the benefits and progress of NRPs (Bratt, Baernholdt, and Pruszynski, 2014; Cochran, 2017; Garrison, 2017; Trepaniere et al., 2012; Koh, 2013). Many studies and researchers have utilized the increases and decreases of turnover rates as indicators to the successes of the implementation of residency programs. These signs also make this type of data beneficial to for this proposed project.

### **Outcomes of an NRP**

In 2017, Crimlisk reviewed the implementation of an NRP in a large 500 -bed trauma center in Boston. The program design consisted of a 6-month orientation period

that included class and support based on the best practices of the IOM report. Surveys via questionnaires were provided to each participant at the 6 and 12- month mark. Initially, the orientation included a 1 month-long orientation specifically on the medical or surgical unit. This also included 1hour -long lunch conferences (Crimlisk, 2017). Once the first 4 weeks had concluded, each nurse was assigned to their respective specialty unit and allowed to continue with their orientation. At the 6-month mark, it was reported that 98% of the 45 NGNs remained in their position. At the 1-year mark, the retention rates decreased slightly to 91% (Crimlisk, 2017). Participants reported the implementation of their NRP guided their successful transition to clinician. Also, the community has been impacted by the integration and assistance from those within the NRP (Crimlisk, 2017).

Rosenfeld and Glassman (2016) completed an analysis of the long-term effects of NRPs from 2005-2012. Researchers were able to identify the impact NRPs have on retention rates. It is averaged that those who leave stay for 2.18 years at their institution; those who stay typically remain for 4.86 years, highlighting that retention beyond two years was dependent on a variety of factors (Rosenfeld & Glassman, 2016). Past NRP participants were able to identify the advantages in helping the transition from “beginner to competent RN” (Rosenfeld & Glassman, 2016, p. 342). In addition, those who have since completed their NRPs have held positive attitudes regarding their programs and significantly valued their experiences (Rosenfeld & Glassman). It is imperative that NGNs experience a smooth and positive transition into their new role. In a study completed by Bratt and Felzer (2011), it was reported that job satisfaction was at its highest at the 12-month mark. According to Goode et al., 2009; Lee, Tzeng, Lin & Yeh,

2009, NGNs perception and professional development is closely linked to attending NRPs.

### **Local Background and Context**

The practicum site for the DNP project is an acute care environment that services veterans. The VA is a large, urban facility with services that include rehabilitation, neurological, surgical, mental health, and long-term and short-term stays. The practice focus topic was identified during a conversation with my preceptor. The practice focused question is: what is the current evidence supporting the implementation of an NRP in an acute care facility?

I have experience in working closely with NGNs. In my current position, my team and I provide all the orientation and education to new onboarding nursing professionals. In this organization, nurses are paired with their preceptors based on their experience and background. However, this process is rather standard and not only to the RNs expertise.

### **Summary**

Section 2 introduced the Benner model novice to expert as the theoretical framework for this project, the project relevance to nursing practice and the relationship of the practice question to the practice site. This section provided an overview of the importance of NRPs in decreasing turnover, improving nurse satisfaction, and patient outcomes.

### Section 3: Collection and Analysis of Evidence

#### **Introduction**

By providing professional development based on the principles of Benner's novice to expert model, leaders are better equipped to increase staff retention and aid in safe quality patient care (Davis & Maisano, 2016). NRPs are also designed to address high turnover rates in the NGN population within their first year of practice. Fielder et al. (2014) stated that nursing turnover negatively affects patient and nursing care in addition to costing the organization \$856 million (p. 418). According to Crimlisk (2017), acquiring a level of high proficiency experience and mastery is needed, which will allow each NGN to progress through each stage of Benner's novice to expert theory smoothly.

The purpose of this systematic review was to identify sufficient evidence supporting the implementation of an NRP. In Section 1, I identified the practice problem, purpose, nature of doctoral project, and significance. In Section 2, I addressed the methodology, theoretical framework, relevance to the nursing profession, and the local background. In Section 3, I will discuss the format for completing the systematic review.

A *systematic review* is defined as a summary of the literature that is focused on answering one particular question (Walden University, 2017). When completing a systematic review, there must be an appraisal and synthesis of all quality research that is relevant to the question (Bettany-Saltikov, 2012). This project was a systematic review of the literature in search of support for the implementation of an NRP at a large urban hospital in the United States. The first step in completing a systematic review was the identification of a practice-focused question. The practice-focused question for this

systematic review was: What evidence and best practices have been identified in the development and implementation of an NRP for NGNs? A literature search was completed for this project including CINAHL, MEDLINE, and ProQuest Nursing & Allied Health Source databases. I also used Google to access the IOM 2010 report.

I used the following search terms: *NRP, residency program, externship, nursing AND internship, residency program AND nursing, residency program AND nurse, internship, externship, AND nursing, new graduate nurse, new graduate NRP, nursing retention, retention, nursing turnover, residency, and preceptorship.*

### **Inclusion and Exclusion Criteria**

The inclusion criteria were as follows:

- Literature on NRPs and new graduates.
- Literature published from 2010 to 2017.
- Various implementations of NRPs.

The exclusion criteria were as follows:

- Literature published before the year of 2010.
- NRPs for experienced nurses moving into another practice area.
- Non-English literature.

### **Project Design**

The systematic review is based on the Cochrane systematic review methodology. The methodology includes (a) having a set of clearly identified objectives and practice questions; (b) search strategy; (c) a detailed inclusion and exclusion criterion for all potential articles; (d) synthesis and analysis of selected data; and (c) a presentation of

results (Walden University College of Health Sciences School of Nursing, 2017; Milner, (2015).

The Cochrane review methodology includes (a) developing review questions, (b) developing the inclusion and exclusion criteria, (c) conducting a literature review, (d) selecting studies, (e) analyzing data (f) presenting results, and (g) dissemination (Milner, 2015). The literature analysis will identify strengths and weaknesses as well as gaps in the current literature. Recommendations related to the practice problem have been developed and presented to nursing administration.

### **Importance of Institutional Review Board Approval**

The systematic review will be conducted using the Walden University DNP Manual for Systematic Review. Form A has been submitted to the Walden University's institutional review board (IRB) for approval.

### **Data Analysis**

I considered each article individually. The search terms for the data included various combinations of the following keywords. In the systematic literature review, I identified and examined published journals and articles published from 2010 to 2017. Once I reviewed the selected articles, I appraised them individually based on the inclusion criteria and extracted the data.

Selected articles have been recorded as a table with the following categories: (a) author and date of publication, (b) purpose, (c) sample size and setting, (d) design/methodology, (e) interventions, (f) findings, (g) limitations, and (h) level of evidence using the categories recommended by Melnyk & Fineout-Overholt (2011).



Table 2

*Melnyk Levels of Evidence*

Level 1	Systematic review and meta-analysis of randomized controlled trials; clinical guidelines based on systematic reviews or meta-analyses.
Level 2	One or more randomized controlled trial.
Level 3	Controlled trial (no randomization).
Level 4	Case-control or cohort study.
Level 5	Systematic review of descriptive and qualitative studies.
Level 6	Single descriptive or qualitative study.
Level 7	Expert opinion.

*Note.* Adapted from: Melnyk, B. M., & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing and healthcare: A guide to best practice*. Philadelphia, PA: Lippincott, Williams & Wilkins.

### **Validity and Reliability**

Melnyk's level of evidence scale was incorporated within this project. Because the potential for errors is high, including an additional reviewer to extract the data and check for mistakes may be beneficial to verify reliability. For a systematic review to identify reliability, a second reviewer should be incorporated to determine the significance of each selected article. When assessing each article, the reviewer is attempting to identify the reliability of each study and its results. Also, the reviewer is differentiating between what has been completed and what has been reported as complete (Dykier, N.D). The purpose of this capstone project does not support the use of the second reviewer to identify reliability.

### **Summary**

The nursing shortage, regardless of the magnitude, affects the quality of care received by the patient. The implementation of NRPs has been widely accepted and praised in reducing vacancy and turnover rates (Garrison, 2017). According to Dumchin

(2010), many healthcare organizations in addition to academic settings have accepted the importance of investments made in improving access to productive learning environments for NGNs. NRPs with the incorporation of the curriculum designed by the University Health System Consortium and the American Association of Colleges of Nursing (UHC/AACN) have gained wide acceptance over the past few decades (Rosenfeld & Glassman, 2016). The curriculum developed by the UHC/AACN has been accepted and adopted by many organizations. The standard length of an NRP based on the curriculum by the UHC/AACN is 12- months long however, many organizations have incorporated their version of an NRP and have opted to shorten the period of the program (Rosenfeld & Glassman, 2016).

Unfortunately, despite all the literature, studies and published data, many organizations have still not begun the process of implementing NRPs. There is a strong possibility these programs will not be implemented unless mandated. Additional studies should continue to identify the benefits of programs geared toward bridging the gap from academia to professional practice. This systematic review included an in-depth search of the literature to identify best practices associated with the implementation of NRPs. The success of a systematic review is dependent on the IRB.

## Section 4: Findings and Recommendations

### **Introduction**

The implementation of an NRP will aid in decreasing nursing turnover within the NG population in the first 2 years of practice. My goal in this systematic review was to present best practices on NRPs for NGNs with the hopes of the organization designing their own program.

The problem that I identified at the organization was a significant number of NGs leaving their nursing positions within the 2 years of practice. With the complexity of care needed by each patient changing, it is imperative to have adequate staffing and knowledgeable nurses at the bedside. With a continued turnover of nurses within 1 or 2 years of graduation, it is difficult for the organization to develop expert bedside nurses.

The purpose of this systematic review was to gather relevant literature and evidence-based practices regarding the successful implementation of an NRP. My goal in this systematic review was to synthesize and organize current data regarding the implementation of an NRP in addition to identifying the causes for lack of retention within the first 2 years of professional practice. The evidence-based question for this project was as follows: What is the available evidence on NRPs?

This systematic review provided to recommendations for the implementation of an NRP within an acute care facility.

## Findings and Implications

### Search Strategy

This systematic review utilized the guidelines of the Walden University Systematic Review Manual. Melnyk's level of grading was used to appraise the literature. Data collection from EBSCO, ProQuest, and CINAHL databases was completed in August 2017 and September 2017. A Cochrane database search yielded no results. Articles published in English between the years of 2010 and 2017 using a combination of search phrases and key words, including *nurse residency*, *internship*, *externship*, and *new graduate*, were reviewed. The search yielded 1,304 results.

Results diminished further as articles that did not meet the inclusion criteria were excluded. Initially, duplicate articles were excluded to assure there was no evidence of bias. Seven of the search terms yielded the same search articles as previously searched terms; therefore, articles from search terms *new graduates*, *preceptorship*, *NGN residency program*, *new graduates*, *Veterans Administration*, *new graduates internship*, *new graduates externship*, and *new graduates turnover* were excluded. To organize search results, Refworks was utilized (Pasila, Elo, & Kääriäinen, 2017).

### Quality Appraisal

In order to assure quality of studies and to assure concrete reliability, an appraisal was completed using Melnyk's level of evidence. Melnyk's level of evidence includes 7 grading levels (Melnyk & Fineout-Overholt, 2011). To be selected for this review, studies needed to meet certain inclusion criteria and quality based on Melnyk's grading levels.

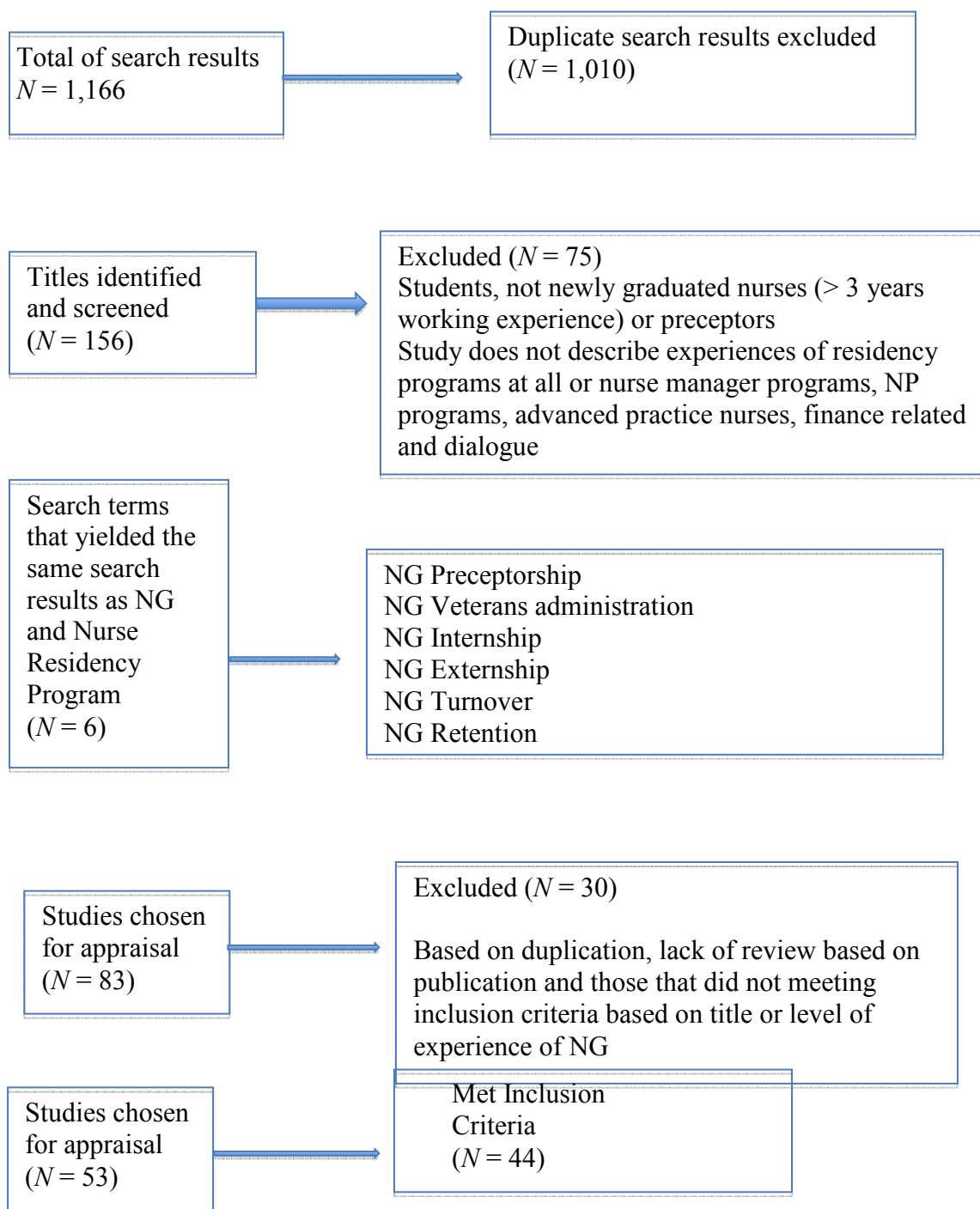


Figure 1. Inclusion criteria.

## **Data Extraction and Synthesis**

The data abstraction included comparing, reading, and categorizing data using the collection tool. Each article was appraised using the Cochrane Review Methodology with guidance from Melnyk's level of evidence appraisal tool to identify whether each article met the inclusion criteria (Table 1).

Articles were plotted in a table with the following categories: (a) author, (b) date of publication, (c) title of article, (d) journal title, (e) summary, and (f) level of evidence using the categories recommended by Melnyk and Fineout-Overholt (2011).

## **Summary of Findings**

There were no documented systematic reviews located in the Cochrane database during the identified time frame of 2010 to 2017 using the predetermined search terms. A total of 1304 potential articles were identified in the preselected database searches. See Figure 1 for search results and study selection. Forty-four studies were included in the final review.

**Description of studies.** Table 3 details the 44 studies that met the inclusion criteria for this review. Evidence was graded using the Melnyk and Fineout-Overholt system (Melnyk & Fineout-Overholt, 2011). Forty-four articles were selected for inclusion. Each article selected for inclusion was broken down into levels of evidence. There were 5 articles for Level I, 6 articles for Level III, 14 articles for Level IV, 10 articles for Level V, 8 articles for Level VI, and 1 article for Level VII. Different areas of representation included, United States ( $n = 37$ ), Saudi Arabia (1), Brazil ( $n = 1$ ), Canada

( $n = 1$ ), Australia ( $n = 1$ ), and the United Kingdom (3). The complete literature review table can be found in Appendix A.

Table 3

*Levels of Evidence*

Level of evidence	Description	Number of articles found
Level I	Systemic reviews, meta-analysis, evidence-based clinical practice guidelines.	5
Level II	One well-designed RCT.	0
Level III	Controlled trial without randomization.	6
Level IV	Case control or cohort study.	14
Level V	Systemic reviews of descriptive or qualitative studies.	10
Level VI	Single descriptive or qualitative study.	8
Level VII	Opinions from authorities or reports from experts.	1

### **Nurse Residency Programs**

The first 2 years of a NGs transition into practice are often very stressful and traumatic. Due to the high levels of stress during the first 2 years of practice, retention rates are a major concern for healthcare organizations for several reasons. In addition, with the influx of retirement from the baby boomer generation, NGs are the ideal pool of employees for the acute care arena (Hillman & Foster, 2011). According to Hillman and Foster (2011), the cost associated with turnover for a RN can reach \$145,000. There are many reasons why NGs leave the profession within the first 2 years of practice, but a common theme has been a lack of satisfaction with their transition to practice. The introduction to practice and their first role include their orientation. The orientation process and length has often been different from unit to unit (Hillman & Foster, 2011). To combat and aid in transition, NRPs have been implemented in organizations globally.

NRPs are said to be formal contracts made between the NG and the employer (AL-Dossary et al., 2014). NRPs have gained worldwide notoriety due to their value as aiding NG's during their transition to practice (Jensen, 2016). An additional benefit due to the implementation of NRPs is its ability to increase retention rates in those organizations that have implemented these types of transition programs.

The purpose of these types of programs are to bridge the gaps between academia and professional practice. Many programs vary in length from 3 months to 1 year. Findings suggest that after the 22-week orientation period retention rates increased substantially. After 5 years of consistently incorporating this detailed orientation period, retention rates have jumped to 72.5% (Hillman & Foster, 2011). In a 4-year period, 251 NGs have completed the RP, and of the original 251, 182 are still at their first organization (Hillman & Foster, 2011).

Although these types of programs address retention and skill acquisition, they also address incivility. Incivility is an important factor associated with the working environment of the nurse that also impacts retention and job satisfaction (D'ambra & Andrews, 2014). NGs who attend NRPs are given strategies and support to aid them in dealing with situations of uncivil work environments. NGs in NRPs also assisted in addressing discourteous and or disrespectful working environments (D'ambra & Andrews, 2014).



Table 4

*Level I Evidence Table*

Reference	Method/design	Sample size	Population	Findings
Anderson, G., Hair, C., & Toder, C. (2012)	Systemic review	20 studies	New graduates	Residency programs provide an opportunity to develop novice nurses.
Van Camp, J., & Chappy, S. (2017)	Systematic review	22 studies	New graduates	NRPs have strong outcomes and graduate nurses benefit from the education.
AL-Dossary, R., Kitsantas, P., & Maddox, P. (2014)	Systematic review	13 studies	New graduates	NRPs decrease turnover in the first year and promote professional growth
Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015)	Systematic review	30 articles	New graduates	Literature supports strategies to assist new graduates as they transition.
Cochran, C. (2017)	Systematic review	15 studies	New graduates	The literature suggested NRPs as a cost-effective strategy to increase NGN retention.

Anderson et al. (2011) completed a systematic review to identify recommendations and lessons learned regarding implementing and evaluating NRPs and improve the NGN transition. Thirty-five studies were initially identified as relevant, but after second review, only 20 studies were included within this systematic review. Quality appraisal of each article utilized Melnyk and Fineout-Overholt. Fifteen of the 20 studies utilized a quasi-experimental design, two studies utilized an ex post facto design, and

three utilized a lived experience approach. Three studies also utilized simulation as an educational tactic. Seven of the 20 studies reported utilizing the UHC/AACN model. There were a few themes identified in regards to the length of an NRP.

The standard duration of an NRP was either the standard model, which was between 3 and 4 months, or the comprehensive model, which was between 12 and 24 months. The program quality and content reflects the principles of the AACN/UHC program. These types of programs heavily concentrate on professional roles, leadership and patient outcomes. Identified teaching and learning strategies include utilizing trained preceptors and pairing them with new graduates and building cohorts among staff and new graduates. Because administrators and nurse leaders are the ones who see quantitative data “consequently retention rates, turnover rates, turnover costs, and ROI are the most frequently used outcome measure” (Anderson et al. , 2011, p. 206).

Within this systematic review, researchers report that program administrators identify a decrease in time need for RN orientation, quicker advancements through Benner’s stages of learning, increased performance, and increased patient satisfaction and improvements in retention rates based on the implementations of NRPs. However, it was identified that there is a lack of a clear theoretical framework that is applied when testing NRP’s. Also, there is difficulty in assessing quality of programs because there is a lack of consistency all across the board. Researchers identified recommendations within the literature that identify a need for “standard operating procedures and preceptor leadership council” to aid in sustain the program as there are changes in the personnel (Anderson et al., 2011, p. 209). Overall, “residency programs provide a unique opportunity for hospital

administrators to guide and oversee the development of novice practitioners in ways that reinforce the vision, values and preferred culture of the organization” (Anderson et al. , 2011, p. 211).

Van Camp and Chappy (2017) completed a systematic review with a purpose of examining literature regarding NGN RPs, retention rates and satisfaction. The question Von Camp and Chappy (2017) set to answer was “What are the common NRPs used in practice, and what effect does NRP completion have on NGNs’ perceived satisfaction and retention rates compared with those of new graduates who did not participate in an NRP?” (p. 129). Twenty-two articles were chosen based on the inclusion criteria. Based on the literature, the incorporation of NRPs began in early 2000 to assist in the gap between academia and practice. Many of the NRPs generally range between 3 to 18 months. There were 2 common programs identified regarding program structure. These were UHC/AACN and Vizient NRPs. The UHC/AACN program provides an organized curriculum that follows the essentials of baccalaureate education with the incorporation of Benner’s novice to expert theory (Von Camp & Chappy, 2017). The programs are 1 year in length and incorporate educational sessions, preceptor training, and simulation. The Vizient program offers a team-based approach as oppose to having a preceptor; however, like the UHC/AACN curriculum, Vizient follows Benner’s novice to expert theory and includes curriculum based educational experiences with a trained preceptor. Vizient also includes detailed mentoring time in addition to debriefing sessions.

Confidence and competence, job and professional satisfaction retention rates, and cost were presented within this systematic review. Participants rated NRPs highly and

indicated they would recommend NRPs for nurses in the future. At the 1-year mark, patient care outcomes improved relationships and participants reported effective teamwork as satisfiers. Retention rates varied based on various lengths of retention reviewed. Retention rates varied from data of 1 year to 10 years with the highest rate of 98.4%, with 100% of NRP participants remaining with the organization. The cost associated with an NRP is about \$2000 per resident according to Van Camp and Chappy (2017). A limitation identified within this review was the differences in the definition of retention rates at 1 year. In conclusion, Van Camp and Chappy (2017) felt NRPs have positive outcomes and “graduates benefit from the education, support, and guidance that NRPs provide” (p. 142).

AL-Dossary et al. (2014) completed a systematic review with an aim of examining the impact NRPs have on new graduate clinical decision-making and leadership skills. Thirteen studies met the inclusion criteria. According to AL-Dossary et al. (2014), NRPs were first reported as far back as the 1980s and are formal contracts between the employer and graduate. Research suggests that NRPs assist new graduates in their clinical judgment, retention, confidence, and overall satisfaction.

Edwards, Hawker, Carrier, and Rees (2015) completed a systematic review to determine the effectiveness of strategies to support new graduates. Thirty articles met the inclusion criteria for their review. The search criteria included a time period between 2000 and 2011. All studies included utilized quantitative study designs. New nurses in their first year were the focus group of this study. Articles were appraised using the Joanna Briggs Institute checklist. In this study, 11,929 participants were included. Two

reviewers extracted data using a data extraction tool. Fourteen articles identified resident programs or internships as the intervention needed in the new graduate population. Seven articles identified graduate orientation programs, three indicated simulation based programs were necessary, and six articles identified preceptorship or mentorship as the go to intervention. A limitation of this study was the inclusion of only English language articles. Literature supports the many benefits of transitional support strategies for NGs and the importance of increasing retention and overall experience.

Cochrane (2017) completed a systematic review aimed at examining residency programs and the ability to be cost-effective and reduce attrition. Literature from January 2011 to September 2014 regarding nurses with 1 year or less of acute care experience was included in the search criteria. Fifteen articles met the inclusion criteria. Research indicates most residency programs are 12 months in length, focus on support, and aid NGs as they transition to professional practice. Literature suggests RPs are a cost-effective intervention used to increase nursing retention.

Table 5

*Level III Evidence Table*

Reference	Method/design	Sample size	Population	Findings
Letourneau, R. M., & Fater, K. H. (2015)	Integrative review	25 studies 10 empirical 15 reported on program development	New graduates	Literature provides evidence that NRPs lead to higher retention for the NG population of nurses. Areas for future research are identified.

Reference	Method/design	Sample size	Population	Findings
Beyea, S. C., Slattery, M. J., & von Reyn, L. J. (2010)	Quantitative	260	New graduates	1 year turnover rates decreased in addition to improved readiness for clinical practice
Baldwin, K. M., Black, D. L., Normand, L. K., Bonds, P., & Townley, M. (2016)	18 week Orientation 1 year long mentorship	Cohort	New graduates	Use of VNAs to support NGNs as they adjust to the staff nurse role can prevent attrition during their first year of nursing practice by providing additional support to the NGN.
Rosenfeld, P., Glassman, K., & Capobianco, E. (2015)	Retrospective study	425	New graduates	The experiences and assessments of former residents demonstrate that certain program outcomes require longer time to emerge.

Reference	Method/design	Sample size	Population	Findings
Phillips, J., Kuhlman, C., & Evanson, C. (2017)	12 month		New graduates	Critical care transport providers have an incredibly steep learning curve and are expected to make critical life and death decisions on a daily basis. As leaders and educators in the field, we need to ensure that we do all we can to make sure they successfully transition into this role.
Garrison, F. W. (2017)	Preceptor training 3 months Support groups 9 months	6	New graduates	By identifying both the internal and external resources available, hospitals with limited capital to direct toward recruitment and retention of NGRNs can work smarter to increase nursing competence and support long-term retention.

Letourneau and Fater (2015) completed a literature review with an aim of exploring NRPs and evaluating evidence supporting their use. An integrative review of the literature was completed, and ultimately, 25 articles met the inclusion criteria. Ten of

the articles were empirical data and 15 were on program development. There are currently 92 practice sites in 29 states and in Washington D.C. that offers the UHC/AACN residency with more than 29,000 nurses have completed the residency. A limitation within this review is the lack of data geared towards patient outcomes. However, findings offer support of NRPs that are specifically geared toward newly licensed graduates.

Beyea, Slattery and Von Reyn (2010) completed a novel NRP utilizing a quantitative design. The cohort consisted of 260 NGs. The sample was completed from July 2005 through July 2008. This study evaluated the clinical practice of each graduate based on a structures simulation clinical scenario instrument. Nurse educators used the instrument to determine clinical competence during scenarios. “A 10-centimeter visual analog scale, creating a possible score from 0 to 10. The instrument was administered during the 1st week of the program and then again at 10 weeks” (Beyea et al., 2010, p. 172). According to researchers, since the residency began it has doubled in size. This project was “funded with money from the Department of Health and Human Services (DHHS) Health Resources and Services Administration, the Bureau of Health Professions (BHP), Division of Nursing (DN)” (Beyea et al., 2010, p. 175).

Baldwin, Black, Normand, Bonds, and Townley (2016) completed a study that would incorporate retired nurses as preceptors for NGs at a VA hospital. The program was called volunteer nursing ambassador (VNA). This hospital among 12 others incorporated the Vizient Residency Program as a transition program for their NGs. Before the implementation of the Vizient program, only 3 of the 29 hired NGs remained



at the hospital. The program consists of an 18-week orientation period followed by a 1-year long mentorship. Six weeks were spent with a preceptor, and during the second 6 weeks the graduate was responsible for a few stable patients. At week 7, the NG was shadowed by the volunteer for 4 to 6 hours a day for a total of 12 weeks. Literature shows “the role of the CNS in NGN retention is implied in the 2010 Clinical Nurse Specialists Core Competencies” (Baldwin et al., 2016, p. 282).

Rosenfeld, Glassman, and Capobianco (2015) completed a retrospective review evaluating the short term and long term outcomes after a residency program. An online survey was implemented in order to gain data from a total of 671 graduates who attended the RP between the years of 2005 to 2012. The survey was provided to those graduates who remained working at the facility in the fall of 2013. In 2002, the organization adopted the UHC/AACN curriculum that is geared towards baccalaureate nurses. On average, 136 graduates participate in the RP each year and between the years of 2005 to 2012 987 graduates completed the program. A Qualtrics survey was created and included four domains: employment characteristics, current assessment, demographic characteristics, and educational and professional accomplishment.

Of the 671 graduates eligible to take the survey, only 425 responded. A total of 1089 graduates entered the residency program between the years of 2005 through 2012 and 987 completed the entire program. Findings suggest that there are variations in retention rates based on the cohort. 95.6% of graduates were still employed at the organization in 2012 in comparison to 48.9% in 2005. A limitation of this study was the

lack of a comparison group however researchers believe the results show the potential to identify strengths and weakness of RPs.

Phillips, Kuhlman and Evanson, (2017) reviewed the orientation for flight nurses. The original orientation period lasts 3 to 4 months where the nurses only received 30 preceptor flight shifts. The idea that once completed, each nurse would have the skill and competence to function on their own. However, on assessment, it was identified that these nurse felt they were in the sink or swim era. Based on that assessment, the idea of implementing an NRP was created.

The Mayo One RP was created to provide a constant support program for new Mayo One Air Operations crewmembers. This program was designed to begin after the completion of general orientation up until the completion through their first year. Initially, the program consisted of only 1 resident who followed the initial plan and transitioned over to the residency directly after completing the general orientation. The program consisted of emotional and social support in addition to competence, skill and knowledge development (Phillips et al., 2017)

The program consisted of learning and development components within 12 monthly modules: to include flight log training, certified Flight Registered Nurse (CRFN), critical thinking exercises, knowledge building, and the completion of a final project (Phillips et al., 2017).

At the completion of the program, team members met with the participant to hear their thoughts and perceptions of the RP. Overall, participants felt that confidence, support, and exposure are necessary when transitioning to a professional nursing role.

Garrison (2017) completed a review regarding an NRP that was implemented in a community hospital. In 2014, this community hospital's turnover rate was 37%, and their retention rate was a low 17% (Garrison, 2017, p. 50). The organization created a plan that would require NGs to complete a RP before they could be employed at the organization officially. Realizing that the organization did not want to create a quick fix to aid NGs, they opted to assure their RP focused on competence development (Garrison, 2017). In 2016, the first class of NGs entered into the RP.

Once general hospital orientation had been completed, each NG began the residency curriculum. This included preceptor guidance, simulation lab, support groups, and didactic training. Simulation lab training occurred once every 2 weeks for a total of 3 months. Didactic training also occurred for the same amount of time as simulation lab but on opposite weeks. Preceptor training continued for 3 months, and 1 hour support groups were consistent for a total of 9 months. Data has shown that based on the initial assessments completed by the graduates at the start of the program and the assessments completed towards the completion that residency programs resulted in an "impactful reduction in vacancies" (Garrison, 2017, p. 53). Turnover decreased from 17% at the end of 2014 down to 7.5% in 2016. Garrison (2017) believed that the integration of evidence-based practices into the creation of RPs strengthen the impact received by NGs.

Table 6

*Level IV Evidence Table*

Reference	Method/design	Sample size	Population	Findings
Smith, J. B., Rubinson, D., Echtenkamp, D., Brostoff, M., & McCarthy, A. M. (2016)	National survey of pediatric nurse residency programs Pediatric Nursing Certification Board (PNCB)	45 studies	New graduates	In the ongoing development of NRPs in children's hospitals, issues such as appropriate content, optimal length, standardization across settings, impact on nurse retention, safe practice and patient outcomes all need to be addressed.
Welding, N. M. (2011)	1 year orientation program	6 hospitals	New graduates	NRPs may be a solution to the need for mentorship and smooth transition into professional nursing practice.

Reference	Method/design	Sample size	Population	Findings
Hillman, L., & Foster, R. (2011)	Cohort 16 week orientation	182 (Still employed)	New graduates	Implications for nurse managers who are considering residency programs include the potential for significant cost savings for the hospital, increased resident, nursing and unit satisfaction and a demand for nurses who desire to work at their hospitals.
Sledge, J. A., Potter, P., & Stapleton, P. (2016)	Cohort 1 year RP 18 month focus sessions	104	New graduates	Gives insight into residents' opinions on the current state of a hospital's NRP program and ideas for enhancement of the program.
Olson-Sitki, K., Wendler, M. C., & Forbes, G. (2012)	Descriptive Study	31	New graduates	The support of NGs is imperative to protect them and to allow them to develop at their own pace.
Bratt, M. M., Baernholdt, M., & Pruszynski, J. (2014)	Longitudinal Study	382 (Urban) 86 (Rural)	New graduates	Providing RPs in rural and urban hospitals can be useful in recruitment and retention Providing a NRP in rural and urban hospitals can be a useful recruitment and retention strategy

Reference	Method/design	Sample size	Population	Findings
Cline, D., Frentz, K. L., Fellman, B., Summers, B., & Brassil, K. (2017)	Retrospective Study 31-Cohorts		New graduates	Results suggest that internally developed residency content may be equally effective as prepackaged programming in supporting the comfort, confidence, and retention of NGNs
Adams, J. M., Alexander, G. A., Chisari, R. G., Banister, G., McAuley, M. E., Whitney, K. B., & Erickson, J. I. (2015)	Cohort	34	New graduates	Researchers identify a benefit in the cohort in addition to new graduates and any nurse that will participate in future programs
Nadler–Moodie, M., & Loucks, J. (2011)	Descriptive Qualitative	16 Cohort 1: 5 Cohort 2: 4 Cohort 3: 7	New graduates	It is necessary for leaders to consider alternative solutions to assist with the looming nursing shortage crisis by considering innovative programs such as this direct entry into a specialty.
Berube, M., Laplante, E., Belmonte, A., Lepage, I., Valiquette, M., & Touchette, S. (2010)	1 year residency program	46	New graduates	This types of program should be recognized as a standard for the orientation of inexperienced nurses in critical care.

Reference	Method/design	Sample size	Population	Findings
Bratt, M. M., & Felzer, H. M. (2012)	Investigator developed model 12-month residency program Longitudinal correlational design 16-Cohorts	468	New graduates	These programs have the potential to reduce errors, build professional practice, promote leadership skills, and minimize burnout and turnover.
Hussein, R., Everett, B., Ramjan, L. M., Hu, W., & Salamonson, Y. (2017)	Cross-sectional survey	87	New graduates	It is crucial for nurse managers in critical-care areas to provide tailored support for NGNs allocated to critical-care settings, particularly during their first rotation.
Kowalski, S., & Cross, C. (2010)	Case Report Qualitative and Quantitative	55 Cohort 1: 36 Cohort 2: 19	New graduates	There is a positive impact on year-round residency programs.
Rosenfeld, P., & Glassman, K. (2016)	Retrospective longitudinal study 8 Cohorts	425	New graduates	Retention among NGs has improved significantly with the introduction of NRPs at this institution.

Smith, Rubinson, Echtenkamp, Brostoff, and McCarthy (2016) completed a study reviewing results of a national survey regarding pediatric NRPs with a purpose of exploring the characteristics of NRPs. The national certification board was utilized in

identifying those hospitals with pediatric units. A total of 316 hospitals were contacted, with 45 reporting pertinent data. Ninety-four percent reported having an orientation program while 70% reported having an NRP. The NRPs were typically a year in length and internally developed. Initially, a literature review was completed to assess best practices related to NRPs. Following the review, a 65-item survey was created. The survey was accessible through Survey Monkey from July 9 through September 15, 2012. Sixty-five hospitals responded to invitations to participate in the study, with 45 responded as having an NRP. Descriptive statistics were used to describe each response. Twenty-seven of the respondents had internally developed NRPs, five were from vendors, the remainder were hybrids of vendor purchased and internally developed programs. Vendors included were AACN, UHC, and Vizient, and eight of the programs were based on Commission on Collegiate Nursing Education (CCNE). Within most of the NRPs was the incorporation of preceptors and consistency regarding content. The length of each residency ranged between 5 to 72 weeks. An identified limitation was the response rate of 25.6%, which was attributed to the length of the survey and time commitments. However, for pediatric nurses, it is imperative to understand benefits and challenges in implementing NRPs and understands the needs of pediatric units.

Welding (2011) discussed an initiative by Nurse Leaders at a western Pennsylvania Medical Center (PMC). PMC initiated their first RP in August 2008. “A major goal for the NRP was to decrease NG turnover within the first year of employment by promoting leadership thinking and nursing excellence, as well as foster critical thinking skills and safe clinical practice “(Welding, 2011, p. 39).



The program included two cohorts of graduate nurses who were entering the organization in the beginning of the summer 2008. Six of the 20 hospitals affiliated with the center, were selected to participate in the initiative. The graduates who were hired between July and August were included in the program. Once general hospital orientation has concluded a 1-year-long orientation began with the guidance of a preceptor. In order to assure the designated preceptors were ready for their new roles, over a 9-month period, each preceptor attended intensive leadership development activities.

Six sessions were created for the leadership team. These sessions included topics such as leadership and coaching, horizontal violence, personality styles, trust in the work place, systems thinking, and situational intelligence (Welding, 2011). The preceptors, nurse managers, and graduates attended the same curriculum. Sessions for discussion were held monthly for the graduates. The last session followed the same agenda as the previous session; however, this session included the graduates and preceptors.

Hillman and Foster (2011) completed an evaluation and review of the impact of NRPs on nurse retention in addition to the cost for the organization. The aim was to identify all benefits associated with the implementation of a RP. The organization decided to contract with an outside company that provided an evidenced based curriculum. The contract was for 3 years. The initial process was to hire two or three times a year; however, after the years had lapsed, the organization decided to revamp their RP. The decision makers would now include nurse managers, directors, and educators. Included in the revamp was a change in the hiring process. Each applicant would be graded based on their customer service interview and their unit-based

interview. With the implementation and completion of their program, 182 remained with the organization (Hillman & Foster, 2011).

Sledge, Potter, and Stapleton (2016) completed a study in 2009. The purpose was to review a RP implemented at a Jewish magnet hospital. The program was designed around the UHC/AACN model. During a 1-year-long residency, each NG engages in monthly educational sessions. Each session focused on professional development and critical thinking. Specifically, each session focused on “changing patient condition, ethics, patient safety, practicing safe patient care, and quality patient outcomes” (Sledge et al., 2016, p. 358).

A collaboration in 2012 with the Department of Research for Patient Care Services at Barnes Jewish Magnet Hospital (BJH), the Centers for Practice Excellence (CPE) created and implemented a series of focus sessions. The purpose of these sessions was to gain insight from participants and to identify opportunities aid in improving the residency. Over the course of 18 months, a series of focus sessions followed a cohort of residents during the entire 1-year-long program. “Sessions were held after the 4th, 8th, and 12th months of the program” (Sledge et al., 2016, p. 359). The cohort included 104 NGs. Nurses who were interested in participating in the project were asked to provide the team with dates and times of availability in order to participate in the group discussions.

A significant theme that was identified was the presence of overload. “One of the main sources of stress was what the project team termed “information overloads” (Sledge et al., 2016, p. 361). In addition, by month, 4 participants expressed feeling ill prepared for their new roles (Sledge et al., 2016). There were 3 areas of improvement that were

identified that could aid in enhancing the program. These were: “how to handle stress, how EBP can become more relevant and beneficial to the new nurse and how to handle conflict appropriately” (Sledge et al., 2016, p. 361). A final discussion group occurred at the 6-month point after the conclusion of the RP. At the 6-month mark, it became evident that the graduates showed maturity as practicing professional nurses.

Olsen-Sitki, Wendler, and Forbes (2012) completed a descriptive qualitative and quantitative study to examine the effects of an NRP on NG experience, retention rates, and satisfaction. A convenience sample of NGs hired between 2006 and 2007 into their first nursing role were included in the study. A total of 31 NGs provided data for both 6 and 12 months and were included within the study. Data revealed before the implementation of an NRP that retention was at 12% and 15%. However, during the implementation, turnover rates decreased to 7% and 11%.

Bratt, Baernholdt, and Pruszynski (2012) completed a longitudinal design study aimed at comparing rural and urban NRP participants. Their sample included 382 urban and 86 rural hospital nurses. These newly licensed nurses attended a 2-month RP. The sample included a cohort of new acute care nurses employed between the years of 2005-2008. Each nurse participated in the RP, which was funded via federal grant (Bratt et al., 2012). The study included data related to NG orientation experiences and characteristics. Data was collected via demographic questionnaire. Results reviewed utilizing descriptive and inferential methods indicated there were no real differences in orientation experience and characteristics of both rural and urban nurses although there were differences in the amount of classroom orientation hours. On the other hand, there were significant

differences in expected program outcomes between rural and urban nurses (Bratt et al., 2012). When this study was completed, researchers were unaware of studies similar to their aim and based on that information this was a limitation of their study. In conclusion, Bratt et al. (2012) believed NRPs are viable mechanisms that promote NGs against turnover.

Cline, Frentz, Fellman, Summers, and Brassil (2017) presented a 10-year retrospective review regarding NRP implementation. Data from the retrospective review was collected using the Casey-Fink Survey. This survey was divided into 5 sections that included demographics, work environment, comfort and confidence, skills, and procedures and role transition. The survey totaled 41 questions and was administered at the beginning and end of the yearlong residency program. A total of 1638 surveys were included for analysis. All participants had 12 months or less of experience as a nurse. From the total amount, 11 were excluded due to failing the NCLEX, and 138 left the organization before completing the residency program. Thirty-one cohorts from summer 2005 through November 2014 provided data.

There was several increases noted based on information gathered. Patient safety increased from 2.77 to 3.16 and communication/leadership increased from 2.88 to 3.24. Support decreased from 3.53 to 3.41, professional satisfaction decreased from 3.36 to 3.29, and stress decreased from .15 to 0.13 (Cline et al., 2017). Because data was collected during a 10-year period, there was some variability in questions that were asked, which served as a limitation. Also, no pre-data were collected in 2005 for the first

cohort and no post data collected for the cohorts in 2014. However, outcomes suggest high retention rates at 1 year with the implementation of NRPs.

Adams et al. (2014) completed a review of a NG cohort in a critical care unit. Thirty-four NG participated in the RP. The program consisted of classroom instruction and simulation for 6 months between October and November 2011. A graduate nursing student and a doctorate prepared research nurse transcribed recordings from participants for further review. Researchers identified a few themes that include program length, stable preceptor resident relationships. Overall, researchers identified a benefit in the cohort in addition to NGs and any nurse that will participate in future programs.

Nadler-Moodie and Loucks (2011) completed a residency-training program based on the American Nurses Association (ANA), International Society of Psychiatric Nurses (ISPN) vision, mission and values of SMVH, APNA, and healthcare. The program was designed to last for 3 months, and preceptors from each unit were pre-selected. The NG program began in 2009 and included 5 graduates. At the 1 year mark, 4 of the 5 graduates were still at the organization as clinical nurses. Cohort 2 included 4 and each of those graduates were successfully placed within the organization. Cohort 3 completed in 2010, included 7 graduates; however, data was not collected because the cohort was still in progress as this study was completed. Researchers believe opportunities such as RPs for mental health nursing will promote interest and aid in resolving retention and recruitment issues.

According to Berube et al. (2010), Canadian hospitals have been battling retention rates within their intensive care unit (ICU) nurses for the past decade. Due to the lack of

ICU nurses, organizations have looked towards finding ways to retain nurses in the ICU. Although there is a need in the ICU, there is also a need to assure NGs are able to provide safe patient care. With the many issues in the ICU, an initiative to create a 1 year RP to aid NGs in their transition was created. The program was broken into 2 segments. During the first semester, each graduate was coupled with an experience nurse and also attended courses. During the second portion of the year, the graduates received mentorship in addition to attending courses that “focused on complex nursing interventions and leadership” (Berube et al., 2010, p. 32). From June 2008 through January 2010, 46 NGs remained within the organization. This increase in NGs constituted a 55% increase when compared to the previous 2 years. Based on the results from the initiative, it was determined that a residency program can improve access to services that address patient safety.

Due to the increase in costs associated with NG turnover, the Wisconsin NRP was initiated in 2009 (Bratt and Feltzer, 2012). With a goal of addressing the lack of support for new graduates, the WNRP provides a continuous amount of support for new nurses (Bratt & Feltzer, 2012). Support services provided within the original program lasted 15 months past hire. The program included monthly educational sessions in addition to preceptor training and mentorship. Those hospitals participating comprise of 35 hospitals belonging to the Wisconsin Health Cooperative (Bratt & Feltzer, 2009). Every month NGs hired within these hospitals traveled to the RWHC to attend the provided sessions.

The program consisted of preceptors who are paired with each NG to provide an encouraging learning environment. Those who serve as coaches within the WNRP also

“serve as teachers, mentors, and role models to promote nurse residents’ professional development within a framework of lifelong learning” (Bratt & Feltzer, 2009, p. 420).

Over 12 months, educational sessions helped NGs adapt to their new roles and develop as professionals. Since the implementation of the WNRP, it has been operational for 4 years. After completion of the program, 90% of NGs had remained at their organization. At the 2-year mark the retention rate was still substantial at 83% “with a mean average rate across all sites of 84%” (Bratt & Feltzer, 2009, p. 421).

The updated study completed in 2012 completed investigations regarding NGs experiences during transition utilizing the Job Stress Scale and the Nurse Job Satisfaction Scale. At the 1 year mark retention rates were 81% (Bratt & Feltzer, 2012).

According to Hussein et al. (2016), a study conducted in a large hospital included 109 NGs who attended a transitional support program over a 12-month period. The attendees’ perceptions were graded based on the Likert scale where 0 = *always* and 10 = *never confident*. Findings indicated satisfaction with unit and orientation, which ranged from 5-8 and in regard to levels of confidence, ranged from 2 to 5. Results also showed that participants who were more satisfied with both their unit orientation and clinical supervision were more likely to be satisfied with their practice environment. These findings were ideal based on common themes found in literature indicating that NG programs improve confidence, retention, decrease reality shock, and improve satisfaction. Participants were recruited 1 at a time in 1 location over a specified time period; however, literature suggested leadership must provide programs specifically for NGs as they transition to the bedside.

Kowalski and Cross (2010) completed a quantitative cohort study. Thirty residents participated in the NRP. In order to participate in the RP, the graduate must possess either an ADN or a BSN degree. Participation in the program is completely voluntary, and participants were placed within the program based on their hire date. The program was broken into divisions. The first 6 months were dedicated to exploring issues surrounding practice, identity, and coping. The second 6 months were dedicated to focusing on patient care, extended learning and the health care team (Kowalski & Cross, 2010).

Outside of the two divisions of the program, there are also two phases within the program. In phase I, there is a 2-week orientation and 12 weeks of working alongside a nursing preceptor on the unit. During phase II, the graduate remains with the nursing preceptor but not as directly as in phase I. In this phase, the preceptor is more of a resource and does not always work the same shifts as the graduate. During this phase, the graduate also attends monthly 8-hour meetings. These meetings are called “Resident Development Days” (Kowalski & Cross, 2010, p. 98). Each meeting lasts 8 hours with a focus on support with and educational module and a demonstration of a selected skill. The study identifies that there are a variety of reasons out there that support the need for an NRP for NGNs.

Rosenfeld and Glassman (2016) completed a retrospective, longitudinal study of former residents. The purpose of the study was to focus on the beneficial long-term effects for those graduates and the organization. The study was conducted in a large urban medical center and examined the effects of the residency on former graduates in 8



cohorts. The cohorts examined were from the year 2005 to 2012. An addition to this study is the researchers also compare responses from graduates who left the institution in addition to those who remain with the organization. A total of 987 NGs completed the RP between 2005 and 2012. From the 987 graduates who completed the RP, 646 have continued their employment at their original institution. A total of 425 graduates responded to survey including 108 surveys that were completed by graduates who left the organization. At the conclusion of their study, Rosenfeld and Glassman (2016) concluded that retention in the NG population had improved with the implementation of the RP.

Table 7

*Level V Evidence Table*

Reference	Method/design	Sample size	Population	Findings
Medas, J. C. (2015)	Prospectus cohort study	79	New graduates	The findings from this project support the use of a CNRP from the perspective of the NLRN.

Reference	Method/design	Sample size	Population	Findings
Friday, L., Zoller, J. S., Hollerbach, A. D., Jones, K., & Knofczynski, G. (2015)	Longitudinal quantitative study	46	New graduates	Nursing leaders must continue to prioritize the job of finding and retaining qualified professional nurses to provide highly technical care.
Goode, C. J., Lynn, M. R., McElroy, D., Bednash, G. D., & Murray, B. (2013)	UHC/AACN residency 2002 through 2012	31,000	New graduates	The recommendations for NGN residency programs are supported by the findings.

Reference	Method/design	Sample size	Population	Findings
Rossler, K. L., & Bennett, A. (2017)	Hermeneutic phenomenology approach	Purposive convenience sample of	Newly licensed registered nurses	Findings lend support for additional research capturing the influence of SBE on the safe transition of newly licensed RNs into practice.
Dos Santos Ferreira, F., dos Santos, J., & Cardoso Meira, K. (2016)	Cross-sectional study	22	1 <sup>st</sup> year and 2 <sup>nd</sup> year nurses	Adequate knowledge was dependent on professional training time.

Reference	Method/design	Sample size	Population	Findings
Moore, L., Kelly, C., Schmidt, S., Miller, M., & Reynolds, M. (2010)	Qualitative design, second-degree	12	Second degree new graduates	Understanding their transition is imperative if these graduates are to be recruited and used at their fullest potential. Such insights can also help nurse administrator's better support these new hires during the transition process.
Hickerson, K. A., Taylor, L. A., & Terhaar, M. F. (2016)	Integrative review	50 articles	New graduates	Three themes emerged: the practice gap is costly, the gap is real and lastly likely interventions will need to include either RPs or preceptor sessions Three themes emerged: the practice gap is costly, the gap is real and lastly likely interventions will need to include either RPs or preceptor sessions

Reference	Method/design	Sample size	Population	Findings
Thein, J. L., & Sandau, K. E. (2013)	Review	26 articles	New Graduates	A RP and programs alike are implemented to aid in the transition process
Everett-Thomas, R., Valdes, B., Valdes, G. R., Shekhter, I., Fitzpatrick, M., Rosen, L. F., & ... Birnbach, D. J. (2015)	Retrospective study	98	New graduates	Simulation and formal training may aid in supporting NGs as they transition from education to practice.
Meyer, R. M., Li, A., Klaristenfeld, J., & Gold, J. I. (2015)	Longitudinal study	216	New graduates Less than 1 year of experience	Researchers believed organizations should be aware of the effects job stress has on daily practice.

Medas (2015) completed a prospective cohort study to evaluate the effectiveness of a 1-year long comprehensive nurse residency program (CNRP). Data was collected at the entry, 6, 12 and 18 months. A convenience sampling method was used for this study. Surveys were distributed to each participant during the different intervals of the study. Satisfaction was measured using the McCloskey-Mueller satisfaction scale. Seventy-nine participants were included within this study. At “baseline the response was 37% ( $n = 79$ ), at 35% ( $n = 74$ ) at 6 months, 15% ( $n = 32$ ) at 12 months, and 11% ( $n = 24$ ) at the 18 months” (Medas, 2015, p. 43).

Friday, Zoller, Hollerbach, Jones, and Knofczynski (2015) completed a longitudinal quantitative study at 3, 6 and 12 months during an NRP utilizing the Casey-Fink survey tool. The RP was 1 year in length and included a convenience sample was utilized to sample new graduates at a level 1 trauma center. Questionnaires were provided to all participants; however, only those who completed all four surveys were completed in the study. Forty-six participants were included in this study. At the 1 year mark, retention rates were 95% and 85% at the 2 year mark. Literature suggests there is value in supporting NGs in their first year until 18 months of practice “with mentoring and professional guidance” (Friday et al., 2015, p. 154). A small sample size provides limitations within this study. However, literature supports onboarding programs are an effective way to assist new graduate transition into their new professional roles.

Goode et al. (2013) completed a 10-year look back at RPs to identify lessons learned. Data was collected from 2002-2012 of graduates who attended the UHC/AACN RP. This residency curriculum is defined in three areas: leadership, professional role and

patient safety. Data was collected utilizing the Casey-Fink online survey tool. Data was collected at three separate points' to include at baseline, 6 months and the 1-year mark. Evaluation of the program geared toward identifying retentions rates and changes of the residents throughout the program. A limitation of this study is the participation of residents. Participation dropped drastically from 61% to 48% by the 1-year mark. As of 2012, "approximately 31000 nurses and 86 organizations representing 100 hospitals have participated in the NRP" (Goode et al., 2013, p. 74). However, the program's data was ultimately based on a 40% participation rate. Although there was low participation, researchers found that the UHC/ACCN residency helps NGs learn organization, prioritization, and communication with multidisciplinary team members.

Rossler and Bennett (2017) completed a qualitative pilot study using a hermeneutic approach. A purposive study utilizing a convenience sample was incorporated. The purpose of this study was to examine the perceptions of simulation into a residency program. The RP consisted of a total of 10 weeks. 2 of the 10 weeks consisted of general orientation. A total of 49 NGs were hired during this study in 2015 and participated in the scheduled SBEs. Fifteen of the 49 met the inclusion criteria, and 6 received face-to-face interviews. A limitation of this study was the sample size. However, research suggests additional findings capturing the benefits of SBE for new graduate transition.

Dos Santos Ferreira, Santos, and Meira (2016) completed a cross-sectional study of nurses enrolled in an oncology RP. The nurses' knowledge was determined based on the Nurses knowledge about cancer pain management- WHO instrument (Dos Santos

Ferreira et al., 2016, p. 694). The RP began in 2013 and included 29 nurses. The final number of participants decreased to 22 after 6 nurses refused participation and one opted to serve as a researcher. All participants had less than 2 years of nursing experience. A multivariate analysis was utilized to determine the nurses' knowledge regarding pain management. Data showed that nurses did not possess adequate knowledge regarding cancer pain and management. In conclusion, professional training time regarding cancer is necessary in NGs.

Moore, Kelly, Schmidt, Miller, and Reynolds (2010) completed a study aimed at understanding the experiences of second-degree pre-licensure nurses as they transition into practicing as nurses. A qualitative design was utilized throughout this study. Graduates were interviewed three times in a 10-month period. Fourteen graduates agreed to be included in the cohort; however, two withdrew based on personal preferences. Data from the graduates was analyzed by four researchers at the end of each round for a total of three rounds. The first round was directly after graduation, the second round was 3 months after employment, and the final round was 6 months after employment. The results from interview questions revealed in the both the 1<sup>st</sup> and 2<sup>nd</sup> rounds that the graduates believed their biggest strength to be critically thinking, problem solvers, and establishing relationships. Consistent in all three rounds was the insecurities novice nurses have as they feel they do not want to "make mistakes, hurting someone or missing something" (Moore et al., 2010, p. 222). Graduates also voiced the fear of being frowned upon by other nurses due to their master's degree that they acquired in only 2 years. A limitation of this study is that all the participants were from one nursing program.



However, the researchers concluded it was important to understand the issues this population of graduates face will aid in attracting and utilizing them to their fullest potential.

Hikerson, Taylor, and Terhaar (2016) completed an integrative review aimed at examining deficits in knowledge in NGs as they enter into clinical practice. Articles from 2001 to 2013 were used in the search criteria of this study. A total of 50 articles were incorporate in the study utilizing the Johns Hopkins practice guidelines. Three themes emerged: (a) the practice gap is costly, (b) the gap is real, and (c) likely interventions will need to include either residency programs or preceptor sessions. (Hikerson et al., 2016, p. 21).

Theisen and Sandau (2013) completed a critical review where the aim was to examine competencies and provide suggestions for implementation during RPs. A total of 26 articles were included in this study from the years of 2000 to 2012. From this search, a few themes emerged: leadership, organization, communication, stress management, and critical thinking. A limitation of this study was the tight inclusion criteria that excluded any type of specialized area of orientation. Researchers have identified several common themes that plague graduates as they enter into the nursing profession. It is the belief that programs such RPs and programs alike are implemented to aid in the transition process.

Everett-Thomas et al. (2014) completed a retrospective study from a medical surgical RP. There were a total of 98 graduates who participated in the RP from January 2008 through November 2011. The participants were broken up into 20 groups of no more than 6 graduates in each group. The organization has adopted the Vizient method of

RP that is geared towards aiding in the transition from student to professional nurse. The RP lasted for 10 weeks and included simulation, preceptorship, and didactic teaching. Each week, graduates also received weekly simulation exercises. Researchers utilized analysis of variance and identified decreases in nurse performance and increases in applied knowledge and practice between weeks 1 and 5 for all clinical management categories. The identified clinical management categories were disease recognition, disease management, patient safety, and critical actions. In regard to patient safety, the improvement in week five increased from 5.3 to 11. For disease recognition, the improvement in week 5 increased from 4.4 to 7.1. For critical action, the improvement in week 5 increased from baseline of 5.4 to decreases in weeks 3 and 4 of 4.1 back to baseline of 5.4. For disease management, the improvement in week 5 increased from 4.7 to 12. A limitation of this study is the use of group observation and not individual observation. However, it is believed that simulation and formal training may aid in supporting NGs as they transition from education to practice.

Meyer, Li, Klaristenfeld, and Gold (2015) completed a longitudinal study identifying nurse burnout, job satisfaction, stress exposure, and fatigue. The RP lasted for a total of 22 weeks and was offered to licensed nurses with less than 1 year of nursing experience. The Vizient program was the model used for the participants. Nurses entering the RP between the years of September 2007 to March 2010 were asked to participate in the study. A total of 251 graduates agreed to participate however, at the 6-month mark, 35 did not complete the questionnaires on job satisfaction, 3 dropped out of the program, 1 did not agree with the unit assignment, 1 relocated, and 1 had other commitments. At

baseline, nurses completed a 20-minute questionnaire. At 3 months, nurses repeated the Life Events checklist (LEC) to identify stress exposure to stressful events. At 6 months, Vizient voyager and wen based questionnaire was completed. A limitation of this study is stressful events were measured in general and not specifically to job stress. In addition, job satisfaction was only measured at the 6-month mark. Researchers believe organizations should be aware of the effects job stress has on daily practice.

Table 8

*Level VI Evidence Table*

Reference	Method/design	Sample size	Population	Findings
Harrison, D., & Ledbetter, C. (2014)	Cross-sectional, descriptive design using quantitative instruments	461 Site 1: 46 Site 2: 57 Site 3: 358	New graduates	With the future of a nursing shortage looming, investing in the new workforce is worth the time and money to assure quality nurses who want to stay in their jobs.
Barnett, J. S., Minnick, A. F., & Norman, L. D. (2014)	Cross-section descriptive design	95	Newly licensed RN	NRPs expansion may be limited by the number of hospitals of a size most likely able to support such programs.

Reference	Method/design	Sample size	Population	Findings
Fiedler, R., Read, E. S., Lane, K. A., Hicks, F. D., & Jegier, B. J. (2014)	Descriptive study	51	Nurse residency students	Long-term outcomes of an NRPs appear to have benefits to both the organization and the individual.
Johnson, A., Salisbury, H., Johannsson, M., & Barajas, K. (2013)	Mixed method descriptive study	11 Purposive sample	RN with completion of ER NRP	The program gives the nurses the skills, such as communication, prioritizing, stress management, and crisis intervention, to support their practice and expand their job satisfaction.
Thomson, S. (2011)	Descriptive prospective study  1 year residency program 2 groups	84	AND BSN	These study findings support the continued need to address graduate nurse transition programs.
Kramer, M., Halfer, D., Maguire, P., & Schmalenberg, C. (2012)		5,316	New graduates	The quality of clinical unit work environments is the most important factor in NLRN retention.

Reference	Method/design	Sample size	Population	Findings
Clark, C. M., & Springer, P. J. (2012)	Descriptive qualitative study	37	New graduates	Having supportive preceptors and nursing staff, feeling valued by the health care team, and being perceived as a vital member of the organization contributed to job satisfaction and overall commitment to the profession.
Jensen, L. (2016)	12 Month residency program	6	New graduates	NG identified having a “well-rounded experience “and saw the NRP as an ideal way to network and gain new experiences

Harrison and Ledbetter (2014) completed a cross sectional descriptive design utilizing quantitative instruments, data regarding retention and turnover rates, and the Casey-Fink Graduate Nurse Experience Survey (CFGNES) outcomes. The question Harrison and Ledbetter (2014), wanted to answer is in NG RNs was, “Does an RN residency versus standard orientation increase retention and recruitment? “(p. 77). This data was gathered from three different acute care facilities. A convenience sample was completed between November 2010 and September 30, 2011. Researchers utilized surveys that were mailed to participants 1 year after their hire date. At site A, their focus was geared towards patient safety, leadership, and professional role. Different material

was covered at the 2-month, 6-month, and 1-year marks. Each new graduate also is assigned a mentor for an entire year. Site B utilized a 1-year transitional program that only included focus courses on safe patient handling, system reviews, and communication. Site C included an orientation lasting between 3- 6 months, but this depended on specialty. Researchers determined that at site A after the incorporation of a RP, their turnover decreased to 2%. At site B, two cohorts were included within the study, and the first cohort, no turnover was noted and within the second cohort 10% was noted for 5%. At site C, a downward trend was noted in their turnover rates. A limitation noted within this study is the smaller sample size due to utilizing a convenience sample and because sites A and B were smaller organizations. Overall, data supports the evidence of reducing first-year turnover with the incorporation of an NRP.

Barnett, Minnick, and Norman (2014) completed a cross-sectional descriptive study utilizing a 24-item survey. The focus of this survey was to describe U.S NRP's. The survey was initially sent to directors and chief nursing officers located within 1011 hospitals that had a minimum of 250 beds. A total of 203 of the initial 1011 surveys were returned. This study incorporated two researchers who tested validity using a sort card method. Of the respondents, 95 identified using an NRP in their organization. Twenty-one of those respondents identified utilizing the American Association of Colleges of Nursing and the University Health System Consortium AACN/UHC model. Fifty-one indicated using an organization based model and 23 reported utilizing other models. Length was a concept that Barnett et al. (2014) wanted to highlight. Ninety-two respondents reported their program lengths of 12 weeks or less. Fifteen reported a

program of less than 10 weeks, 12 reported 12-week programs, and 25 reported a program length between 14 and 50 weeks. However, the majority of respondents reported program lengths of 52 weeks. Limitations identified within this study referred to the abundance of NRP due to the response rate. Researchers believed future research should be completed regarding the direct effects of NRPs.

Fielder et al. (2014) completed a pilot study aimed at determining the long-term effects NRPs had on retention, career satisfaction and leadership development. This was a descriptive study including former residents still employed at the facility. One hundred and seventy NRP graduates were still employed at the facility between July 2008 and August 2010 were asked to participate in this study. Survey Monkey was utilized to email surveys to the participants. The final sample included 51 responses. Descriptive statistics identified a 5.6% (11) turnover rate among new graduates while they attended the yearlong program. A limitation in this study is the 30.2% survey rate. Overall, data indicates an environment of professional development enhances “quality and safety of the practice environment” (Fielder et al., 2014, p. 422).

Johnson, Salisbury, Johannsson, and Barajas (2013) completed an evaluation of an emergency department NRP that included 13 nurses. A mixed method descriptive study was utilized. Purposive sampling was used to select participants. Interviews were completed with an investigator and were recorded and transcribed. The Casey-Fink survey was incorporated for data collection purposes and was sent to nurses who were currently employed at the facility. The results of the residency program indicated all 11 nurses who completed the program of the 13 felt themselves to be competent, confident,

and have the ability to prioritize. A limitation of this study was having a small sample size. Despite the small amount of participants, researchers believed RPs supply nurses with the skills, “such as communication, prioritizing, stress management and crisis intervention, to support their practice and expand their job satisfaction” (Johnson et al., 2013, p. 236).

Thomson (2011) completed a descriptive study aimed at comparing results between AND nurses and BSN prepared nurses. Three survey tools were incorporated in this study McClosky Mueller Satisfaction Scale, Casey-Fink, and Gerber Control over Nursing Practice scale. A total of 105 nurse both BSN and ADN nurses were recruited by convenience sampling during the week of being hired during July 2004 through July 2005. Surveys were completed at three points within this study: 1, 6, and 12 months from hire; however, the surveys for the ADN nurses were paper and the surveys for the BSN nurses were computerized. Analysis included only 84 surveys from participants. All three surveys from both BSN and ADN were completed. Researchers found the both groups of nurses had an increase in job satisfaction at the 1-month mark than the 1-year mark. Both groups also had higher satisfaction rates at baseline than at the 6-month and 1-year mark. A limitation in this study is the sample size; however, aside from limited participant data, research supported the need to address residency programs.

Kramer, Halfer, Maguire, and Schmalenberg (2012) completed a longitudinal quantitative study utilizing descriptive design aimed at examining the effects of a healthy work environment and multistage RPs on NG retention rates. A total of 5,316 NGs were employed during 2006 through 2008. The data from the 28 of the 34 selected hospitals



provided included data. Retention rates were analyzed at the 6-month mark, and 1-, 2-, and 3-year marks. Consistent findings suggested healthy work environments make a big difference. However, a limitation of this study is that researchers were inadequately able to test the impact of multistage RPs. In addition, many hospitals did not return sufficient data that made it difficult to measure certain aspects. Researchers believed retention rate data should be collected after the second year after hire.

Clark and Springer (2011) completed a qualitative descriptive study geared towards examining job satisfaction and lived experiences of graduates in their first year of nursing practice. The sample consisted of 37 NGs of a newly implemented RP. Krueger's process was utilized to create nine focus groups. First emails were sent to all residents employed at the hospital. The second step was moderating, which included creating a warm environment and explaining the purpose and process of the study. The third step is analysis where all sessions are recorded, labeled, and properly transcribed by the researcher. Researchers concluded a significant amount of participants in the study predicted 10 years from now they would still be in the nursing profession, provides they "encountered supportive preceptors and nursing staff, felt valued by the care team and felt they contributed as a vital member of the organization" (Clark & Springer, 2011, p. e7).

Jensen (2016) completed a 12-month RP created with salaries for the 6 positions. These positions were funded through a grant from the Veterans Health Administration Office of Academic Affiliations. The goal of the program was to assist with the transition from student to professional practice. Each participant was responsible for detailed

weekly journals regarding their experiences (Jensen, 2016). Feedback after the completion of the RP included “the program provides a good experience” (Jensen, 2016). NG identified having a “well-rounded experience “and saw the NRP as an ideal way to network and gain new experiences (Jensen, 2016, p. 4).

Table 9

*Level VII Evidence Table*

Reference	Method/design	Sample size	Population	Findings
McPhee, K. (2016)	Expert Opinion		New graduates	Organizations must understand, meet and create programs that meet the needs of new graduates and support their transition

McPhee (2016) is considered an expert in the field of high-quality residency programs. She has been an NRP coordinator since 2006 and has worked in professional nursing development for the past 15 years. In her opinion, the amount of residency programs has grown. The rigorous process of gaining of CCNE accreditation is also aiding in providing quality RPs. McPhee believes that attention needs to be directed at measuring effectiveness and learner impact. It is important to understand the needs of NGs and to provide a program to support their needs as they transition to practice (McPhee, 2016).

The final major goal of the RP was to increase residents' competency and overall comfort with their new level of responsibility. Overall, Welding (2011) concluded that RPs are not a quick fix for nursing turnover, they provide a sure way to assure new graduates receive the additional support and needs they have as they transition.

### **Recommendations**

Although there is not a clear timeline as to implementation of an NRP, it would be beneficial to only accept BSN graduates into their program initially until they have completed a successful implementation. Additionally, implementing an NRP will give the program organizers the opportunity to evaluate the successes of the program and address any failures or inconsistencies that were identified during the evaluation phase. Also, limiting the number of accepted participants for the inaugural program could also create the ability to control the environment and identify issues before they become major problems.

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

#### **Strengths**

A significant strength of the project is that there is a vast amount of literature in support of the implementation of an NRP. An additional strength of this project is the leniency of the organization to determine when and if they are willing to implement this type of program within their organizational structure. By leaving the final decision up to the organization, leadership can pinpoint when is the best time for the implementation based on staffing, resources, and cost.

## **Limitations**

A significant limitation of this project is the lack of a second reviewer. In completing a systematic review, a second verifier is necessary in order to assess for validity and reliability of the literature and data. In addition, the second verifier identifies what has been completed within the literature in comparison to what has been documented (Dinkier, n.d.). Another limitation is the importance the organization will place on the implementation of an NRP. Because this is a government agency utilizing government funds, it may not be an easy process to convince the leadership team of this programs importance.

## **Summary**

According to Hillman and Foster (2011), nurse leaders have indicated NRPs have increased the variety of NG who is ready to become nurse leaders and are quickly ready to be involved in leadership training programs. Leadership felt NGs were better equipped and more prepared to handle the day-to-day needs of the unit. With an improved hiring strategy, leadership team members are able to select the best candidates from a large pool of applicants, which ultimately assure the best candidates receive additional support via NRP (Hillman & Foster, 2011).

The goal of this systematic review was to gather, organize, and synthesize the current literature regarding the implementation of an NRP. An additional goal of this systematic review was to assure the data was organized coherently and simplistically in order to assure its understanding and overall necessity in the local VA's organization. Although there has not been a clear way to address the monetary constraints a program of

this magnitude will cause, the bigger picture that address improved quality in patient care outcomes and significant improvement in nursing retention rates show that there is a need for this program.

## Section 5: Dissemination Plan

### **Introduction**

The transition from academia to professional practicing nurse in an acute care setting can be difficult. Nurses' realization that they are now caring for patients on their own and are now responsible for all care needed for each patient's disease process is often a difficult reality to face. To assist with the transition process, certain resources must be in place. Implementing an NRP will serve as a structured aid that encompasses the additional training, mentorship, and support needed by each NG.

### **Analysis of Self**

Throughout this process, I believe that I have grown in many ways. This has been a life-changing experience. I have encountered difficulties that I had not encountered previously in my educational career. This process has aided me in improving my writing skills and capturing my audience. Writing for a doctoral degree is not on the level of a master's or bachelor's degree, and this process has shown me what is necessary to achieve the status of a scholarly doctoral writer and educator. I have a newfound excitement for my proposal and the ultimate outcomes of its dissemination. I also have an increased interest in literature, research, and evidence-based practice. This study alone has taken me through so many emotions and has ultimately made me want to be a better version of myself.

I believe with this process that I have been challenged to think outside of myself. I have never encountered several drafts of the same information or several revisions. However, this process has been nothing short of several drafts and revisions. By finally

reaching this stage, I believe that I am almost at the finish line. I feel like I am steps away from achieving a goal that I did not originally set for myself. This has been nothing short of a dream. The challenges and changes that this process have forced me to make have strengthened and encouraged me to do more within my career. There is more work in the nursing profession that needs to be done outside of my everyday life. Change needs to occur to strengthen to profession of nursing.

### **Summary**

The development of an NRP is geared toward providing the additional support needed by NGs as they transition from bedside to professional practice. Throughout this process, I have had some difficult times where I have come down on myself and often felt discouraged. However, through the accomplishments of my classmates and encouragement from my support system, I have brought myself back on track. This process has shown me how to be resilient throughout all the obstacles that I have faced. This has not been an easy process, but it has been a rewarding experience.

To meet requirements for dissemination, I will provide the Director of Veterans Health and Education access to my study in its entirety. It is my hope that the director will find the information necessary and will present the information to the additional leadership team members. If the implementation is ideal, the plan for dissemination will be left at the hands of the facility. My goal is to provide the organization with the data from the completed systematic review as a guide for the implementation of its own NRP.

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## Appendix A: Inclusion Matrix

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Adams, J. M., Alexander, G. A., Chisari, R. G., Banister, G., McAuley, M. E., Whitney, K. B., & Erickson, J. I.	2015	Strengthening New Graduate NRPs in Critical Care: Recommendations From Nurse Residents and organizational Stakeholders.	<i>Journal of Continuing Education on Nursing</i>	Researchers identify a benefit in the cohort in addition to NGs and any nurse that will participate in future programs	Level IV
AL-Dossary, R., Kitsantas, P., & Maddox, P.	2014	The impact of RPs on new NGs' clinical decision-making and leadership skills: A systematic review.	<i>Nurse Education Today</i>	NRPs decrease turnover in the first year and promote professional growth	Level I
Anderson, G., Hair, C., & Toder, C.	2012	NRPs: An evidence-based review: of theory, process and	<i>Journal of Professional Nursing</i>	RPs provide an opportunity to develop novice nurses	Level 1

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Baldwin, K. M., Black, D. L., Normand, L. K., Bonds, P., & Townley, M.	2016	outcomes Integrating Retired Registered Nurses Into a New Graduate Orientation Program. Clinical Nurse Specialist :	<i>The Journal For Advanced Nursing Practice</i>	Use of VNAs to support NGNs as they adjust to the staff nurse role can prevent attrition during their first year of nursing practice by providing additional support to the NGN	Level III
Barnett, J. S., Minnick, A. F., & Norman, L. D.	2014	A description of U.S. post-graduation NRPs.	<i>Nursing Outlook</i>	NRP expansion may be limited by the number of hospitals of a size most likely able to support such programs.	Level VI
Berube, M., Laplante, E., Belmonte, A., Lepage, I., Valiquette, M., & Touchette, S.	2010	NRP: a solution to safely introduce NGs in critical care while improving accessibility to services	<i>Dynamics</i>	Our findings confirm that a RP is an initiative that can improve accessibility to services while addressing patients 'safety. Consequently, this type of	Level IV

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
				program should be recognized as a standard for the orientation of inexperienced nurses in critical care.	
Beyea, S. C., Slattery, M. J., & von Reyn, L. J.	2010	Outcomes of a simulation-based NRP.	<i>Clinical Simulation In Nursing</i>	1 year turnover rate decreased. Improved readiness for clinical practice	Level III
Bratt, M. M. & Feltzer, H.M.	2012	Retaining the next generation of nurses: the Wisconsin NRP provides a continuum of support.	<i>Journal of Continuing Education In Nursing</i>	A program of this magnitude is not possible without the dedication of a team of nurse leaders in academe and service who are committed to excellence and who embrace a model of collaboration and collegiality.	Level IV
Bratt, M. M., Baernholdt, M.,	2014	Are rural and urban	<i>Journal of</i>	Providing residency	Level IV

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
& Pruszynski, J.		newly licensed nurses different? A longitudinal study of a nurse residency programme.	<i>Nursing Management</i>	programs in rural and urban hospitals can be useful in recruitment and retention Providing a NRP in rural and urban hospitals can be a useful recruitment and retention strategy	
Clark, C. M., & Springer, P. J.	2012	Nurse residents' first-hand accounts on transition to practice	<i>Nursing Outlook</i>	Having supportive preceptors and nursing staff, feeling valued by the health care team, and being perceived as a vital member of the organization contributed to job satisfaction and overall commitment to the profession	Level VI



Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Cline, D., Frentz, K. L., Fellman, B., Summers, B., & Brassil, K.	2017	Longitudinal Outcomes of an Institutionally Developed Nurse Residency Program.	<i>Journal of Nursing Administration</i>	Results suggest that internally developed residency content may be equally effective as prepackaged programming in supporting the comfort, confidence, and retention of new graduate nurses.	Level IV
Cochran, C.	2017	Effectiveness and Best Practice Of Nurse Residency Programs : A Literature Review.	<i>MEDSU RG Nursing</i>	Literature suggested NRPs as a cost-effective strategy to increase new graduate nurse retention	Level 1
Dos Santos Ferreira, F., dos Santos, J., & Cardoso Meira, K.	2016	Knowledge of resident nurses on the management of cancer pain: a cross-sectional	<i>Online Brazilia Journal Of Nursing</i>	Adequate knowledge was dependent on professional training time.	Level V

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Edwards, D., Hawker, C., Carrier, J., & Rees, C.	2015	study. A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse.	<i>International Journal of Nursing Studies</i>	Literature supports strategies to assist NGs as they transition	Level I
Everett-Thomas, R., Valdes, B., Valdes, G. R., Shekhter, I., Fitzpatrick, M., Rosen, L. F., & ... Birnbach, D. J.	2015	Using Simulation Technology to Identify Gaps Between Education and Practice Among New Graduate Nurses	<i>Journal of Continuing Education in Nursing</i>	Simulation and formal training may aid in supporting NGs as they transition from education to practice	Level V
Fiedler, R., Read, E. S., Lane, K. A., Hicks, F. D., & Jegier, B. J.	2014	Long-term Outcomes of a Postbaccalaureate Nurse	<i>Journal of Nursing Administration</i>	Long-term outcomes of an NRP appear to have benefits to both the organization	Level VI

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
		Residency Program.		and the individual.	
Friday, L., Zoller, J. S., Hollerbach, A. D., Jones, K., & Knofczynski, G.	2015	The Effects of a Prelicensure Extern Program and NRP on NG Outcomes and Retention	<i>Journal For Nurses In Professional Development</i>	Literature supports onboarding programs are an effective way to assist NG transition into their new professional roles.	Level V
Garrison, F. W.	2017	Working smarter: building a better nurse residency program	<i>Nurse Management</i>	Resources may be limited in implementing NRPs, but organizations should work smarter and harder towards recruitment and retention.	Level III
Goode, C. J., Lynn, M. R., McElroy, D., Bednash, G. D., & Murray, B.	2013	Lessons Learned From 10 Years of Research on a Post-Baccalaureate Nurse Residency	<i>Journal of Nursing Administration</i>	The recommendations for new graduate NRPs are supported by the findings.	Level V

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Harrison, D., & Ledbetter, C.	2014	Program NRP	<i>Journal For Nurses In Professional Development</i>	With the future of a nursing shortage looming, investing in the new workforce is worth the time and money to assure quality nurses who want to stay in their jobs.	Level VI
Hillman, L., & Foster, R.	2011	The impact of a nursing transitions program on retention and cost savings	<i>Journal of Nursing Management</i>	Before the development of a NG transition program, our 1 year retention rate was as low as 50%. Five years after program adoption, retention increased to 72.5%, resulting in major cost savings to the organization	Level IV
Hickerson, K. A., Taylor, L. A., & Terhaar, M. F.	2016	The Preparation-Practice Gap: An Integrative	<i>Journal of Continuing Education In</i>	Three themes emerged: the practice gap is costly, the gap is real and lastly likely	Level V

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
		e Literature Review	<i>Nursing</i>	interventions will need to include either RP or preceptor sessions Three themes emerged: the practice gap is costly, the gap is real and lastly likely interventions will need to include either residency programs or preceptor sessions	
Hussein, R., Everett, B., Hu, W., Smith, A., Thornton, A., Chang, S., & Salamonson, Y.	2016	Predictors of NGNs' satisfaction with their transitional support programme	<i>Journal of Nursing Management</i>	Crucial for managers to provide tailored support for NGNs	Level IV
Jensen, L.	2016	Evaluating RN residency programs	<i>Nursing Management</i>	The program provides a good experience. The program is a great way to network and gain exposure to new experiences	Level VI
Johnson, A.,	2013	Emergen	Journal	The program	Level VI

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Salisbury, H., Johannsson, M., & Barajas, K.		cy NRP Evaluation.	<i>For Nurses In Professional Development</i>	gives the nurses the skills, such as communication, prioritizing, stress management, and crisis intervention, to support their practice and expand their job satisfaction	
Kowalski, S, and CL Cross.	2010	Preliminary outcomes of a local RP for NG registered nurses.	<i>Journal of Nursing Management</i>	The results of this study demonstrate the positive impact of a year-round RP for NG RNs	Level IV
Kramer, M., Halfer, D., Maguire, P., & Schmalenberg, C.	2012	Impact of Healthy Work Environments and Multistage Nurse Residency Programs on Retention of Newly Licensed RNs	<i>Journal of Nursing Administration</i>	The quality of clinical unit work environments is the most important factor in NLRN retention.	Level VI

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Letourneau, R. M., & Fater, K. H.	2015	Nurse RP: An Integrative Review of the Literature	<i>Nursing Education Perspectives</i>	The literature demonstrates benefits associated with NRPs. More evidence is needed to determine if NRPs contribute to nurse-sensitive patient outcomes, thereby influencing quality of nursing care.	Level III
McPhee, K.	2016	Demonstrating High-Quality Outcomes in Nurse Residency Programs	<i>Journal For Nurses In Professional Development</i>		Level VII
Medas, J. C.	2015	Outcomes of a comprehensive NRP	<i>Nursing Management</i>	The findings from this project support the use of a CNRP from the perspective of the NLRN	Level V

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Meyer, R. M., Li, A., Klaristenfeld, J., & Gold, J. I.	2015	Pediatric Novice Nurses: Examining Compassion Fatigue as a Mediator Between Stress Exposure and Compassion Satisfaction, Burnout, and Job Satisfaction	<i>Journal of Pediatric Nursing</i>	Researchers believe, organizations should be aware of the effects job stress has on daily practice	Level V
Moore, L., Kelly, C., Schmidt, S., Miller, M., & Reynolds, M.	2010	Second-degree prelicensure master's graduates and their transition to practice	<i>Journal of Nursing Administration</i>	Understanding their transition is imperative if these graduates are to be recruited and used at their fullest potential. Such insights can also help nurse administrator's better support these new hires during the transition	Level V



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				process.	
Nadler–Moodie, M., & Loucks, J.	2011	The Implementation of a New-Graduate Nurse Residency Training Program Directly Into Psychiatric–Mental Health Nursing	<i>Archives of Psychiatric Nursing</i>	It is necessary for leaders to consider alternative solutions to assist with the looming nursing shortage crisis by considering innovative programs such as this direct entry into a specialty.	Level IV
Olson-Sitki, K., Wendler, M. C., & Forbes, G.	2012	Evaluating the impact of a NRP for newly graduated registered nurses.	<i>Journal For Nurses In Staff Development</i>	The support of NGs is imperative to protect them and to allow them to develop at their own pace.	Level IV

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Phillips, J., Kuhlman, C., & Evanson, C.	2017	Air Medical Transport Residency Program for Flight Nurses and Paramedics.	<i>Air Medical Journal</i>	As leaders and educators in the field, we need to ensure that we do all we can to make sure they successfully transition into this role.	Level III
Rosenfeld, P., & Glassman, K.	2016	The Long-term Effect of a NRP	<i>Journal of Nursing Administration</i>	Retention among NGs has improved significantly with the introduction of NRPs at this institution.	Level IV
Rosenfeld, P., Glassman, K., & Capobianco, E.	2015	Evaluating the Short- and Long-term Outcomes of a Post-BSN RP	<i>Journal of Nursing Administration</i>	The experiences and assessments of former residents demonstrate that certain program outcomes require longer time to emerge.	Level III

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Rosler, K. L., & Bennett, A.	2017	Restructuring a Hospital NR: Nursing and Patient Safety Unite	Clinical Simulation In Nursing	Findings lend support for additional research capturing the influence of SBE on the safe transition of newly licensed RNs into practice	Level V
Sledge, J. A., Potter, P., & Stapleton, P.	2016	Participant Voices: Making a Nurse RP Better.	<i>Nurse Leader</i>	Insight was gained into residents' opinions on the current state of a hospital's NRP and ideas for enhancement of the program.	Level IV
Smith, J. B., Robinson, D., Echtenkamp, D., Brostoff, M., & McCarthy, A. M.	2016	Exploring the Structure and Content of Hospital-Based Pediatric NRPs	<i>Journal of Pediatric Nursing</i>	In the ongoing development of NRPs in children's hospitals, issues such as appropriate content, optimal length, standardization across settings, impact on nurse retention, safe practice and	Level IV

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
				patient outcomes all need to be addressed.	
Theisen, J. L., & Sandau, K. E.	2013	Competency of NGNs: A Review of Their Weaknesses and Strategies for Success	<i>Journal Of Continuing Education In Nursing</i>	A RPs and programs alike are implemented to aid in the transition process	Level V
Thomson, S.	2011	Transition into practice: a comparison of outcomes between associate- and baccalaureate-prepared nurses participating in a NRP	<i>Journal For Nurses In Staff Development</i>	These study findings support the continued need to address graduate nurse transition programs	Level VI

Authors(s) last name first initial	Publication date	Title of article	Journal title	Summary	Grading of evidence
Van Camp, J., & Chappy, S.	2017	The Effectiveness of NRP on Retention : A Systematic Review.	<i>AORN Journal</i>	NRP's have strong outcomes and graduate nurses benefit from the education	Level I
Welding, N. M.	2011	Creating a Nursing Residency: Decrease Turnover and Increase Clinical Competence	<i>MEDSURG Nursing</i>	NRPs are not a quick solution for nursing turnover or skill building; however, they offer an effective way to address the needs of new nurse graduates.	Level IV