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Walden University

College of Health Sciences

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Carolyn Berglund

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> Walden University 2019

Abstract

Nursing Staff Development for Novice Nurse Practitioners in Acute Care

by

Carolyn Berglund

MS, Walden University, 2011

BS, Graceland University, 1995

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

Walden University

February 2019

Abstract

An acute care practice site reported 75% turnover of novice nurse practitioners (NPs), which indicated a gap in the transition from student to practitioner within the first year of clinical practice. This gap can leave novice NPs unprepared to manage patients effectively and contribute to high turnover. The practice-focused question addressed whether an evidence-based staff development program for novice NPs at an acute care site could be developed. The purpose of this project was to create a framework based on evidence to transition novice NPs successfully into practice. Benner's skill-acquisitionin-nursing theory informed this project. Evidence was obtained by searching electronic databases, reviewing professional organization websites, and consulting with experts. The search revealed journal articles, best-practice guidelines, and useful insights from experts. The Elkins literature review matrix was used to organize, summarize, and weigh the evidence. A summary of consultations with experts was used. Commonalities within the evidence included guided clinical experiences and nonclinical activities such as (a) formal didactic sessions, (b) professional development, and (c) quality improvement. Outcomes include recommendations for a 12-month postgraduate development program framework and educational content. Recommendations were also provided for formative and summative evaluations. The implications of this project for social change include effective preparation of novice NPs and stabilization of the NP workforce at the project site.

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Dedication

I would like to dedicate this body of work to my parents, Linda Jean Berglund and John Oscar Berglund. They devoted their lives to their children's success. Thank you for insisting we obtain a college education.

Acknowledgments

I would like to thank my friends and family for being supportive, encouraging, and understanding when I needed to stay home to work on academic pursuits. Now I can go and play! Thank you to my colleagues and long-time friends Marvin and Mike for repeatedly proofreading my work, listening to me iron out the bugs in my project, and being flexible when I needed time off. Your friendship and support have been invaluable. I would like to sincerely thank Dr. Anne Vitale for making this process challenging and pushing me to think beyond my limits, helping me to grow as a doctoral prepared scholar-practitioner. Without your guidance, my success would not have been possible. Thank you to Dr. Emma Camarena for all your support and assistance, but mostly for your role as preceptor and mentor. You helped me to stay focused and to keep my eye on the prize. Many times, you were a calming force in an otherwise stormy sea. You have been pivotal in my journey, and your presence has had a deep impact on me as a professional. Last, but far from least, I would like to thank Sela B. and Thanie for always helping me find joy in life. I love you very much.

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Section 1: Nature of the Project

Introduction

As the United States responds to the increasing demand for access to quality and timely healthcare, nurse practitioners (NPs) are being used in more settings, including the acute care setting in hospitals (Brown, Poppe, Kaminetzky, Wipf, & Woods, 2015; Martsolf, Nguyen, Freund, & Poghosyan, 2017). Nurse practitioners (NPs) are highly educated professionals, yet evidence is clear that the first year of practice is very stressful for novice NPs, leaving them at risk for job dissatisfaction and attrition (Brown et al., 2015; Bush, 2015; Sciacca & Reville, 2016; Wirtz Rugen, Speroff, Zapatka, & Brienza, 2016). Over the previous 10 years, at least 70 postgraduate staff development programs have been initiated across the United States as a means to bridge this transition-topractice period to best prepare novice NPs for practice (Martsolf et al., 2017). In this project, I sought to develop an evidence-based nursing staff development program for novice NPs tailored to the acute care setting at the practice site. Ultimately, the goal of a nursing staff development program for novice NPs is to facilitate a successful transition to practice for these professionals, grow an expert workforce, and improve the quality of care provided to the community.

This project has the potential to create positive social change by advancing nursing practice at the project site. It does this by providing the practice site with a formal evidence-based framework for a nursing staff development program aimed at cultivating an expert NP workforce. By better preparing NPs at the project site during the transition-to-practice period, it is possible to ensure that these professionals will be

increasingly prepared to meet the demands of complex patient care in a rapidly changing and challenging work setting (Bush, 2014).

Problem Statement

After graduation, a significant percentage of new NPs may lack confidence regarding their new provider role. In a recent survey of new NPs, less than 40% of new graduates felt generally prepared to practice (Hart & Bowen, 2017, p. 545). Bush (2014) reported that novice NPs struggle with anxiety, role confusion, and legitimacy concerns that can result in leaving their position and sometimes the profession altogether. One of the contributing factors, according to Wirtz Rugen et al. (2016), is the evolution of NPs. At one time, registered nurses (RNs) pursued their NP education only after years of clinical experience. Now, RNs move quickly through academia, lacking this depth of clinical experience (Wiltse, Nicely & Fairman, 2015). This leaves the novice NP with less experiential knowledge to build upon. As described by Flinter (2011), another factor is that novice NPs are not being prepared to manage the average complex patient after graduation, despite being highly educated. This is not due to lack of education, but to lack of professional expertise development. Collectively, these issues generate anxiety and stress for the novice NP and leave the NP and organization at risk of attrition.

The local nursing problem at the project site is the generic, self-directed onboarding orientation that focuses on tasks and familiarization with the physical plant at the project site. It does not provide a formal framework to specifically support novice NPs in their new provider role. Unfortunately, traditional on-the-job training does not meet the needs of the novice NPs caring for complex patients in a rapidly changing work

environment (Bush, 2014; Zapatka, Cornelius, Edwards, Meyer, & Brienza, 2014).

These facts compound the stress experienced during the transition-to-practice period.

The relevance of this practice problem can be linked to the intermittent absence of dedicated NP provider staffing of the project site's observational unit. Three years ago, the project site implemented an observational unit staffed by nurse practitioners who were employed by the project site. All of the NPs hired for this unit were novices who had just completed their academic education. According the manager of the nurse practitioners at the project site, they have undergone a 75% turnover rate over the previous three years. Without NPs, the observational unit is left unstaffed. When this happens, the patients within the observational unit are shifted to the hospitalists, who already have a full schedule of patients. A lack of dedicated onsite provider staffing results in delays in discharge and timely treatment of patients, further impacting the practice site by incurring unrecoverable healthcare costs due to extended length of stays.

There are currently 190,000 practicing NPs across the United States (NP Roundtable, 2014). These professionals positively impact access, quality, and cost-effectiveness of care across the continuum, including acute care. The practice site continues to bring on more NPs into the acute care setting and has plans to incorporate NPs into specialty service lines such as orthopedics and neurology. Without a formal evidence-based framework to onboard these NPs successfully in a safe, controlled environment, however, the practice site is left with less prepared and less competent practitioners, as well as ongoing high turnover rates. A timely solution to this problem is of paramount importance for the project site. This doctoral project is significant to

nursing as it seeks to identify evidence-based scholarly content for nursing staff development that best prepares novice NPs for acute care practice.

Purpose

There is a meaningful gap in practice during the transition from student to provider that is recognized in the literature. While some experts have identified this period ranging from 3 to 18 months, overall, experts agree and identify this period as the first 12 months of practice after graduation (Martsolf, 2017). There is a self-reported lack in confidence to practice during this time (Hart & Bowen, 2017). Novice NPs lack a social support structure to guide and grow their professional development (Dillion, Dolansky, Casey, & Kelly, 2016). They lack refinement of their clinical skills to safely manage a full load of patients. Additionally, novice NPs lack the leadership, communication, and collaboration skills required to work successfully in interprofessional teams (Bush, 2014; Flinter, 2012; Wirtz Rugen et al., 2016). The guiding practice-focused question for this doctoral project was the following: Can an acute care nursing staff development program for novice NPs be developed based on existing evidence?

Novice NPs are highly educated, capable professionals, but evidence demonstrates that they are unprepared to manage full patient loads in complex delivery systems immediately after graduation. The Institute of Medicine (IOM) 2010 report *The Future of Nursing: Leading Change, Advancing Health* included recommendations for postgraduate transition programs for novice advanced practice nurses to best prepare them for practice (IOM, 2011). This reinforces the concept that traditional on-the-job

training does not meet the needs of novice NPs during this transition (Bush, 2014; Sciacca & Reville, 2016). This nursing staff development program has the potential to address this gap in practice by identifying evidence-based content to support novice NPs through the transition-to-practice period. A formal framework tailored to the practice site will provide a safe and supportive environment for novice NPs to develop their clinical expertise. Additionally, this project will help NPs to develop professional confidence and maximize their potential to provide safe, efficient, quality care while avoiding costly employee turnover as well as dissatisfaction with the profession.

Nature of the Doctoral Project

The subject of nursing staff development programs for novice NPs and what that content should look like is relatively new. Postgraduate programs have been developed in response to the IOM's 2010 report in which recommendations were made to support the transition to practice of novice advance practice nurses (Bush, 2014; Chappell, 2014; Rugen, Dolansky, Dulay, King, & Harada, 2017; Sciacca & Reville, 2016). I explored traditional electronic databases and professional organizations, as well as other sources of evidence. The sources of evidence used to meet the purpose of this doctoral project included electronic databases such as CINAHL, MEDLINE, PubMed, ProQuest, and Cochrane Database of Systematic Reviews. I reviewed professional organization websites for position statements, white papers, and published standards for development content. These organizations included the American Association of Nurse Practitioners (AANP), American Nurses Association, American Association of Critical-Care Nurses, the American Association of Colleges of Nursing, California Association of Nurse

Practitioners, and the National Nurse Practitioner Residency & Fellowship Training Consortium.

Last, I consulted with experts in the field of postgraduate development for novice nurse practitioners. This included program advisors within the partnership between University of California San Francisco and University of California Los Angeles (Rauch, 2013), as well as the University of Maryland Medical Center (Fitzpatrick & Gripshover, 2016). These organizations offer a variety of acute care postgraduate staff development programs for novice NPs. Additionally, I consulted with program advisors at Community Health Center, Inc (Flinter, 2011). This particular organization offers primary care nursing staff development programs. This is relevant to the project because this Community Health Center, Inc. is the flagship for advocacy and creation of postgraduate nursing staff development programs for novice NPs transitioning to practice (Flinter, 2005, 2011).

This is a doctoral nursing staff development project. The Elkins Literature Review Matrix (Elkins, 2010) was used to organize and summarize evidence pertinent to this project. This method helped to identify the quality, strengths and weaknesses in the evidence, as well as commonalities and gaps in the evidence. This provided an efficient strategy to review sources for content and assist to synthesize the evidence. After personal consultation with program advisors, I summarized key points. I anticipated that these strategies would provide an adequate amount of evidence to address the gap in practice during the transition-to-practice period for novice NPs, sufficient to create a nursing staff development program for the project site.

Significance

A nursing staff development program for novice NPs will have an effect on numerous stakeholders. In this case, the stakeholders most affected include my preceptor, the established NPs, and the education department, including a nurse educator at the project site. The anticipated impact of this program for NPs involves improving understanding of advanced practice nursing role and responsibilities. The anticipated impact on the education department includes the commitment to the vision of professional development of advanced practice nurses at the site through the dedication of resources that align with the nursing staff development program.

This project is important to nursing practice. It advances nursing by abandoning outdated and ineffective "on-the-job training" or "baptism-by-fire" approaches, consistent with apprentice-type positions (Bush, 2014; Flinter, 2011; Harris, 2014; Orsolini-Hain & Waters, 2009; Zapatka, 2014). The project advances nursing by using evidence and best practices to create a more professional method of development consistent with the advance practice nursing role (Chappell, 2015). The project aligns with the IOM's recommendations (IOM, 2011) enabling NPs to respond effectively to meet the healthcare needs of the nation.

Transferability of this project to specialty areas within the project site is a relevant and timely issue. The project site is actively planning to hire more NPs in specialty areas such as neurology, palliative care, cardiology, and orthopedics. This nursing staff development program may offer some transferability to these specialty areas. Extending

the context of this project to other settings, the project site holds the potential to increase inefficiency and develop a larger expert workforce of NPs across the organization.

This doctoral project has the potential to create positive social change by advancing nursing practice at the project site. The project does this by using timely and relevant research to identify evidence-based content of an acute care nursing staff development program to best prepare novice NPs. The goal of the project was to create a framework to develop an expert workforce of NPs at the practice site who are prepared to meet the complex needs of today's patients and function successfully in the rapid-paced environment of the acute care setting.

Summary

The number of NPs at the practice site is growing. The practice site is expanding the use of NPs in acute care and integrating them in specialty service lines within the organization. Without a formal framework to bridge these novice NPs during the transition from student to provider, novice NPs at the practice site will continue to struggle during the transition-to-practice period. This places the practice site at ongoing risk for high turnover and continued attrition, resulting in difficulty launching fully functioning service lines, and ultimately difficulty caring for the community.

Section 2 links the above introductory information with the background and context of this proposal. I discuss the chosen theory that informed the development of this project, as well as the relevance of this problem to both nursing practice in general and a more focused, practice site perspective. Lastly, I describe my role as a DNP student as it relates to the nursing staff development program.

Section 2: Background and Context

Introduction

There is a growing demand for cost-effective, competent providers, resulting in expanding roles for NPs. NPs are being used more frequently in areas that once belonged solely to physicians, such as the acute care setting. Making the transition from student to NP is stressful in any setting, including acute care (Dillon, Dolansky, Casey, & Kelley, 2016; Wiltse Nicely & Fairman, 2015). New NPs can struggle and face several potential challenges, including feelings of being inadequately prepared to practice, role identity, complex patient care needs, as well as intricate hospital systems (Faraz, 2017; Harris, 2014). The practice question that drove this doctoral project was the following: Can an acute care nursing staff development program for novice NPs be developed based on existing evidence? In this project, I sought to develop an evidence-based framework of content to bridge new NPs through their first year of practice, supporting their efforts to become successful and proficient acute care NPs.

In Section 2, I describe the theory that informed this project and provide a rationale to support the chosen theory. I discuss the relevance of this nursing staff development project to nursing practice and existing scholarship and provide a history of the gap in the transition from student to practicing nurse for novice NPs. I address strategies and any standard practices used in the past, along with their effectiveness. These issues are addressed from both a broad and a local perspective. Last, I clarify the meaning of *gap in practice, transition*, and *onboarding* in the context of this project.

Concepts, Models, and Theories

The theory that informs and guided this project is Benner's (2001) skill acquisition in nursing theory. This theory is derived from the Dreyfus model of skill acquisition, which was developed to study pilots in emergency situations (Benner, 2001). Benner's theory suggests that novice practitioners develop increasingly complex skills while progressing through five stages of proficiency, from novice to expert, that is, from theoretical knowledge to practical knowledge. Benner's theory helps nurses recognize the gap in practice from student to practitioner and seeks to standardize the development of practitioners.

Benner's (2001) theory has three main concepts. First, students move from reliance on abstract concepts to more concrete experience-driven concepts (Benner, 2001). Second, novice learners' perceptions of situations change as they no longer see situations as discrete pieces of experience but develop a broader perspective on the whole (Benner, 2001). Benner, Kyriakidis, and Stannard (2011) described this phenomenon as *thinking-in-action*. And lastly, novices move from being observers to being active participants with increased proficiency (Benner, 2001). According to Benner, the gap between theoretical knowledge and practical knowledge is wide. Nurses require well-planned nursing development programs (Benner, 2001), which is what this project seeks to deliver.

Theoretical knowledge alone does not provide practical expertise because expertise is contextually dependent and requires experience (Benner, 2001). Experience allows nurses to test hypotheses, identify false hypotheses, and develop a sense of

salience (Benner et al., 2011). Nurses with experience develop global sets of knowledge or "habits of thinking" that inform them of how to respond to a situation (Benner et al., 2011, p. 43). These sets or habits can vary if there have been conflicting or contrary approaches to the same situation or if ineffective communication exists (Benner, 2001). Benner (2001) also suggested that different stages of proficiency align with specific developments and evaluation strategies. For example, novice nurses who participate in rounds can benefit by standardizing their clinical language. Another example involves waiting until nurses have more experience before evaluating them based on context (Benner, 2001). Assuming that a graduate nurse is a finished product not only is impractical, but also may be dangerous (Benner et al., 2011; Benner et al., 1996).

Key terms within this paper are clarified here for shared understanding.

- *Gap in practice* is defined as the difference between theoretical knowledge and practical knowledge (Benner et al., 1996).
- *Transition* is the experience of nurses at the interface of their student-practitioner lives during the first 12 months of practice (Duchscher, 2010).
- Onboarding is defined as the act or process of orienting and training a new employee (Merriam-Webster On-line Dictionary, 2019).

Relevance to Nursing Practice

The history of postgraduate training for NPs started with Dr. Margaret Flinter, an NP working in Connecticut in a community health clinic system. Flinter (2011) observed that new physicians transitioned much more seamlessly into practice than did new NPs, who seemed to struggle. Flinter concluded that nursing staff development programs

played a critical role in successfully transitions into practice (Flinter, 2005) and developed the first primary care NP postgraduate development program in the country (Flinter, 2011).

The passage of the Patient Portability and Affordable Care Act (PPACA) of 2010 increased the demand for physicians, NPs, and physician assistants. In response to this, the IOM (2011) released the report *The Future of Nursing: Leading Change, Advancing Health*. This report was a blueprint for transforming nursing to meet the goals of the PPACA (IOM, 2011). Recommendation 3 in the IOM's report called for transition-to-practice programs to bridge novice nurses, including advanced practice nurses, from the academic environment to the work environment (IOM, 2011).

Health care organizations that implement transition-to-practice programs share common challenges. The most salient challenge is cost (Joint Commission on Accreditation of Healthcare Organizations [JCAHO], 2003). There is no federal funding available for these programs in acute care settings (JCAHO, 2003). The IOM recommended diverting financial resources from diploma nursing programs to fund nurse transition-to-practice development, but to date, this has not occurred. Traditionally, the employing organization is responsible for the cost of these training programs (Brown et al., 2015; Bush, 2014; Chappell, 2014; Harris, 2014; Kells, Dunn, Melchiono, & Burke, 2015; Martsolf, 2017; Wiltse Nicely & Fairman, 2015). The cost for employers includes the salary and benefits of the novice NP, along with any didactic costs for teaching and training. Additional costs include a reported decrease in productivity of mentors as well as associated administrative costs (Bush, 2014; Harris, 2014). Some expenses could be

offset by the revenue generated by the novice NP, but sustainability of nursing staff develop programs can be a challenge (Brown et al., 2015; Bush, 2014; Chappell, 2014; Harris, 2014; Kells et al., 2015).

Existing scholarship has demonstrated that nursing staff development programs positively influence many issues that challenge novice NPs. The first issue is role identity. Understanding the new role of NPs and how novice NPs fit into the bigger picture can be difficult (Faraz, 2017; Flinter, 2011). Ambiguity of role transition can be due to a lack of experience on the NP's part and/or a lack of clarity on the employer's part (Faraz, 2017). According to Faraz (2017), the autonomy of the role can be confusing and overwhelming for novice NPs, and establishing interprofessional relationships is essential during this period. The second issue is perceived low self-confidence (Faraz, 2017; Flinter, 2011). Existing research has made clear that the majority of new NPs may struggle with confidence in their new role (Faraz, 2017; Harris, 2014). Only 38% of new NPs feel "generally well prepared," and 43% feel "somewhat prepared" to practice (Hart & Bowen, 2016, p. 545). The last issue is professional development. Cultivation of expert interprofessional skills is of paramount importance so that NPs can function successfully within and across teams (Chappell, 2014; Dillon et al., 2016; Flinter, 2005; Rugen et al., 2014). These issues contribute to a successful transition to practice and job satisfaction, as well as avoiding potential turn-over (Bush, 2014; Faraz, 2017a).

The IOM (2010) and JCAHO (2003) have recommended implementing nursing staff development programs for novice NPs transitioning into practice. Flinter (2005) noted that postgraduate development programs for novice nurses are an accepted and

increasingly standardized practice that the acute care site typically sponsors. Not having a formal postgraduate training program leaves the novice NP open to assuming an apprentice-type role, making it more difficult to move forward to a more professional role at a later date (Flinter, 2005).

Standards for nursing staff development programs for novice NPs have been developed. In 2015, interested parties were brought together to discuss best practices (Norwick, 2016). This work resulted in the formation of the National Nurse Practitioner Residency and Fellowship Training Consortium (NNPRFTC). NNPRFTC (2015) created standards for postgraduate training, along with a voluntary residency/fellowship certification programs, to ensure quality and standardize training. In March 2016, the Commission on Collegiate Nursing Education (CCNE, 2016) formed a task force to study advance practice registered nurse residency/fellowship programs. The goal was to determine if there is a need to create an accreditation for qualifying programs. The CCNE is currently surveying programs for content and commonalities (CCNE, 2016).

Strategies previously used to orient new NPs include moving novice NPs directly into practice after they have completed their academic requirements (Wiltse Nicely & Fairman, 2015). At one time, this may have been an acceptable strategy; however, today's NPs must navigate evolving patient needs within a complex healthcare system. The novice NPs of today have moved swiftly into the NP role as compared to previous NPs, but they bring less professional experience than do registered nurses (RNs) to the new position of NP (Wiltse Nicely & Fairman, 2015). Admittedly, there is conflicting evidence as to whether less experience as a RN affects the transition to practice for

novice NPs (Faraz, 2017). There is no disagreement that present-day patients and healthcare are more complicated compared to 15 years ago. These facts make on-the-job training inadequate, unstructured, and inconsistent, leaving NPs to find their own way (Harris, 2014; Zapatka, 2014), and this results in inconsistencies in knowledge and performance (Harris, 2014).

Nursing staff development programs similar to the one I sought to deliver through this project are in place at other hospital organizations. University California of San Francisco (UCSF) Medical Center offers NPs opportunities to participate in focused clinical rotations paired with NP mentors in a multitude of inpatient settings including critical care, general surgery, kidney transplant, neurosurgery, vascular surgery, and infectious disease (Rauch, 2013). Additionally, Carolinas HealthCare System (2017) offers an acute care program that provides one-on-one clinical experience with an assigned NP preceptor and physician colleagues. Both programs are 12 months long and focus on three sets of skills: clinical, leadership/professional, and collaboration skills (Carolinas Healthcare System, 2017).

This doctoral project advances nursing and fills a gap in practice for novice NPs at the project site by using current evidence guided by nursing theory to develop a nursing staff development program aimed at the stressful first year of practice for novice NPs. Literature reveals that this transition period is known to be crucial to the success of these providers in becoming confident, satisfied, efficient and effective professionals (Brown, Poppe, Kaminetzky, Wipf, & Woods, 2015; Chang, Mu, & Tsay, 2006; Dillon et al., 2016; Flinter, 2011; Harris, 2014; Hart & Bowen, 2016; Kells, Dunn, Melchiono, &

Burke, 2015; Martsolf, 2017; Rugen et al., 2014; Zapatka, 2014). Traditional on-the-job training leaves a gap in practice for new NPs, resulting in stress, role ambiguity, dissatisfaction, and turnover. A structured framework of evidence-based strategies will address this gap in practice between theoretical knowledge and clinical competence.

Local Background and Context

Three years ago, the project site implemented an observational unit in the acute care setting staffed entirely with novice NPs. Observation units are traditionally used to decrease cost, decrease hospital length of stay, and increase hospital bed availability (Murphy, Willetts, Duphiney, Dalton, & David, 2016). Patients that qualify for observation status only do so for a short period. This results in a demanding pace within observation units, requiring providers to be increasingly efficient (Gabele, Bugais, & Laguna, 2016). These NPs received no formal orientation or support program to bridge them through the transition-to-practice period in a challenging work environment. The unit experienced a 75% turnover rate for NPs according to the department manager. This resulted in disruption in operation of the observation unit, delays in care and discharge, as well as increased unrecoverable healthcare costs.

The project site is located in rural Central California. It is a general acute care hospital with over 581 licensed beds. The site is a teaching facility that hosts several medical residencies (family practice, emergency medicine, surgical, and anesthesia), as well as pharmacy residencies (Kaweah Delta Health Care, 2017). Additionally, the project site is a clinical setting for nursing students and other ancillary support services such as respiratory therapists. The stated mission of the project site is to provide safe,

high-quality, customer-oriented, and financially strong healthcare to the community. The vision of the project site is to deliver a broad range of excellent healthcare services to the population of Tulare County (Kaweah Delta Health Care, 2017).

Currently, there are no state or federal mandates requiring nursing staff development programs for novice nurse practitioners. According to the AANP, NPs have restricted practice authority within the state of California and are required to have a supervisory agreement with a physician (AANP, 2017). Through this project, I seek to create a nursing staff development program that complies with California's current practice regulations.

Role of the DNP Student

Nineteen years ago, I was a novice NP. I remember feeling unprepared and unsupported while I worked in a "sink-or-swim" environment. There was no formal orientation or development program in place. The academic program I completed included 2,000 clinical hours. At the time, I had been working as a registered nurse for over 9 years. My professional journey does not represent the novice NP of today. Over the past 18 years, there has been an evolution with regard to NP education, as well as the number of years of clinical experience registered nurses bring to their new NP role.

My employment at the project site is not connected to this project. I am currently employed in a specialty service line, and this doctoral project is aimed at the acute care setting. Five years ago, I joined a group of four NPs at the project site. The observation unit NPs were brought onboard 2 years later. I have witnessed multiple novice NPs begin their professional careers just to struggle, become frustrated, and leave. The facility

employs 17 NPs in different service lines. The NP manager reports the project site has plans to expand to new specialty settings.

My motivation for this project is to advocate for the nursing profession and our patients. My role in this nursing staff development doctoral project was to discover and synthesize relevant evidence. The goal of this project was to create a nursing staff development program for the practice site. The practice site uses NPs in multiple settings, but this project focused on acute care. Onboarding more novice NPs without a formal nursing staff development program is counterintuitive to a growing body of evidence (Martsolf, 2017) as well as potentially dangerous because novice NPs may not be adequately prepared to practice safely (Wiltse Nicely & Fairman, 2015).

It was important for me to be cognizant and aware of potential bias. One effective strategy to prevent bias included critical review of the evidence. Another strategy included using a decision matrix to facilitate objective decisions (Technology Evaluation Centers, 2018). I used both of these strategies to minimize any risk of bias throughout my project. Last, I solicited frequent and regular feedback on ongoing project work from my preceptor. My preceptor's input brought to light potential issues of bias that I might not have identified otherwise. Ignoring evidence that did not support my project would not have been beneficial and could have produced results that were only partially accurate (Glick, 2017). Any nursing staff development program generated from biased information would not be accurately informed and would have limited usefulness.

Role of the Project Team

The project team was utilized to provide feedback to the nursing staff development program and consisted of key leadership and stakeholders. Stakeholders include my preceptor, established NPs and the Education Department including a nurse educator. A meeting was arranged where I presented background information, best-practice evidence and the nursing staff development program to the team via a PowerPoint presentation. All information was referenced in a scholarly manner. The project team provided expertise and insight into the final product during the meeting, after I presented my findings.

Summary

The site is looking to explore strategies to more successfully support novice NPs through the transition-to-practice period and more effectively operate the observation unit. Benner's skill acquisition nursing theory was chosen to guide and inform this project. This theory aligns well with the project because Benner bridges the gap-in-practice between theoretical knowledge and real-world practical knowledge. Providing a nursing staff development program can decrease turn-over and increase provider competency. Existing evidence must be analyzed. Section 3 will explore, collect, organize, and analyze existing applicable evidence and any measurement tools regarding nursing staff development programs for novice NPs.

Section 3: Collection and Analysis of Evidence

Introduction

Novice NPs face a challenging first year of practice and may not be prepared to take on the demanding role of caring for the average complex patient in the complicated acute care environment (Brown et al., 2015; Chang et al., 2006; Dillon et al., 2016; Faraz, 2017; Flinter, 2011; Hart & Bowen, 2016; Kells et al., 2015; Martsolf, 2017). The project site does not offer a formal development program to support and develop new NPs and instead provides on-the-job training, which leaves the project site at risk for ongoing high turnover and less-than-competent practitioners (Harris, 2014; Wiltse Nicely & Fairman, 2015; Zapatka, 2014). The purpose of this project was to produce a formal evidence-based method to successfully grow and retain a competent and professional NP workforce and replace ineffective traditional onboarding strategies. Several events have brought the concept of postgraduate development to the forefront, including passage of the PPACA of 2010, along with the IOM's 2011 report The Future of Nursing: Leading Change, Advancing Health. A developing body of current scholarship supports postgraduate nursing progression from novice to expert NP (Brown, Poppe, Kaminetzky, Wipf, & Woods, 2015; Chang, Mu, & Tsay, 2006; Dillon et al., 2016; Faraz, 2017; Flinter, 2011; Hart & Bowen, 2016; Kells, Dunn, Melchiono, & Burke, 2015; Martsolf, 2017). Synthesizing a variety of relevant evidence as well as expert input from the project team allowed me to create a nursing staff development program for novice NPs in acute care, closing the gap in practice for new NPs at the project site.

In Section 3, I address the practice-focused question, clarify the purpose of the project, and explain how the practice-focused question aligned with the project. I discuss the sources of evidence as well as published outcomes and research. Additionally, I describe in detail how evidence was collected, organized, analyzed, and synthesized.

Last, I clarify the relationship of the evidence to the purpose of the project.

Practice-Focused Question

The practice question that guided this project was the following: Can a nursing staff development program for novice NPs in acute care be developed based on the evidence? The local problem at the practice site involved high turnover in acute-care novice NPs and the lack of a formal development program to support new NPs through their first year of practice. The purpose of the project was to develop a nursing staff development program to bridge the gap in practice experienced by novice NPs transitioning to acute-care practice (Brown et al., 2015; Dillon et al., 2016; Harris, 2014; Hart & Bowen, 2016).

Sources of Evidence

I used evidence-based scholarly literature, existing best-practice guidelines, curricular guidelines from existing organizations, white papers, and the insight of experts to address my practice-focused question. The best-practice standards developed by NNPRFTC provided a comprehensive approach to the creation of a nursing development program at the site. Another source of evidence was curricula from UCSF Medical Center and Carolinas HealthCare System residency programs for acute-care NPs.

Interviews with experts in the field of postgraduate development for novice NPs transitioning to practice also helped me to discover useful information for the project.

The evidence collected was used to address the purpose of this project, which was to narrow the gap in practice experienced by new NPs in acute care. The evidence provided strategies to cultivate and retain a more competent and professional NP workforce at the project site. Collecting and analyzing a variety of relevant scholarly sources of evidence provided a timely evidence-based program for onboarding new NPs and eliminating the current ineffective on-the-job-training approach.

Published Outcomes and Research

I used electronic databases including CINAHL, MEDLINE, PubMed, ProQuest, OVID, Cochrane Database of Systematic Reviews, and the Joanna Briggs Institute. Key search terms included *nurse practitioner residency, nurse practitioner postgraduate* training, nurse practitioner fellowship, nurse practitioner training, novice nurse practitioners, onboarding nurse practitioners, advance practice nurse development, advance practice nurse, and postgraduate training.

My goal was to use evidence produced no later than 2013, but it was important to make exceptions. For example, when exploring Benner's theory of skill acquisition in nursing, I used sources related to groundbreaking events such as the publication of the IOM report in 2010, the passage of PPACA in 2010, and lastly, Flinter's pioneering work in 2005. I searched for evidence in scholarly peer-reviewed articles, systematic reviews, books, organizational websites, and professional websites such as those of the AANP and

NNPRFTC. Finally, experts in the field of postgraduate development programs for novice NPs were consulted for contributing insights.

I worked to complete an exhaustive search by exploring a multitude of databases using a comprehensive list of search terms. These terms were modified or linked as needed to effectively collect high-quality, timely, relevant articles. Exclusion terms were used to narrow searches. I also employed citation chaining to explore additional scholarly evidence. Other sources of evidence I researched included curricula from organizations with programs that mirrored my project, best-practice guidelines, white papers, and position statements from professional organizational websites. These strategies provided a comprehensive and exhaustive search for evidence that related to this project.

Evidence Generated for the Doctoral Project

Participants. I used key stakeholders to contribute insight and expertise to the project. These included established NPs, the NP director, a representative from the nursing education department, and my preceptor, who was a clinical nurse specialist at the project site. These stakeholders comprised an expert panel. They were chosen because they would be most affected by this project, they could provide contextual insight not otherwise identified, and they were integral to the implementation and success of this development program outside the scope of this project. Their input and expertise, along with the collected evidence, helped to comprehensively answer the practice-focused question.

Procedures. Stakeholders were brought together for a project team meeting. I

presented the evidence-based findings along with recommendations for a nursing staff development program for novice NPs in acute care that was tailored to the project site. Once I had completed the presentation, I asked for stakeholders' feedback and expert insight to finalize the recommendations for this doctoral project.

Protections. This project was a staff education project. The aim of the project was to develop a nursing staff development program for acute-care novice NPs at the project site. No actual teaching occurred. To ensure ethical compliance with Walden University's Institutional Review Board, I followed the Walden University Manual for Staff Education Project instructions (Walden University, 2017) and received approval to proceed (05-02-18-0199871). This nursing staff development program for novice NPs in acute care is a project site organizational priority and involved expert feedback from sources in and outside the organization, along with public information and literature.

Analysis and Synthesis

Several tools were used to collect and organize evidence. I used a search log to record my searches for evidence in electronic databases. The purpose of the search log was to be efficient and effective when searching online databases by having a quick reference to demonstrate which databases had already been searched and which search terms had already been used. I used Elkins's literature review matrix to summarize, organize, and analyze evidence. First, I recorded the citation. Then, I recorded any conceptual framework or theory used in the study. Next, I recorded the research methodology used in the article. The purpose of the study was summarized, along with the main finding of the study. I then summarized strengths and weaknesses of the study

as well as implications for practice. Additionally, I recorded the strength or hierarchy of the evidence using the hierarchy of evidence for intervention studies (Stillwell, Fineout-Overholt, Melnyk, & Williamson, 2010). This information provided a basis for comparison between and among studies, allowing me to synthesize the evidence. A decision matrix was used when evaluating the evidence to prevent bias by facilitating objective decisions when critically reviewing the evidence (Technology Evaluation Centers, 2018). These tools allowed me to objectively answer the practice-focused question using the highest quality evidence and to ensure that this project was useful and successful for the project site upon completion of this doctoral process.

Summary

The project site needs a strategy to more effectively move new NPs into practice because the previous approach has not been successful. To comprehensively explore current evidence, I used several scholarly strategies. These included a literature matrix, a search log, and a decision matrix. These tools allowed me to minimize bias, as well as analyze, compare, and synthesize evidence to answer the practice-focused question. In Section 4, I discuss findings, implications, and recommendations for practice. I describe the contribution of the doctoral project team to the project as well as strengths and weaknesses of the project.

Section 4: Findings and Recommendations

Introduction

The local problem at the project site involved 75% turnover of NPs in the acutecare setting with all of the departing NPs being novice NPs within their first year of practice. The project site is lacking a formal postgraduate transition-to-practice program for novice NPs. There is a gap in practice during the transition from student to provider, as recognized in the literature, along with a self-reported lack in confidence to practice during this time (Hart & Bowen, 2016). Novice NPs lack a social support structure, leadership, communication, and collaboration skills, leaving them unprepared to safely manage a full load of patients (Bush, 2014; Dillon et al., 2016; Flinter, 2011; Wirtz Rugen, Speroff, Zapatka, & Brienza, 2016). The guiding practice-focused question for this doctoral project was the following: Can an acute care nursing staff development program for novice NPs be developed based on existing evidence? The purpose of the doctoral project was to create a formal framework tailored to the practice site. With this project, I aim to design a safe and supportive environment for novice NPs to develop their clinical expertise and confidence while avoiding turnover and dissatisfaction with the profession.

Sources of evidence used for this project included (a) published research; (b) professional organization white papers, position statements, and best practices; and (c) insight from experts in the field. I obtained evidence and compiled data by searching electronic databases, exploring professional organization websites, and engaging in direct communication with experts. The Elkins literature matrix (Stillwell et al., 2010) was

used to summarize, organize, and weigh the evidence. This literature matrix was modified to include the level of evidence and function as a decision matrix as well (see Appendix A). In addition to critically analyzing and weighing the evidence, I continued to work closely with my preceptor to ensure that I avoided bias.

Findings and Implications

The literature review provided a rich source of evidence regarding the content of postgraduate development programs for novice NPs (see Appendix A). Key findings of the literature review include both guided clinical experiences and nonclinical activities over a 12-month period (Bargagliotti & Davenport, 2017; Brown et al., 2015; Community Health Center, 2018; Fitzpatrick & Gripshover, 2016; Flinter, 2011; Martsolf, 2017; Mayo Clinic, 2018; Morgenlander & Blessing, 2016; Norwick, 2016; Rudy & Wilbeck, 2017; Sargent & Olmedo, 2013; Taylor, Broyhill, Burris, & Wilcox, 2017; Zapatka, 2014). Existing programs allocated clinical hours in both the home department of the novice NP and specialty departments that would impact the NP's work. Tailoring the clinical experiences to meet the individual needs of the novice NP was also found in the literature (Brown et al., 2015; Fitzpatrick & Gripshover, 2016; Moore, 2017; Sciacca & Reville, 2016; Taylor et al., 2017). Key findings concerning nonclinical activities included formal didactic sessions, simulation education, heavy use of case studies, and participation in grand rounds (Corbridge, Tiffen, Carlucci, & Zar, 2013; Fitzpatrick & Gripshover, 2016; Gaudio & Borensztein, 2018; Harris, 2014; Mayo Clinic, 2018; Schofield & McComiskey, 2015; Sciacca & Reville, 2016; Taylor et al., 2017). In programs that were nursing or healthcare organization based, there was a strong focus on

professional development and quality improvement (Fitzpatrick & Gripshover, 2016; Harris, 2014; Taylor et al., 2017; Wirtz Rugen et al., 2016). Professional development and quality improvement were less prevalent in programs developed and managed by physicians (Benham & Geier, 2014; Morgenlander & Blessing, 2016). Self-reflection is commonly used as a means of education in the literature (American Nurses Credentialing Center [ANCC], 2016). Last, interprofessional training was a key finding as a mode to create a culture of patient-centered care (ANCC, 2016; Bargagliotti & Davenport, 2017; Brown et al., 2015; Corbridge et al., 2013; Flinter, 2011; Gaudio & Borensztein, 2018; Morgenlander & Blessing, 2016; NNPRFTC, 2015; Norwick, 2016; Sargent & Olmedo, 2013; Schofield & McComiskey, 2015; Taylor et al., 2017; Zapatka, 2014).

These key findings are consistent with best-practices developed by both the ANCC (2016) and the NNPRFTC (2015). Both of these professional organizations offer voluntary certification for transition-to-practice programs for novice NPs. The NNPRFTC guidelines indicate that at the completion of a quality postgraduate program, novice NPs should have successfully accomplished the eight required competency domains (see Table 1).

Table 1

NNPRFTC Competency Domains

1	Provide compassionate, valued, effective patient-centered care
2	Demonstrate knowledge of established and evolving bio-psycho-social, clinical, epidemiological, and nursing sciences, for provision of evidence-based patient care
3	Ability to evaluate one's own practice and improve outcomes of patient care based on best available evidence, constant self-evaluation, and life-long learning
4	Demonstrate effective communication and collaboration with patients, families, and interprofessional colleagues
5	Demonstrate a commitment to carrying out professional roles and responsibilities and adherence to ethical principles
6	Demonstrate awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care
7	Demonstrate the ability to practice within an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care
8	Demonstrate qualities required to sustain lifelong growth as a healthcare professional and leader
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Note. Adapted from *NNPRFTC* (p. 6), by National Nurse Practitioner Residency and Fellowship Training Consortium, 2015

(https://www.nppostgradtraining.com/Portals/0/Documents/2.0_NNPPTC_Accreditation _Standards_1.5.16.pdf?ver=2016-01-13-070416-923). Copyright 2015 by National Practitioner Residency & Fellowship Training Consortium. Adapted with permission.

Consultation with various nursing experts in the field of postgraduate development for novice NPs revealed a practice trend of interprofessional training to support patient-centered care and to help novice NPs develop collaboration skills across disciplines, as well as to create professional relationships and networks to draw from in the future (J. Saxe, personal communication, June 14, 2018; M. Flinter, personal communication, June 22, 2018; S. Fitzpatrick, personal communication, June 7, 2018). Flinter and Saxe reinforced the use of case studies to enhance learning, which aligned with the evidence. Fitzpatrick and Flinter were associated with large programs that were designed with flexibility so that the didactic content was based on learners' needs (refer to Appendix B for consultation summary).

The most salient unanticipated limitation was the lack of higher levels of evidence such as systematic reviews and random clinical trials related to postgraduate development programs for novice NPs. The evidence reflected observational studies, best-practice guidelines, and cohort studies. Another unanticipated limitation was the conflicting language used to define these programs and their participants (Bush & Lowery, 2016). Many programs refer to postgraduate development programs as *residencies* and the NPs as *residents*. Other programs may refer to the NPs as *fellows*. The argument against the use of the terms *residency* and *resident* is that these terms refer to the medical model of education, wherein medical residents have not yet finished their formal education (Bush & Lowery, 2016). In comparison, NPs have officially completed their academic requirements and are entering the workforce as practicing professionals. This lack of consistent language could have limited my online database searches. Last, I identified a

lack of standardization in content and evaluation methods of novice NPs within development programs. Without standardization, it will be difficult to compare programs and their outcomes (Bush & Lowery, 2016; Martsolf, 2017).

The potential implications of this project include cultivating confident professional NPs who are prepared to safely practice in a collaborative manner at the project site. Additional implications include changing the culture of the organization by expanding the knowledge of professionals at the project site as to the scope of NPs and their potential contribution to the organization and patient care. This program could draw novice NPs to the organization, decreasing the cost of recruitment, stabilizing the NP workforce within the site through improved retention, and reducing the cost of the healthcare workforce as more NPs are onboarded. The potential implications for positive social change include moving the nursing profession forward at the project site by modernizing the transition into practice for novice NPs to a professional level that matches the clinical and professional demands of an increasingly complicated healthcare landscape.

Recommendations

Recommended solutions to bridge the gap in practice at the project site include a 12-month long postgraduate development program for novice NPs in acute care. The postgraduate program should incorporate (a) guided clinical experiences that integrate interprofessional clinical education and (b) nonclinical content that includes formal didactic professional development and quality improvement. Postgraduate development programs are often organized using immersion blocks of scheduled training and

education integrated with the use of simulation education (Corbridge et al., 2013; Rudy & Wilbeck, 2017; Schofield & McComiskey, 2015; Taylor et al., 2017). I recommend organizing the program and educational content into seven immersion blocks (see Appendix C) and aligning content with the NNPRFTC (2015) best-practice guidelines. The first immersion block is an intense 2-week orientation designed to (a) review program expectations, (b) introduce representatives from key departments that will impact the novice NP's practice, and (c) provide the NP with tools to be as productive as possible.

Guided Clinical Experiences

Guided clinical experiences should support an environment for the novice NP to provide care that is patient centered, compassionate, valued, appropriate, and effective for the treatment and promotion of health (NNPRFTC, 2015). Additionally, the evidence is clear that interprofessional education is common in postgraduate development programs (Bargagliotti & Davenport, 2017; Brown et al., 2015; Corbridge et al., 2013; Fitzpatrick & Gripshover, 2016; Flinter, 2011; Harris, 2014; Moore, 2017; Taylor et al., 2017; Wirtz Rugen et al., 2016). Interprofessional education improves health systems and healthcare outcomes by supporting respect and shared understanding for each member of the team and his or her unique scope of practice and potential contributions to patient care (ANCC, 2016; NNPRFTC, 2015; NLN Board of Governors, 2015; NNPRFTC, 2015; Wirtz Rugen et al., 2016). Nurse practitioners become part of a team and learn to communicate effectively across disciplines in interprofessional teams (Bargagliotti & Davenport, 2017; Corbridge et al., 2013; Wirtz Rugen et al., 2016). This model is thought to promote high-

quality, cost-effective, and efficient coordinated care (Wirtz Rugen et al., 2016).

According to Saxe (personal communication, June 14, 2018), interprofessional teams provide care based on patient needs and team members' skillsets, as compared to the traditional method of physician driven care. This promotes practicing at the top of one's license (J. Saxe, personal communication, June 14, 2018). The Carolinas Healthcare System (Taylor et al., 2017) and the University of Maryland Medical Center (Fitzpatrick & Gripshover, 2016) are large organizations that support interprofessional training within their postgraduate development programs for novice NPs. These organizations assign NPs to staff patient care areas in partnership with medical students and physician residents.

Recommended solutions include allocating 80% of program hours to guided clinical experiences. The novice NPs should be assigned to an interprofessional resident hospitalist rotation for immersion blocks II and III. The majority of programs also incorporate clinical specialty rotations outside the home department (Fitzpatrick & Gripshover, 2016; Flinter, 2011; Gaudio & Borensztein, 2018; Mayo Clinic, 2018; NNPRFTC, 2015; Sargent & Olmedo, 2013; Schofield & McComiskey, 2015; Taylor et al., 2017). The amount of clinical time spent away from the home department varied from program to program. In some cases, specific clinical rotations were offered based on the individual needs of the novice NPs (Flinter, 2011; Schofield & McComiskey, 2015). Following immersion blocks II and III, I recommend that NPs split their time between specialty and hospitalist rotations while functioning as part of the interprofessional team taking patient assignments. To deepen understanding, novice NPs

should spend 1 day per month in nonclinical hours with an ancillary service that will impact their work. This is thought to be useful for the novice NP when planning and coordinating patient care (NNPRFTC, 2015). These areas include infection prevention, pharmacy, physical therapy, case management, clinical documentation specialist, radiology, throughput services, information services, speech therapy, and dietician. The NPs will develop their own objectives before each ancillary experience (Taylor et al., 2017).

Formal Didactic

Formal didactic sessions are a strong component of postgraduate training programs; however, the amount of didactic sessions varies across programs. Flinter's (2011) model allocates 20% of postgraduate training time to nonclinical activities that include didactic. Fitzpatrick and Gripshover (2016) described 1 day a week dedicated to formal didactic. Zapatka (2014) described a program that splits time evenly between clinical and educational training. The Carolinas Healthcare System's postgraduate training includes an initial 3 months of didactic and simulation, followed by weekly didactic sessions (Taylor et al., 2017). The NNPRFTC (2015) guidelines report that didactic sessions should "occur regularly and include objectives to guide learning" (p. 6). Educational sessions are conducted with a variety of instructors or faculty depending on the content and facility.

It is recommended that nonclinical hours comprise the remaining 20% of program hours and that didactic sessions occur weekly as well as have formal learning objectives.

Primary didactic sessions include management of the most common acute care diagnoses

and include case studies as well as simulation training (Corbridge et al., 2013; Mayo Clinic, 2018; Schofield & McComiskey, 2015). Schofield and McComiskey (2015) reported that the main objective of simulation training is to provide a controlled environment in which the novice NP can synthesize didactic information. This strategy allows the novice to apply knowledge and be evaluated for mastery of critical criteria in a setting that mirrors actual patient care. Critical criteria include (a) recognition of signs and symptoms, (b) initiation of appropriate interventions, (c) accurate interpretation of labs and diagnostic tests that guide effective treatment, (d) interprofessional teamwork, and (e) patient-centered care (Schofield & McComiskey, 2015). Topics covered over the initial 16 weekly sessions (immersion blocks II and III) include heart failure, chest pain, pneumonia, sepsis, cerebral vascular accident, myocardial infarction, chronic obstructive pulmonary disease, and diabetes mellitus. In alignment with ANCC (2016) and NNPRFTC (2015), didactic sessions should include formal lesson plans, objectives, and evaluation (see Appendix D for example). Secondary didactic content (immersion blocks IV-VI) covers topics designed to assist the novice NP in clinical decision making, practice strategies, and management of increasingly complicated patient care related to both hospitalist and specialty rotations (Brown et al., 2015; Community Health Center, 2018; Flinter, 2011; Furfari, Rosenthal, Tad-y, Wolfe, & Glasheen, 2014). Topics include acute care antibiotic use, rapid response team with simulation training, Glucommander training, effective communication with patients and families, palliative care, ethics, and project site performance improvement metrics and core measures.

Proposed Secondary Products

Secondary products that will guide the use of the primary product of formal didactic sessions includes specific recommendations for professional development and quality improvement. Professional development is pivotal to the success of the novice NPs and should be included in the 20% nonclinical hours. The NNPRFTC (2015) recommended professional development of new NPs through activities incorporating qualities including emotional intelligence, conflict management skills, team-leading skills that complement healthcare delivery and learning, and by seeking and utilizing feedback for growth and learning. Based on the evidence, recommended solutions include requiring the NP to join a professional organization early in the program. This will provide a resource for up-to-date evidence, health care policy, and educational resources.

It is recommended that weekly self-reflection is required throughout the program. The NNPRFTC and the ANCC call for programs to include self-reflection as another method of learning. Additionally, the National Organization of Nurse Practitioner Faculties published the Nurse Practitioner Core Competencies Content recommending self-reflection as a method for life-long learning (National Organization of Nurse Practitioner Faculties, 2017). Wallace and Boller (2014) report self-reflective learning provides for a deeper understanding of concepts including social justice, cultural competence, professional, and patient rights and positively impacts confidence, critical thinking skills, and problem solving. Another recommendation to reinforce professional development and life-long learning is to require a 5-year professional development plan

from the novice NP upon completion of the program (Rugen, Dolansky, Dulay, King, & Harada, 2018; Sciacca & Reville, 2016).

Case studies are utilized heavily in well-established programs such as Carolinas Health System (Taylor et al., 2017) as a means of professional development and are integrated into the didactic sessions. All programs required the NP to create and disseminate formal presentations such as best-practice guidelines or quality improvement projects. Presenting case studies and participating in grand rounds, creating and disseminating formal presentations such as best-practice guidelines is found across programs (Fitzpatrick & Gripshover, 2016; Flinter, 2011; Furfari et al., 2014; Moore, 2017; Rugen et al., 2018; Taylor et al., 2017; Zapatka, 2014).

Andrade (2015), Fitzpatrick and Gripshover (2016), Furfari et al. (2014), and Gaudio and Borensztein (2018) recommend integrating case studies in didactic sessions. A recommended strategy for the postgraduate development program includes (a) selecting a case that aligns with the didactic content for that session; (b) reviewing history, presentation, and treatment provided; (c) analyzing how the treatment incorporates evidence-based practice, and last; (d) determining what could have been done differently (Taylor et al., 2017).

Andrade (2015), Harris (2014), Mayo Clinic (2018), and Taylor et al. (2017) recommended that the novice NP be required to present a case studies during postgraduate development programs. A recommended solution for the project site consists of requiring the NP to present a case study at grand rounds. In this setting, the novice NP will create a professional presentation to meet the needs of a wide audience

including physicians, physician residents, medical students, physician assistants, and other NPs. The novice NP will present a 20-minute PowerPoint case study presentation. The goal here is to provide insight to enhance the practice of the attendees. The recommended format for grand rounds presentation should merge case study as well as professional presentation criteria. It is recommended that the site consider both components when developing evaluation criteria.

Additionally, it is recommended the novice NPs participate in a monthly journal club and present a journal article critique. Nurse practitioners work in an evidence-based environment (NNPRFTC, 2015) and need to be able to identify strengths, weaknesses, credibility, meaning, and significance to practice in scholarly articles (Andrade, 2015; Harris, 2014; Wirtz Rugen et al., 2016). Critiquing a scholarly journal article will work to increase the NPs ability to critically appraise evidence and determine how or if the knowledge applies to their practice (Abell & Garret Wright, 2016). It is recommended the program develop a framework of critical criteria for critique evaluation.

Participating in a quality improvement (QI) project during postgraduate development is a strong trend throughout the evidence. Postgraduate development programs require the novice NP to identify, study, measure a clinical issue, analyze the data, implement evidence-based changes to improve the clinical problem, measure their impact, and disseminate their findings (Brown et al., 2015; Moore, 2017; Taylor et al., 2017; Thabault, Mylott, & Patterson, 2015; Wallace & Boller, 2014; Wiltse Nicely & Fairman, 2015; Wirtz Rugen et al., 2016; Zapatka, 2014). Few articles suggest QI is not a requirement but can be an option based on the learner's interests and needs (J. Saxe,

personal communication, June 14, 2018). The NNPRFTC (2015) and ANCC (2016) recommend QI content to assist the novice NPs to understand issues that impact patients and healthcare organizations, as well as to provide the NP skills and opportunity to effect positive change in quality. It is therefore recommended that the novice NPs complete and present one QI project. The NPs will identify a potential practice problem, study, evaluate the problem, and make recommendations. The NPs will be expected to disseminate QI project findings within the organization.

Immersion block VII is designed to be a 2-week wrap up. Here, elective didactic sessions can be provided as needed. During this section of the program the NPs can complete outstanding program requirements as well as a summative evaluation. This is an opportunity to consider revisions to the program based on feedback from the NPs.

Recommended Implementation and Evaluation Strategies

Recommended implementation procedures include forming a group of stakeholders that include representation from leadership within the Advance Practice Nurse Department, the Education Department, and Graduate Medical Education Department (ANCC, 2016; Moore, 2017; NNPRFTC, 2015). This group can leverage didactic resources for the postgraduate development program. Furthermore, this group of stakeholders can provide generalized oversight and assist in overcoming unanticipated challenges during the first cohort of novice NPs.

It is recommended the site develop a formal evaluation for each didactic session that aligns with the didactic session's objectives (ANCC, 2016; Andrade, 2015; Flinter, 2011; Furfari et al., 2014; NNPRFTC, 2015; Sargent & Olmedo, 2013; Sciacca &

Reville, 2016; Taylor et al., 2017; Wirtz Rugen et al., 2016). This will demonstrate comprehension of material (see example provided in Appendix D). Furthermore, it is recommended that the site award contact hours for formal didactic sessions. Professional content will be evaluated by completion of meaningful self-reflection, participating in grounds rounds and journal club monthly, including successful presentation of their case studies (ANCC, 2016; Fitzpatrick & Gripshover, 2016; Furfari et al., 2014; Gaudio & Borensztein, 2018; Harris, 2014; Moore, 2017; 2015; Taylor et al., 2017; Thabault et al., 2015). The site will need to develop evaluations for each of the professional development components as well.

It is recommended that the site develop a formative evaluation method for clinical performance that would occur formally and informally (Moore, 2017; NNPRFTC, 2015; Sciacca & Reville, 2016; Thabault et al., 2015; Wirtz Rugen et al., 2016; Zapatka, 2014). A recommended solution includes using the competency evaluation tool developed by the VA as a model for the project site's evaluation tool (See example provided in Appendix E). The site's formative evaluation tool should incorporate NNPRFTC domains and subdomains of competency and at least one objective developed by the novice NP that they would like to focus on. This tool will operationalize competencies, reflect a more accurate evaluation of the NP's progress, and Identify the NP's level of competence specific to different metrics (Bargagliotti & Davenport, 2017; Benham & Geier, 2014; Rugen et al., 2018; Sargent & Olmedo, 2013; Sciacca & Reville, 2016; Wallace & Boller, 2014). Additionally, this tool aligns with Benner's skill acquisition in nursing theory (Rugen et al., 2018). According to Benner (2011), understanding the NPs progress and

current stage of competency will inform the preceptor, who can then guide the NPs learning experiences in a thoughtful manner. Informal evaluation will be ongoing with the novice NP and their preceptor by focusing on competencies, objectives, and individual learning needs throughout guided clinical experiences (Thabault et al., 2015). Formal clinical evaluation will be completed by the preceptor and faculty that have experience working with the novice NP at the end of every immersion block (ANCC, 2016; NNPRFTC, 2015; Taylor et al., 2017).

I recommend the site develop a summative evaluation that will incorporate all 8 NNPRFTC domains (see Table 1) and subdomains (see Table 2 for example) that must be accomplished at the end of a successful postgraduate development program (NNPRFTC, 2015, p. 5-9). Table 2 provides an example of domain 1 and the associated subdomains that the novice NP must successfully accomplish.

Table 2

NNPRFTC Patient Care Domain with Subdomains

- 1. Patient care: Provide patient-centered care that is compassionate, valued, appropriate, and effective for the treatment of health problems and the promotion of health.
- 1.1 Perform all screenings, diagnostic assessments, and procedures that are essential for practice and patient population.
- 1.2 Gather essential and accurate information about patients and their conditions through review of records, history-taking, physical examination, and assessment and review of data derived from laboratory and imaging testing.
- 1.3 Organize and prioritize responsibilities to provide care that is safe, effective, and efficient.
- 1.4 Interpret laboratory data, imaging studies, other tests required for the area of practice.
- 1.5 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preference, evidence-based information, and clinical judgment.
- 1.6 Develop and carry out patient management plans.
- 1.7 Counsel and educate patients and their families to empower them to participate in their care and enable shared decision making.
- 1.8 Provide appropriate referral of patients, including ensuring continuation of care throughout transition between providers or settings and following up on patient progress and outcomes.
- 1.9 Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health.
- 1.10 Provide appropriate role modeling for the interprofessional team.

Note. Adapted from Postgraduate Nurse Practitioner Training Program Accreditation Standards (pp. 6-7), by National Nurse Practitioner Residency and Fellowship Training Consortium, 2015 (https://www.nppostgradtraining.com/Portals/0/Documents/2.0 _NNPPTC_Accreditation_Standards_1.5.16.pdf?ver=2016-01-13-070416-923). Copyright 2015 by National Practitioner Residency & Fellowship Training Consortium. Adapted with permission.

At the end of the program, the novice NP will be evaluated by both faculty and preceptors (ANCC, 2016; NNPRFTC, 2015). The NP will perform a self-evaluation utilizing the same tool. Wirtz Rugen et al. (2016) developed the Centers of Excellence Primary Care Evaluation tool for NPs and found when faculty evaluated resident NPs, the tool correlated to the self-evaluation findings of the NPs when they used the same tool. I recommend using this as a model not only for a summative evaluation, but as a selfassessment of competency before the program as well. At the end of the program, I recommend adding 3 open ended questions for the NP to address: (a) What was the most helpful part of the program?, (b) What was the least helpful?, and (c) What was missing that you would have liked to have seen included? Leadership can then use this information to evaluate the effectiveness of the program by determining the progress of the NPs after the program and to revise future programs. The overall goal of the program is for the NP to be competent to practice independently with a normal patient assignment, using a preceptor for resource. This aligns with stage 2 or possibly stage 3 of Benner's skill acquisition in nursing theory (Benner et al., 2011). The advanced beginner has enough experience through guided clinical experiences to direct their actions and be competent but not enough to be totally independent. The NPs still require experience to develop expertise. The competent practitioner begins to see long-range goals or plans, establishes a perspective based on conscious, abstract, and analytic critical thinking. Although competent, the NP may not be able to identify the most salient issue at this stage and still require occasional guidance (Benner et al., 2011).

Last, I recommend creation of an exit survey for any novice NP who drops out of the program. Questions that could prove useful include: (a) Why are you leaving?, (b) Were you provided the resources you needed to be successful?, (c) Describe your relationship with your preceptor?, (d) In your opinion, were the expectations of this program reasonable?, (e) What was the biggest factor that led you to decide to leave?, (f) What did you like most about the program?, (g) What did you like least about the program? (h) If you are leaving for another opportunity, what does the other organization offer that we do not? (i) How would you improve the postgraduate development program? and (j) Did the postgraduate development program meet your expectations? This secondary product could inform leadership of areas within the program that are potentially flawed and in need of revision (ANCC, 2016; NNPRFTC, 2015; Rugen et al., 2018).

Contribution of the Doctoral Team

The project team was comprised of an expert group of stakeholders that represented leadership, the Education Department, my preceptor, and established NPs. A meeting was arranged and held at which time I presented a 40-minute scholarly PowerPoint that explained background information, current best-practice evidence, and my recommendations for a postgraduate development program for novice NPs in acute care (See Appendix F). The team members roles were to consider the recommendations presented from their unique expert perspective, provide insight to ensure the final recommendations met the needs of the project site, and finally, to decide if or how they wanted to move forward. After the presentation, I encouraged input. The team

consensus was that the project was very much needed and would be a good fit. The project team accepted the recommendations as presented. Future meetings will be planned for implementation.

Plans to extend the project beyond the current DNP doctoral project included discussion of partnering with local universities to attract potential candidates for the postgraduate program and filling the need for more NPs at the project site. Discussion also ensued regarding the current trend at the project site of specialty service-lines onboarding NPs (most of which are novices) and potential transferability of the project recommendations.

Strength and Limitations of the Project

One notable strength of this project was the abundance of observational studies describing organizational experiences with postgraduate programs, retrospective survey data, and some cohort studies. There are large organizations with thriving postgraduate development programs that serve as rich sources of knowledge. Additionally, several well-known experts in the field who have been instrumental in the development of postgraduate education were generous enough to provide insight and guidance for this project. Another strength includes the NNPRFTC and ANCC. These professional organizations offer best-practice standards for organizations seeking voluntary certification. Collectively, this data, best-practice guidelines, and expertise of leaders in the field of postgraduate development of NPs, contributes to the nursing profession's body of knowledge that informs this project.

There was a limited amount of evidence specific to acute care therefore, I chose to include acute care, primary care, and specialty settings within acute care. This could be viewed as limitation. An additional limitation includes the range of transparency of educational content details within the evidence. This could affect the generalizability of the recommendations. Future recommendations include addressing the impact postgraduate development programs for novice NPs have on patient outcomes and quality. This information could help support the need for these types of development programs and direct future program structure and content.

Section 5: Dissemination Plan

Dissemination of this project began with the project team meeting. Findings and recommendations were provided via PowerPoint presentation to leadership, nursing education representatives, and nurse practitioners (see Appendix F). I will present my PowerPoint again at a future meeting to representatives of leadership from the Graduate Medical Education Department and the organization's executive leadership team. All invited attendees will be provided an electronic copy of the PowerPoint before the meeting, and I will be prepared to answer any questions. To reach other NPs, I will present my PowerPoint at a future NP departmental meeting. To reach general staff at the project site, I will develop and present a professional poster board of my project findings and recommendations during competency week.

I am committed to contributing to the nursing profession's body of knowledge. Application of my findings along with other scholars' work will advance nursing beyond the project site. To accomplish this, I will work toward presenting my findings via poster sessions at state and national conferences for nurse practitioners next spring and summer, respectively. My long-term goal is to publish my findings in the *Journal for Nurse Practitioners* by January 1, 2021.

This project is the synthesis of my doctoral academic journey. Completing this project has given me the opportunity to grow and demonstrate my skills as a DNP-level practitioner, scholar, and project manager. My ongoing development of DNP-level skills as an advanced practice nurse guided by the DNP Essentials assisted me in identifying a significant practice problem at the site. My developing skills as a DNP-level practitioner-

scholar assisted me in (a) thoughtfully researching the problem, as well as the evidence; (b) synthesizing this information; and (c) guided by theory, creating an evidence-based plan for the project site to improve the process for transitioning novice NPs into practice. My project required extensive planning and development, as well as collaboration with interprofessional stakeholders. My work will be implemented at the project site in the upcoming months, and I am confident that I will be a highly competent project manager.

My long-term professional goals include exploring opportunities that will allow me to use my DNP skills and create positive social change. I believe that I have outgrown my current position and would like to work with the advanced practice group at the facility. This would provide me the opportunity to translate evidence to practice and publish results of these projects. The skills and competencies gained during the completion of my doctoral project will serve as a launching point for future scholarship.

Completing this project has been challenging. The iterative nature of this project has required perseverance and patience. Challenges included finding my academic voice and staying focused on the educational content of the project. Solutions involved frequently communicating with my chairperson, using the writing center, reviewing published articles for form and style, attending a writing intensive, and working closely with my mentor. I gained several insights through this journey, including the value of using available resources. Initially, I felt that I had failed because I needed to reach out for assistance. Now, I realize that this is part of the process that grows scholars. Prior to this project, I would not have thought to consult with well-known experts or authors for insight. Consultation with experts during completion of my project demonstrated their

generosity with knowledge and how committed these experts are to advancing nursing.

This is a strategy that I will use again in the future.

In summary, the role of NPs is expanding in response to societal demands within a rapidly changing healthcare landscape (J. Saxe, personal communication, June 24, 2018). On-the-job training no longer meets the needs of the novice NP transitioning into practice (Bush & Lowery, 2016; Chappell, 2015; Harris, 2014). This is evidenced by the high turnover rate of NPs within their first year of practice at the project site as reported by the NP manager. Nursing staff development programs for novice NPs better prepare these professionals for success during their challenging and stressful first year of practice (Brown, Poppe, Kaminetzky, Wipf, & Woods, 2016; Bush, 2014; Sciacca & Reville, 2016; Wirtz Rugen et al., 2016). Along with guided clinical experiences, this project makes specific recommendations for educational content that includes traditional classroom learning, simulation education, professional development, as well as quality improvement. Additional recommendations are provided for both formative and summative evaluations. This doctoral project answers the following practice-focused question: Can an acute care nursing staff development program for novice NPs be developed based on existing evidence? Most importantly, this project advances nursing at the project site by creating a formal and professional nursing staff development program tailored for novice NPs in acute care at the project site.

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Appendix A: Elkins Literature Review Matrix

Citation	Conceptual Framework Theory	Research Method Level of Evidence (LOE)	Purpose	Main Findings	Strengths (S) and Weaknesses (W)
Taylor, D. A., Broyhill, B. S., Burris, A. M., & Wilcox, M. A. (2017). A Strategic Approach for Developing an Advanced Practice Workforce: From Postgraduate Transition-to- Practice Fellowship Programs and Beyond. Nursing Administration Quarterly, 41(1), 11- 19. doi:10.1097/NAQ.0 0000000000000198	None	Report of organization experience This program is budgeted for 70 novice NP positions across 20 specialties for their postgraduate education program annually since 2013 LOE: VI	To share how a large complex healthcare system met the growing demand for providers.	 12 months in length. Integrates didactic and clinical experience. Formal application process with interviews. Didactic: First 3 months are didactic & simulation then specialty specific weekly curriculum. Clinical: First 3 months home department, then 2 months ICU, then home department. Interprofessional education (CM, OT, PT, RD, Chaplin, blood bank, Pharmacy, Rad.). NP reports to a NP postgrad director & specialty medical director who steer content. NP assigned primary & secondary supervising MD. Described as a mentorship without mention of preceptor Case study & presentation 	S: Acute care context. One of the largest, successful programs in the US. Very comprehensive. Domains: Professional, clinical, collaboration, political, quality improvement. Decrease in attrition Bill for services (fully credentialled at the time of hire) Less expensive than physician onboarding. W: no specific mention of preceptors

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				twice a month with literature review to determine if EB guidelines followed. • Quality improvement project - present poster and oral at event at the end of program. • Professional Development: join professional organization, taught political advocacy skills, meet with leaders for mentored advice. • Program prepares and vet	
				Trainees paid a stiped until program completed. • Sustainability: lower	
				provider workforce cost, lower turnover cost, fellow	
				billing and collections, and lower recruitment costs.	
Harris, C. (2014).	None	Literature	Examine the	• 12 months in length.	S:
Bridging the gap		review.	need for	 Formal application process 	 Acute care context
between acute care			postgraduate	 rotate through various 	 Develop skills set
nurse practitioner		LOE: VI	development	specialties and units that	specific to acute
education and practice: The need			(specialized training) for	impact primary work.	care,
for postgraduate			postgraduate	Trainees attend grand rounds journal clubs	utilizes preceptor
residency programs.			ACNPs	rounds, journal clubs, weekly lectures,	professional development
The Journal for				certification is expected.	refers to ACNP
Nurse Practitioners,				 Continue to develop NPs 	academic
10(5), 331-336.				on foundation of ACNPs	competencies to

doi:http://dx.doi.org/ 10.1016/j.nurpra.20 14.03,003				program curricula. • Work up to 60 hours a week. • Formal preceptors for each trainee, supervision is a team effort (attending MD, fellows, ACNPs, preceptor, PAs). • Evaluation: Exams, research projects, oral case presentations, preceptor reviews. • NPs paid a stipend to cover costs of program but provided with full benefits. • Bill for services during program to offset costs.
Thabault, P., Mylott, L., & Patterson, A. (2015). Describing a residency program developed for newly graduated nurse practitioners employed in retail health settings. Journal of Professional Nursing, 31(3), 226-232. doi:10.1016/j.profnurs.2014.09.004	Informed by Benner. DNP Essentials Core Competencies for Interprofession al Collaborative Practice: Report of an Expert Panel.	Report of organization experience This organization accepts 8 novice NPs annually into their postgraduate development program. LOE: VI	Description of a pilot program for transition to practice in retail health clinics	 12 months in length Partner with academia Preceptors assigned early. Developed from stakeholder input: new and established NPs, human resources, nursing faulty from local university, managers, physicians, marketing, and finance. Preceptor training model informed by Benner to guide learning and transition phases, case scenarios and recommended preceptor/NP activities. S: Very context specific (MinuteClinic) Utilize technology (webinar, teleconference) W: • weak professional development • may not be generalizable

				 First month: work with preceptor and same patients Then, 11 months of weekly: case reviews monthly continuing education opportunities: one-on-one conferences (face-to-face, webinar, etc.), teleconferences including clinical and business education - physician management team, quality department, strategic practice managers, manager of professional practice. 		
Brown, K., Poppe, A., Kaminetzky, C., Wipf, J., & Woods, N. F. (2015). Recommendations for nurse practitioner residency programs. Nurse Educator, 40(3), 148-151. doi:10.1097/NNE.0 0000000000000117	None	Case-Control study of NPs at a professional organization conference (NP Residency forum in Seattle WA), written surveys & focus group discussions n = 52	focus group identify and prioritize critical aspects needed in novice NP residency program	• Agreed upon elements of NP residency: (1) interprofessional training, (2) leadership/policy component, (3) quality improvement and (4) scholarship, diagnostic & special skills (labs, EKGs, etc.), (5) dedicated, trained, motivated mentors. (6) funding to support program and expansion, (7) accreditation, (8) training space, (9) reliable and valid evaluation tools, and	S: •	Acute care Comprehensive Must-haves: (1) interprofessional training, (2) leadership policy components, (3) quality improvement and scholarship, (4) diagnostic skill honing and special skill readiness, (5) dedicated

		questionnaires completed LOE: V		 (10) university affiliation. Framework: need strong evaluation to quantify results. Specialty care clinical rotations. Tailor to individual experience and interest. Resources: Identify stakeholders to support implementation. External funding sources (residency and preceptor salary) Description of successful NP resident: commitment to clinical skills mastery, awareness of role as team member, equal contributor to quality improvement and clinical practice enhancement. Desired outcomes: increase productivity, retention of mentors and trainees Impact: burnout survey. Re-admission rates, decrease in productivity, Costs and Benefits recruitment-pipeline, NP to provides critical care, saving orientation costs.
National Nurse Practitioner	None	Accreditation standards/guid	Outlines standards for	 Standards include: (1) Mission, Goals, Good for general

Residency & Fellowship Training Consortium. (2015). Postgraduate nurse practitioner training	elines - expert opinion	accreditation of postgraduate training for novice NPs	Objectives, (2) Curriculum, (3) Evaluation, (4) Program Eligibility, (5) Administration, (6) Operations, (7) Staff, (8)	overview of administration, eligibility, length of program, • good descriptive
program accreditation standards		to meet NNPRFTC standards.	Postgraduate Trainee Services. • Core elements: (1) clinical	statistics
standards (accreditation standards). Retrieved May 13, 2018 https://www.nppost gradtraining.com/Po rtals/0/Documents/2 .0_NNPPTC_Accre ditation_Standards_ 1.5.16.pdf?ver=201 6-01-13-070416-923		standards. LOE: VII	 Core elements: (1) clinical based practice and patient care experience, (2) regularly scheduled didactic sessions, (3) system-based learning and quality improvement, (4) population-based health focus, & (5) leadership and professional development. Competency Domains: (1) pt centered care, (2) Knowledge for practice, (3) practice-based learning and improvement, (4) interpersonal and communication skills, (5) professionalism, (6) systems-based practice, (7) inter-professional collaboration, (8) personal and professional development. Evaluation: Program (1) Trainee self-assessment, (2) trainee evaluation of all core program components, 	 W: No specifics only generalities geared toward overview

				(3) preceptor assessment of trainee, (4) reflective self-assessment by trainee of experience, (5) final programmatic evaluation. • Organizational (1) review and assess operation and financial impact, eval for improvements, (2) documented process for initial and ongoing evaluation, (3) encouraged to have residency advisory committee - steering committee. • Clinical Faculty Evaluation: process for evaluating faculty, preceptors and didactic presenters, process for addressing faculty performance concerns improvement plan with measurable goals. • Ongoing Program Self-Assessment: Use accreditation standards to identify program's compliance, periodic basis, no less than annually, document results
Martsolf, G. R., PhuonGiang, N.,	None	Environmental study of	study of publicly	• Of the programs that were identified, 45.7% called S: Good for general

Freund, D., & Poghosyan, L. (2017). What we know about postgraduate nurse practitioner residency and fellowship programs. The Journal for Nurse Practitioners, 13(7), 482-487. doi:http://dx.doi.org/10.1016/j.nurpera.2 017.05.013	programs across the United States	available information about NP residency and fellowship programs to systematical ly describe the program's key characteristi cs. LOE: VI	themselves "residency", 54.5% "fellowship". Discussion of what the program should be called. Residencies tend to reflect primary care outpatient clinics and fellowships were more reflective of specialty care within a hospital. Programs predominately Northeast, South, and West (largest at 34%). Midwest with fewest programs (14.7%). Largest portion of programs focused on primary care, ED and trauma accounted for 11.8%, acute care 11.8%, psychiatry and palliative care 7.4%. Types of organizations with oversite of programs include hospitals, health systems (38.2%), academic medical centers oversee 20.6%. 89.7% of the programs are 12 months in length full time with competitive salary and benefits. 42.6% paid > 60K, 30.8% paid < than 50K.	overview of administration, eligibility, length of program, good descriptive statistics W: No specifics only generalities geared toward overview
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				 56.5% of programs had 2-4 residents, largest had 10. Requirements: 79.4% required states licensure, 67.7% require certification, 51.5% focused on new grads, 22.1% required NP degree from specific field, 17.7% required DEA# Recommend research to explore deeper issues including impact, outcomes, and best practices for postgraduate training. Postgraduate training may
Fitzpatrick, S., & Gripshover, J. (2016). Expert nurse to novice nurse practitioner: The	References Benner's theory but does not appear to be	Literature review. Describe organization experience.	describe urban hospital experience with	training. Postgraduate training may help addresses the increased complexity of clinical demands. to addresses the increased complexity of clinical demands. Current residency program in place that focuses on transition and use of clinical case studies. Implemented a monthly Postgraduate training may help addresses the increased complexity of clinical demands. S: Large university hospital but important gap
journey and how to improve the process. The Journal for Nurse Practitioners, 12(10), e419-e421. doi:http://dx.doi.org.ezp.waldenulibrary.	informed by theory	This program accepts 2-6 novice NPs for the postgraduate program	attempting to manage transition shock for novice NPsdecre ase turn	meeting with 2 senior NPs, director of NPs, and all novice NPs and PAs (< 2 years of experience). Predetermined topics such as leadership, publishing, workplace civility, in residency/postgrad program (wellbeing) • >350 APPs W: • Did not describe

org/10.1016/j.nurpra		annually.	over,	transition from bedside evaluation or
.2016.05.012			increase	nurse to NP, and emotional effectiveness of
		Employs 250	satisfaction	intelligence. strategy
		NPs		NPs identified role-
				transition challenging.
		LOE: VI		Meeting with senior NPs
				also helped the
				experienced NPs
				understand what novice's
				needed.
				Development of leadership
				qualities critical for role
				transition and workplace
				relationships across
				disciplines.
				Evaluation demonstrated
				NPs did not always feel
				supported to attend.
				Gaps in program include
				well-being. Emotional
				support important to
				novice NPs and influences
				team efficiency and job
				satisfaction and turn-over.
Wirtz Rugen, K.,	None	development	describe	Interdisciplinary learning
Speroff, E., Zapatka,		of tool with	development	experiences to advance S:
S., & Brienza, R.		curricular	and testing	clinical, diagnostic, • EPA is an
(2016). Veteran's		examples to	of	leadership, and scholarship established tool for
affairs		promote	interdiscipli	skills. evaluation and
interprofessional		transition to	nary	• Work in a team, within a correlates across
nurse practitioner		practice.	education	patient-centered model. evaluations
residency in primary		20	model for	• NPs are assigned patients (resident, mentor,
care: A competency-		38 novice NPs	novice NPs.	they share with physician qualitative
based program. The		and their	In use at 5	residents. comments),

Journal for Nurse Practitioners, 12(6), e267-e273. doi:http://dx.doi.org/ 10.1016/j.nurpra.20 16.02.023	mentors completed the competency tool. LOE: VI	VA primary care facilities (West Haven, Boise, Cleveland, San Francisco, and Seattle)	 Mentor (NP or MD) assigned to each NP resident. This program is founded on a continuation of the academic curriculum and competencies of the NP program, include American Association of Colleges of Nursing competencies, National Organization of Nurse Practitioner Faculties core competencies, American Association of Colleges of Nursing, Accreditation Council for Graduate Medical Education core competencies for MD, residents and CoEPCE NP competency tool. Quantitative, Qualitative, and measurable. NPs are trusted to perform activities based on Entrustable Professional Activities (EPA) evaluation taken from medical education. EPA evaluation aligns well with Benner and more accurately reflects level of mastery of a competency: (1) observes, (2) needs full 	 Competencies and domains reflect academic and professional organization standards, W: Primary care but appears to easily be used for acute care VA resources are pretty extensive, unclear if transferable to project site.
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				supervision (3) needs supervision periodically, (4) able to perform without supervision, and (5) able to supervise others (aspirational goal). Data collected at 1 month, 6 months, and 12 months. Methods of trainee evaluation include: Self- evaluation, mentor evaluates based on direct observation, input from faculty, and review of the medical record. Clinical domains of training: Interprofessional Team Collaboration Domain, Patient-Centered Care Domain, Shared Decision-Making Domain, Sustained Relationships Domain, Performance Improvement Domain		
Zapatka, S., Conelius, J., Edwards, J., Meyer, E., & Brienza, R. (2014). Pioneering a primary care adult nurse practitioner interprofessional fellowship. The Journal for Nurse	None	Qualitative cohort study. Data collected from postgraduate education experience from 7 novice NPs extending	Describes the experience of the initial cohort of an interprofessi onal and collaborative , team-based NP	 VA in West Haven Center of Excellence in Primary Care Education (CoEPCE) Work in panels with physician residents. Immersion blocks: interdisciplinary, Time split 50% clinical and 50% educational sessions. (1) shared decision making, 	S: • • W: •	Used same evaluation CoEPCE as Rugen study. Consistent with Rugen study Doesn't mention leadership as noted

Practitioners, 10(6), 378-386. doi:https://doi.org/1 0.1016/j.nurpra.201 4.03.018		from 2011- 2013. LOE: IV	fellowship program	 (2) interprofessional collaboration, (3) performance improvement, (4) sustained relationships. NPs report mentors were valuable to care for more complicated patients. Mentors and teachers reported positive learning experience working interprofessionally. NPs reported better and more comfortable communication skills across disciplines after fellowship. Four themes evolved (1) fellowship helped to successfully bridge into practice, (2) necessity of mentorship, (3) commitment to interprofesional collaboration, and (4) expanded role appreciation of other disciplines. 	in Rugen study • Small cohort (n=7) Heavy didactic/nonclinical schedule requiring moderate resources
Community Health Center. (2018). Structure and program elements. Retrieved May 16, 2018 http://npresidency.c om/index.php	None	CHC website describing residency. LOE: VII	Program elements and structure.	• First 4 weeks: intensive orientation to CHC (area, training sites, health problems, walking tours, meetings with community leaders, EHR, CMO with responsibilities and privileges)	S: • flagship for NP residency • comprehensive • well established program • accredited by NNPRFTC

				 40% precepted continuity clinics: develop own patient panel and have provider assigned to them 20% Specialty clinics: 10 rotations high-volume, high-burden, high-risk situation, 20% Mentored clinics: work as part of an integrated/interprofessional care team, see pts delegated by primary care provider mentor 10% didactic education sessions: formal learning of complex clinical challenges most commonly encountered in FQHCs 10% quality improvement seminar: participate in QI focuses on opportunity to develop knowledge and skill to improve care by using quality improvement and system-based learning
Corbridge, S. J., Tiffen, J., Carlucci, M., & Zar, F. A. (2013). Implementation of an interprofessional educational model. Nurse Educator,	Framework for Action on Interprofession al Education and Collaborative Practice, Knowles adult	descriptive article of educational model. Participants: n = 14 NPs, n = 14 medical	describes development , implementat ion and evaluation of an interprofessi	 Interprofessional education emerging as valuable strategy for improved collaboration by better understanding other's roles, better patient outcomes, and efficient resource use. Provides support for interprofessional training which could translate to context of postgraduate

38(6), 261-264. doi:10.1097/01.NN E.0000435271.4015 1.23	learning theory	students, residents, attending physicians. Comparison group: n = 16 medical persons. LOE: VI	onal clinical education model integrated into a nurse practitioner curriculum.	 Core Competencies for Interprofessional Collaborative Practice: (1) values/ethics/roles/responsi bilities, (2) Communication, and (3) teams and teamwork. Simulations to practice working in teams to assess, admit, and manage patients, and presenting pts on rounds. Worked within teams with medical students and residents, including conferences, and morning reports. Completed 2-week inpatient internal med rotation working as a third-year medical student participating in rounds, carrying their own patient load, presenting initial histories and physicals, follow up visits Took call during day but 	training • work to develop strong working relationships in acute care W: • specific to NP student curriculum
				carrying their own patient load, presenting initial histories and physicals, follow up visits	
				not night. • Lickert-type scale based on a lit review for evaluation was developed to understand perceptions of	
				roles and collaboration. Validity established.	

				 Evaluation completed intermittently, and results reflected participants agreed or strongly agreed interprofessional collaboration is important to understand their respective roles. NPs and medical student/physicians' perceptions of each other's roles as equals, felt collaboration is superior to silos. Collaborative approach provided superior care. NPs were perceived as equal or better communicators than students/residents, NP were strong at culturally sensitivity, students/physicians less likely to perceive themselves as better able to coordinate patient care compared to NPs. Patient-centered care is a shared responsibility, must focus training interprofessional approach.
Sciacca, K., & Reville, B. (2016).	Benner's novice to	Literature review	describe definitions,	 Authors report lack of standardized evaluation S: Authors performed

Evaluation of nurse	expert		theoretical	methods: self-assessment,	comprehensive
practitioners	framework	LOE: VI	framework,	competency measures,	search of 673
enrolled in			and	mentoring, portfolios	articles, 19 met
fellowship and			evaluation	(capture linear growth,	criteria.
residency programs:			methods to	evidence and narrative	Speaks to how to
Methods and trends.			assess	reflections), simulation-	best evaluate
The Journal for			competency	based learning & written	postgraduate NPs
Nurse Practitioners			of	evaluation.	in programs.
12(6), e275-e280.			postgraduate	Capability tool:	 Promotes use of
doi:http://dx.doi.org/			NPs	competencies and role	portfolios
10.1016/j.nurpra.20			111 5	descriptions published by	W:
16.02.011				accrediting bodies for NP	No discussion of
10.02.011				practice used a foundation	
				to evaluate NP residents.	sustainability
				Operationalize	
				competencies & placed on	
				a scale reflecting Benner's	
				developmental stages so	
				each can be assessed	
				individually.	
				• Create a	
				platform/framework where	
				learners can construct own	
				learning goals, obtain	
				feedback, reflect, and	
				consolidate learning.	
				 More flexible and captures 	
				the broad role of the NP	
				better than a list of	
				competencies can.	
				 Evaluated at beginning, 	
				halfway, and completion.	
				 NP performs self- 	
				assessment using same	

				tooltailor learning goals. Self-Reflection: self- reflection prompts periodically throughout program. documented in electronic doc-sharing platform allowing for continuous self-reflection. Create opportunity for mentor to respond real- time. Mentorship: assign mentor for duration of program. Notes on learning during these conversations can be documented on electronic platform, easy access to check goals and progress. Learning goals: generated throughout program created by NP and mentor together. Portfolios integrate theory and practice and can be used for evaluation and demonstrate professional development. Authors report lack of research regarding evaluation methods.
Bargagliotti, L. A., & Davenport, D.	None	Literature review,	Describe how	Gap between education and practice for both MDs S:

(2017). Entrustables	descriptive	entrustables	and NPs	•	Standardize
and entrustment:	article	and	Expertise evolves in		milestones and
Through the looking	urtiere	entrustments	additive ways.		when they should
glass at the clinical	LOE: VI	could			be met in education
making of a nurse	LOL. VI	standardize	• An entrustable professional		
practitioner. The		NP	activity (EPA) is a		and postgraduate
Journal for Nurse			competency that is		programs.
		education	operationalized through	•	Provide common
Practitioners, 13(8),		and bridge	discrete, measurable,		dialogue about
e367-e374.		transition to	observable activities.		when, where, and
doi:http://dx.doi.org/		practice in	 Standardizing EPAs will 		how students and
10.1016/j.nurpra.20		fellowship	enhance reliability novice		postgrads can
17.05.018		programs	NPs skills, and physicians.		obtain this clinical
		mirroring	 EPA is a professional 		experience and
		medical	activity that requires skill,		how much
		students	judgment, and supervision.		experience and
		education	 Milestones represent the 		supervision is
		model.	marker points		required for
			(competencies) in a		entrustment of
			curriculum when EPAs		independent
			should be accomplished.		practice.
			 Currently, National 	•	Provides a method
			Organization of Nurse		for transition to
			Practitioner Faculties and		practice.
					Authors report
			AACN have developed		strategy brings
			competencies NPs must		nursing and
			meet in academia but not		
			how those competencies		medicine closer,
			are met.		easily adaptable
			 Postgraduate Programs: 	***	with GME program
			The authors suggest EPA	W:	
			would provide a common	•	builds from
			language that would help		education to
			the learner progress toward		postgraduate
			safer and more confident	•	medical model but

	N.			clinical independence in an identified, measurable, standardized fashion across academic programs and postgraduate transition programs. • Medical EPS are linear with 5 levels of proficiency: performs with supervision, performs with moderate supervision, performs with independently, and teaches and supervises others. • There are 8 conditions of EPAs in medicine that would apply to nursing. • Ways to develop independent practice include: simulation, skill level required, frequency of performance in practice, and opportunity for practice. Intangible factors: self-confidence, affinity for risk taking, immediate past experience. interfering influences and competing priorities can interfere. Important to identify, address, and move forward.	seems applicable to NP practice.
Holley, S. L. (2016). Ongoing	None	Literature review	describe how APRNs	TJC requires any	S:

professional performance evaluation: Advanced practice registered nurse practice competency assessment. The Journal for Nurse Practitioners, 12(2), 67-74. doi:http://dx.doi.org/ 10.1016/j.nurpra.20 15,08,037	None	Cohort study	are evaluated postgraduate , advocate for nursing specific criteria development	credentialed and privileged provider in hospital be evaluated against (1) Ongoing Professional Performance Evaluation (OPPE) and (2) Focused Professional Practice Evaluation (FPPE). OPPE is ongoing process monitor for continuing competency using 6 domains of objective and subjective data, used to immediately identify specific provider in need of performance improvement monitoring using the FPPE. FPPE is a time-limited evaluation of practitioner competence performing (a) newly requested specific privileges, (b) newly hired providers reviewed at 6 months, (c) current providers requesting a new privilege, (d) whenever a question arises regarding ability to provide safe, high-quality patient care of identification or (e) unprofessional behavior.	OPPE and FPPE are established guidelines currently in use. Could be flexible and incorporate APN specific criteria W: OPPE and FPPE were developed by the Accreditation Council for Medical Education for physicians and may not capture what makes APN practice unique from physician practice will not evaluate for improvement, competency, or decision made in relation to credentialing and privileging.
Rugen, K. W.,	None	Cohort study	Describe	 NP residents demonstrated 	S:

Dolansky, M. A., Dulay, M., King, S., & Harada, N. (2018). Evaluation of Veterans Affairs primary care nurse practitioner residency: Achievement of competencies. Nursing Outlook, 66(1), 25-34. doi:10.1016/j.outloo k.2017.06.004		of NP residents over 1 year at 5 VA sites. This study included 38 NPs. LOE: IV	aggregate NP resident outcomes across 69 items in 7 competency domains across the five VA CoEPCE from 2012 - 2015. Measured resident competencie s with respect to NP progress and identificatio n of the aggregate highest and lowest scores at 1 and 12 months.	ability to practice safely without supervision at completion of program. Evaluated by mentors and NP self-ratings. CoEPCE tool provided value to both formative and summative evaluations, identified strengths and weakness for NPs, insight to the residency programs and areas in which improvements in the curriculum can be made. Recommend faculty training to standardize mentor assessment of NP through increased direct observation and portfolios to make tool as relevant as possible.	 NPs competency reflects independent practice at the sites Tool is reliable across the 5 sites VA very strong in area of postgraduate training. Only 68% of residents had complete data for all three time points. Small numbers (n=19).
Gaudio, F. G., & Borensztein, R. (2018). An Emergency Medicine Residency for Nurse Practitioners: The	None	Descriptive statistics. This program accepts 2-3 NPs per 15-month	describe the development and general organization of an Emergency NP	Due to higher acuity of patients and an academic requirement of only 300-400 hours, developed an Emergency NP residency program.	S: Comprehensive clinical experience Strong didactic curriculum W:

New York Presbyterian-Weill Cornell Medicine Experience. Advanced Emergency Nursing Journal, 40(2), 119- 126. doi:10.1097/TME.0 000000000000186	program. LOE: VI	residency at NY Presbyterian Hospital.	 ENPs require in-depth clinical knowledge and experience. 3,000 clinical hours of supervised patient care and didactic learning. 50% of hours in the ED and 50% in EM-related specialty rotations. Work under supervision of ED physician. 15-month program. Work 4-12-hour days 	 No specific mention of leadership though somewhat implied Small, qualitative data to report residents insight.
Journal, 40(2), 119- 126. doi:10.1097/TME.0			 50% of hours in the ED and 50% in EM-related specialty rotations. Work under supervision of ED physician. 15-month program. 	

	N.			 months. Medical director reviews logs, and charting. > 500 clinical hours in residency. 	
Morgenlander, J. C., & Blessing, R. (2016). The Duke neurology advanced practice provider residency: Its time has come. Neurol Clin Pract, 6(3), 277-280. doi:10.1212/CPJ.00 0000000000000249	None	Descriptive article. Article states the current class is the first cohort but does not disclose the number of NPs in the cohort. LOE: VI	develop advanced practice providers competency to manage neurology patients	 1-year residency postgraduate Advanced Practice Practitioners Did not bill because they were directly supervised by physician or senior APP but were privileged and therefore had successfully passed certification exam. Paid at PGY1 level. Rotation coordinator for each rotation, 2/3 of their time with faculty and 1/3 of their time with the senior APP on that service curricular outline of common topics to be covered during each rotation physical diagnosis was emphasized given 60 minutes for a new patient and 30 minutes for a return visit. Didactics were piggybacked on to neurology residency program core lecture series 	S: Interdisciplinary collaborative program W: medical model which may not capture the unique perspective, competencies, and attributes NPs bring to the table unclear as to what the "core competencies" were. Not clear about division of time and activities

Sargent, L., & Olmedo, M. (2013).	Benner's skill acquisition in	Descriptive article	Describes one	 APP residents met weekly with one of the program directors to review questions about care, learning objectives, and professionalism. Evaluation were completed by supervising faculty and senior APPs and aligned with core competencies. Stakeholders surveyed before any residency was Comprehensive
Meeting the needs of new-graduate nurse practitioners: a model to support transition. Journal of Nursing Administration, 43(11), 603-610. doi:10.1097/01.NN A.0000434506.7705 2.d2	nursing theory	describing how this postgraduate educational program was developed and implemented. Article states 4 NPs are chosen for interview but does not state how many are/were accepted. LOE: VI	organization 's efforts to implement a novice NP postgraduate program	created. 12-month program: clinical intensive, comprehensive didactic, precepted sessions, specialty clinic sessions, and scheduled time out of clinic meets with clinical mentor Clinical: assigned half load of 500 patients Preceptors have dedicated time for patient care sessions with no other responsibilities than to mentor, instruct and support NP residents. NPs present to preceptors who review, instruct, reexamines the patient, and sign- off. Chart Rounds: end of each patient care session, chart clinical experience Didactic curriculum includes, leadership, professionalism, dedicated mentors, admin time to meet with preceptors, interdisciplinary building team skills, Uses Benner's model to framework for self-assessment confidence for competencies. Provided budget for transparency. W:

	rounds are conducted to review pts seen with MD and NP faculty. Interdisciplinary, participate in reviewing conditions and plan of care. Specialty Clinics: 1-month rotation once a week throughout 12-month program. Classroom Didactic: first Tuesday of the month 1-2 hour core curriculum lectures, 2nd Tuesday of	care
	the month released for grand rounds with medical residents to attend core curriculum lectures or	
	 workshops and training. Team Precepting: faculty NPs conduct weekly team precepting sessions with a team of FP MDs and 	
	behavioral science faculty while observing resident through 1-way glass during patient encounter.	
	Administrative Time: 4- hour time blocks reserved each week for preceptors available to answer	
	questions and assist with interpreting results and	

clinical decision making.
Leadership: participate in
administrative meetings
and committee work,
fostering understanding
into structure and function
of the organization.
Interprofessional Balint
strategy seeks to
understand the meaning of
the patients' behaviors and
symptoms through case
presentation and
exploration of lived
experience of the patient
and the provider.
Evaluation: resident
evaluated in first few
months and they transition
to monthly meetings with
their respective mentor.
NPs exit program with
portfolio that describes
skills, procedures, &
knowledge gained.
Evaluation: coordinators
assess performance of
individuals and the
curriculum using formative
evaluation.
• residents complete NP
Clinical Confidence
Assessment self-evaluation
tool adopted from Benner's

Schofield, D. L., &	Theory of	None.	Describe the	theory. Perceived preparedness of each resident is evaluated before and after the program using NP preparedness survey. Autonomy is measured by resident - writing essay upon entry and conclusion of the program. Recommendation: Have to achieve equivalent outcomes across NP residency programs, standardize National Organization of Nurse Practitioner Faculties residency model that can be replicated and measured on a large scale. 9-month postgraduate	S:
McComiskey, C. A. (2015). Postgraduate nurse practitioner critical care fellowship" Design, implementation, and outcomes at a tertiary medical center. The Journal for Nurse Practitioners, 11(3), e19-e26. doi:http://dx.doi.org/	Diffusion of Innovations, process map	This program accepts 2 NPs per 9-month program. LOE: IV	planning, implementat ion, and evaluation of the initial cohort of NP fellowship program for critical care	 9-Hollin postgraduate critical care (CC) fellowship program for new and experienced NPs who lack CC experience. Structured clinical and didactic fellowship directed by interprofessional team of NPs and MDs with expertise in critical care, cardiac surgery, general and emergency surgery, radiology, and infectious 	ACNP specific interdisciplinary team - build relationship outcomes showed improvement in all areas W: availability of preceptors did not sound predictable funding questionable if

10.1016/j.nurpra.20	diseases, pain management	unable to bill for
14.11.001	and palliative care.	NP
	 Pharmacy, nursing and 	• small group (n=6)
	social work participated in	 no professional
	didactic portion of the	development
	curriculum. rotations	activities explicitly
	through 5 specialty	noted
	intensive care units.	
	 Weekend and night 	
	coverage and on-call	
	expectations.	
	 Clinical rotations decided 	
	upon based on need and	
	preceptor availability.	
	 Didactic was based on 	
	perceived needs according	
	to preceptors and	
	physicians.	
	 Trauma rotation included 	
	multi-trauma, neurotrauma,	
	orthopedic trauma.	
	 Critical Care rotations 	
	include surgical, medical,	
	cardiac surgery, and	
	neuroscience.	
	 Fellows rotate through 	
	perioperative readiness	
	center, infectious diseases,	
	emergency medicine, and	
	soft tissue teams PLUS 2	
	electives.	
	Simulation was used for	
	management of	
	deteriorating situations,10	

scenarios are established
"failure to rescue"
Applicants successfully
pass national certification
exam, write letter of
interest, transcripts, and 2
letters of reference.
• Salaries were 80% of
starting new graduate NP
salary
• not fully credentialed
during the program.
Adjusted to 1 year of experience at completion.
•
Credentialled as affiliate full and provides
fellow provider.
Enter orders under
supervision of preceptors.
Rated skills before and
after each rotation
(Lickert-likeno skill,
little skill, some skill, some
proficiency, fully
competent).
Simulation scenarios had
critical actions fellows
must meet.
Increase in confidence,
knowledge, skills, and
ability to management
critically ill deteriorating
patient, increase physician
satisfaction, and greater
opportunity for more
opportunity for more

				experienced NPs to get additional education.		
Mayo Clinic (2018). Cardiology nurse practitioner fellowship (Arizona). Retrieved May 22, 2018 from http://www.mayo.ed u/mayo-clinic-school-of-health-sciences/careers/nur sepractitioner/cardiology-nurse-practitioner-fellowship-arizona?_ga=2.1129 24615.2119743450. 1527031900-1635018107.1527031900	None	Webpage. 2 NPs are accepted for each fellowship offered. LOE: VII	Organizatio n website describing postgraduate training	 12-month program 200 didactic hours 1,700 clinical mentored hours. Interdisciplinary rounds Conferences Self-learning modules Simulated learning Professional development project Primarily inpatient but some outpatient. Goals: (1) analyze pathophysiology for various CV disease processes, (2) develop CV diagnoses, formulate a treatment plan and evaluate patient response to treatment, (3) utilize evidence-based medicine, using quality, costeffective care, (4) educate patient and families being aware of emotional, physical, and cultural needs, (5) develop organizational skills to manage a patient caseload, (6) develop effective communication and presentation skills with the 	S: • W:	Prestigious facility Comprehensive program No mention of mentors or quality improvement but implied (professional development project)

interdisciplinary CV NP,
and (7) transition from
novice NP into the
professional role as a CV
NP.
Monthly rotations: CV risk
and assessment, CV
diagnostics, general
inpatient and outpatient
cardiology, interventional
cardiology, structural heart
disease, electrophysiology,
advanced heart failure and
mechanical circulatory
assist devices, adult
congenital heart disease,
vascular heart disease,
cardiothoracic surgery and
transplantation.
Evaluation: successful
completion of all clinical
rotations, performance
criteria, formal
presentations, learning
activities, and an academic
manuscript or abstract is
required for graduation.
Applicant has to be eligible
for NP license
Paid stipend with benefits
Attend one national
cardiovascular-focused
conference.
Interdisciplinary team, NP,
1

				PA, allied health and MDs	
American Nurses Credentialing Center (2019). ANCC practice transition accreditation program (PTAPTM). Retrieved May 22, 2018 http://www.wyonurs e.org/ancc-practice- transition- accreditation- program-ptap/	Benner's theory	Webpage LOE: VII	Professional organization webpage – explains accreditation program and process	 Fellowship for APRNs initial entry into or between practice settings Domains: (1) program leadership, (2) organizational enculturation, (3) development and design, (4) practice-based learning, (5) nursing professional development, (6) quality outcomes Leadership: program director responsibilities Organizational enculturation: process APRNs assimilate into practice Development and design: faculty, curriculum, competencies, scope and standards Practice-based learning: preceptor, mentor or experienced provider, incremental goals for evaluating APRNs, managing transition Professional development: process of learning, how they protect public and provide quality, safe care. Quality: residents, patients, 	S: good overview comprehensive specific to nursing validates sound program W: \$10,000 cost

				practice setting	
Wallace, D. & Boller, J. (2014). New nurse practitioner competencies: Skill development and reflective writing rubrics. The Journal for Nurse Practitioners, 10(7), e13-e21. doi:http://dx.doi.org/10.1016/j.nurpra.2014.04.018	Benner	Descriptive statistics LOE: VI	describes introduction and development of 2 rubrics for assessing performance of new NPs transitioning to practice	 Rubrics developed to clarify performance and role expectations. Competency Rubric: (1) health promotion, (2) relationship between NP and patient, (3) teaching-coaching, (4) professional role, (5) management of health care delivery systems, (6) monitoring quality health care practice, (7) cultural competence. Reflective Writing Rubric: (1) depth of reflection, (2) reflection in action, (3) lifelong learning, (4) content and format Uses Benner as framework for rubrics. Rubric used in conjunction with existing competency tools: Quality and Safety Education for Nurses initiative, Core Competencies for Interprofessional Collaborative Practice, National Organization of Nurse Practitioner Faculties - NP core competencies. 	S: Rubrics can clarify roles and expectation which is important because not all physicians and employers understand the NP role tool developed by authors based on current established competencies for NPs in academia incorporated reflection journaling W: no reported validity

				 Have to standardize competencies to ensure competent effective NPs postgraduation. 	
Furfari, K., Rosenthal, L., Tady, D., Wolfe, B., & Glasheen, J. (2014). Nurse practitioners as inpatient providers: A hospital medicine fellowship program. The Journal for Nurse Practitioners, 10(6), 425-429. doi:http://dx.doi.org/ 10.1016/j.nurpra,20 14.03.022	Framework based on foundation of patient care, medical knowledge, professional development, communication - aim for clinical excellence	cohort study of NP & PAs This program accepts 6 applicants (NPs and/or PAs) annually since 2009. LOE: IV	Describes the cohort experience of an Advanced Practice Fellowship (APF) at University of Colorado in acute care	 Hospitalist group - APF attempt to improve clinical competency and NP confidence, collaboration with physicians. Partnered with University of Colorado Application process: must successfully graduate from academic program and pass certification exam before commencing. Framework: (1) building medical knowledge, (2) skill in communication and (3) professional development. Clinical rotation (nonresident medical service with MDs, PAs, NPs) Didactic instruction and scholarly activity: (1) boot camp, (2) ongoing didactic building on clinical topics, (3) case studies. Build knowledge and desire to improve quality, safety and efficiency. Ramp up of clinical work 	S: Context is acute care Train with PAs W: No medical residents in fellowship. This could have limited collaboration experience but may not be a teaching facility medical model - can they adequately speak to professional development for NPs?

Andrade, N. (2015).	None	Literature	provide	didactic teaching. Evaluation: quizzes, case studies, multisource feedback and evaluation process, nursing faculty, case-management, NP fellow self-assessment. Pre and post examination. 75% of the cohort chose jobs in an inpatient setting, 100% felt very unprepared initially and after fellowship, 80% reported they felt prepared, 20% felt very prepared. Post-clinical medicine test mean went from 57% to 79%. 11 acute care programs in
Postgraduate Fellowships: What Is in It for New Acute Care Nurse Practitioners? Advanced Critical Care, 26(3), 197- 200. doi:10.1097/NCI.00 0000000000000000		review, descriptive article. LOE: VI	background to support postgraduate training in acute care, summarizes the residencies in the US	 Most 12 months in duration Rotations include a variety of specialties, All offer didactic and clinical components, including lectures, journal clubs and interdisciplinary conferences Most include demands of 60 hours per week and 24-hour weekend call. Established curriculum and Program content consistent with other articles Similar to Martsolf's article but specific to acute care programs. W: Leadership not mentioned but known component of at least one of the programs

				preceptors who focus on collaborative model. • Work with other NP, PAs, fellows, and attending MDs. • Evaluation varies from institution to institution but usually includes examinations, research projects, and case presentations. • Most offer full time benefits along with stipend (45K - 55K) but can vary.		mentioned in the article (CHCS).
Rudy, S., & Wilbeck, J. (2017). Postgraduate Emergency Nurse Practitioner Fellowships: Opportunities for Specialty Education. Advanced Emergency Nursing Journal, 39(3), 224-230. doi:10.1097/TME.0 000000000000155	None	comparison and gap analysis among ENP fellowship programs. This article contacted 9 postgraduate emergency NP fellowship programs. The number of NPs per postgraduate educational program was not reported.	Compares curricula, didactics, clinical rotations, and measure of competency.	 Recommend national ENP fellowship curriculum to ensure consistency among program, support, competency and clarity to role, and education of APRNs seeking employment in ED. Direct clinical hours ranged from 2,000-3,000. Programs ranged 12 -18 months 40-65 hrs/week worked. Majority of clinical hours in the ED including adult, pediatrics Didactic hours were independent of clinic hours vary between 4-10 hr/week (time spent attending 	S: •	General similarities exist between programs ED specific Author reports opportunity for increased standardization between programs with regard to core didactics, advanced skills and procedure, core rotations, number of clinical hours, and measurement

		LOE: VI		conference, lecture, series, skill laboratories, and workshops, or program lectures), ACLS, BLS, PALS. • Evaluation of competency and performance were reported as "similar" between programs. • Clinical performance assessed during clinical rotations, feedback provided by preceptors, faculty members, and program directors through summation and formative process. • Evaluation every 3 months after each clinical rotation and within skill and simulation labs, using program-specific standardized criteria and benchmarks. • Some program offered written examination in didactic, clinical rotations, and at program completion.
Benham, A. J., & Geier, A. (2014). Preparing nurse practitioners to provide orthopedic primary care. The	Benner	descriptive statistics, cohort study. 8 NPs were included in	describe pilot MS residency for NPs	 Small study that provided anecdotal information regarding the number of hours dedicated to orthopedics in NP training. Of the 8 NPs surveyed,

Journal for Nurse	this study	15 hours of their academic	developing
Practitioners, 10(8),		program dedicated to ortho	evidence-based
603-606.	LOE: V	Felt they were not	best practices for
doi:http://dx.doi.org/		prepared.	improving NP
10.1016/j.nurpra.20		• 20-60% of primary care	knowledge and
14.04.015		visits include an orthopedic	skill,
		complaint.	multidisciplinary,
		Provided test to assess	educational
		competency before - 0%	objectives, and
		passed, after fellowship,	strategies used in
		62% pass rate.	med school, PA
		AAMC report: skills,	training programs,
		attitudes, knowledge	and nursing school.
		required, with curriculum	 Speaks to NPs who
		development,	specialize without
		implementation and	specific
		evaluation	specialization
		National Assoc. of	education
		Orthopaedic nurses core	(academic)
		curriculum for Orthopaedic	program (FNPs
		Nursing, AACN Essential	who work in
		of Doctoral education for	ortho).
		DNP as guide for	 Discusses moving
		curriculum aimed at NPs	some ortho
		ortho knowledge	specialty under the
		postgraduate.	primary care
			provider (NP) to
			provide access to
			ortho services and
			cost-effectiveness
			W:
			 small study,
			results not
			statistically

					•	significant but did demonstrate improvement with pilot fellowship and need for further investigation. No specifics about fellowship Focus appeared to be clinical onlyno professionalism, leadership, etc. but did refer to the Essentials which addresses non- clinical broader development Application process implied but not explicated
Moore, V. G. (2017). Essential frameworks of postgraduate certified nurse practitioner training programs: An e- Delphi study. (Doctor of Philosophy e-Delphi research study), Capella University, Retrieved from	Delphi study, references Benner	Dissertation research study. Utilized a group of experts to determine optimal framework for postgraduate educational development program.	dissertation research study	 Experts participated in 3 rounds of e-Delphi study to determine the framework of a postgraduate training program for novice NPs Designed to bridge the gap from education to practice. 11 domains with 92 competencies identified. 	S: • • •	very recent study 2017 Comprehensive Could be very useful but designed for the "ideal" post graduate training program some of the 92 competencies are not specific, i.e.

https://search-proquest-com.ezp.waldenulib rary.org/central/doc view/1925938922/7 B5230CE01304560 PQ/2?accountid=14 872 ProQuest database.		LOE: VI			"have clear evaluation procedure throughout the program"
Lindfors, K., & Junttila, K. (2014). The effectiveness of orientation programs on professional competence and organizational commitment of newly graduated nurses in specialized health care: A systematic review protocol. Joanna Briggs Institute of Systematic Reviews Retrieved June 3, 2018 https://ovidsp-uk-ovid-com.ezp.waldenulib rary.org/sp-3.30.0b/ovidweb.cgi?&S=MIOBPDHO DHHFLOJNFNEK LDBGOMKAAA00 &Link+Set=S.sh.21	Protocol	Systematic review LOE: I	Identify effective orientation program and their effects on professional competence and organization al commitment of newly graduated nurses.	Study used Nurse Competence Scale (NCS), Australian National Competency Standards (ANCI), and 6-D Scale (Six-dimension scale of nursing performance) organizational commitment: Organizational Commitment Questionnaire, Organizational Commitment Scale, and Affective, Continuance, and Normative Commitment Scale Successful orientation creates a sense of belonging-socialization preceptors important for satisfaction and competency development, facilitate new nurse's role adjustments and	S: systematic review valid and reliable tools that might be helpful for project W: focus was novice RNs, results very brief

%7c3%7csl_190				professional behaviors • Management and a supportive learning environment fosters confidence needed to gain nursing experience.	
Van Camp, J., & Chappy, S. (2017). The effectiveness of nurse residency programs on retention: A systematic review. AORN Journal, 106(2), 128-144. doi:DOI:10.1016/j.a orn.2017.06.003	One of the studies utilized Benner's framework.	systematic review LOE: I	examine new graduate nurse residency programs, residents perceived satisfaction, and retention rates, make recommenda tions for implementat ion in perioperativ e settings	 Residencies bridge gap Attractive to new nurses - good for recruitment. Up to 60% of RNS leave their first job within 1 year of hire Transition is stressful, reality shock, General consensus: new RNs are not competent/prepared for workforce. Complicated by nursing shortage which is more severe in perioperative setting (focus of study). Turnover is expensive Residencies: didactics, clinical support, preceptor, mentorship 3-18 months long. Results demonstrated high satisfaction with residency and increased perceived competency 	S: Good timely information, Results demonstrate RNs who participate in a residency are more prepared to practice in the realworld settings, increased competency, confident nurses with potential decreased turnover W: Perioperative, nursing not APRN. May not be generalizable. Programs varied - recommend consistency in design, outcomes curriculum, and length. Hard to compare when measures are

					different. • Some difficulty determining retention. • Recommend quasi-experimental studies
Faraz, A. (2017). Novice nurse practitioner workforce transition and turnover intention in primary care. Journal of the American Association of Nurse Practitioners, 29(1), 26-34. doi:10.1002/2327- 6924.12381	None	Descriptive, cross-sectional study. N = 177 NPs LOE: VI	purpose was to describe the individual characteristics, role acquisition and job satisfaction of novice NP, identify factors associated with their successful transition and turnover intention in the first year of practice	 3 major categories driving a successful transition: (1) individual characteristics of the NP, (2) role acquisition, & (3) job satisfaction. Characteristics: prior experience as a RN may be helpful Mentorship has been shown to improve NP role transition What that mentorship should look like is not clear Social support important during transition period Sense of meaning leads to greater professional or organizational commitment Find meaning, sense of motivation in work environment high levels of empowerment which is linked to successful practice and retention. Job Satisfaction: autonomy 	identifies those issues important to novice NPs Can incorporate into program W: primary care context

Norwick, R. M.	Modeled after	Retrospective	Purpose was	develops early as novice, • Quality of professional and interpersonal relationships important to new NPs, time to complete work, time to develop skills, and discuss challenging patient and ethical dilemmas • Benefits and pay are critically important • Autonomy is critical factor in turnover intention in novice NPs • Candidates - spoke	S:
(2016). Family nurse practitioner residency for recruiting and retention. The Journal for Nurse Practitioners, 12(5), e231-e233. doi:http://doi.org/10.1016/j.nurpra.2016.01.014	Flinter's work	description of NP residency program. 12 NPs have completed program. Program accepts 3-4 NPs every 6 months. LOE: VI	to describe the residency program implemente d in Santa Rosa community health clinic	Spanish, had strong internal med background - felt this correlated with competence within FQHC, knowledgeable of FQHCs and personal interest to serve the underserved. Interview included attendance of weekly didactic lecture and interaction with current FNP residents. Interview included medical question in Spanish. Ist Fundamental component: Consistent with Flinter: 1 year long, supportive environment to develop in new role, orientation, assigned	 Consistent with Flinter's model, speaks to sustainability 3 residents to 1 preceptor - cost efficient Program has produced 12 graduates. 10 working at NPs in primary care, 2 went back to nursing, 4 hired internally, 10 are ethnic minorities Includes advice for preceptors FQHC based

	preceptors, and low but escalating productivity targets. • 2-week intense orientation: culture of FQHC, EHR training, motivational interviewing training, 4-Habits Model of efficient and effective patient visits, contraceptive implant insertion and removal, formularies are reviewed, safe prescribing practice discussed • Lunch meeting with medical assistant to explain best practice of teamwork. • 2nd Fundamental: assigned preceptor, for every 3 NPs there is 1 preceptor who does not see patients. • All NP residents are licensed • See pts without preceptor in room unless difficult case or emergency, double check prescriptions and	Does not address professional development though likely incorporated as program is modeled after Flinter
	case or emergency, double	
	 Review all notes, no extra time, high satisfaction due to lower stress and immediate reward of teaching, preceptors 	

interns, and a family physician. • Use models evaluated by	
Use models evaluated by	
William Cayley.	
• 3rd Fundamental:	
escalation of	
responsibilities, inherit a	
panel of 500 patients first	
3-months preceptor signs	
off on all labs, imaging,	
and patient plans.	
• First 6 months residents	
send all notes to the	
preceptor for review, after	
which only high-risk pts	
notes are sent (chronic	
pain, uncontrolled DM,	
polypharmacy).	
• Initially, 1 patient per hour	
and end of year, 9 patients	
in 4 hours.	
Take call for after-hour	
advice	
Present 2-3 case studies in	
didactic during 12-month	
program.	
• Final project is a	
presentation of a medical	
guideline update at	
morning provider meeting.	
Budget: initially HRSA	
funded, productivity of NP	
residents offset cost of	

Cayley, W. E., Jr. (2011). Effective clinical education: strategies for teaching medical students and residents in the	"one-minute preceptor", "SNAPPS"	Literature review LOE: VI	Describe effective strategies for teaching	nonproductive preceptors. NP residents are licensed and billable. Soft outcomes include patient access, provider diversity, and provider retention. Residents good at chronic care model and attentive to routine health maintenance. Medicaid bonuses for MU and quality improvement project standards. Goal is bill 1,900/year but 1,700 is adequate for sustainability. Paid 80% with full benefits and join the union OMP: (1) get a commitment, (2) probe for supporting evidence, (3) Teach general rules, (4) reinforce what was done right, (5) correct mistakes, NAPPS: (1) summarize	S: • Quick, simple tools OMP and SNAPPS improve educational processes and outcomes
office. WMJ, 110(4), 178-181; quiz 203.				relevant history and physical findings, (2) narrow the differential, Is it likely? Is it relevant? (3) Analyze the differential, (4) probe the preceptor, (5) plan patient management,	W: Developed for medical teaching but transferability should not be a problem Pattern recognition
				plan patient management, (6) select a case-related	Pattern recognition and activated

				learning issue. • Aunt Minnie (focuses on pattern recognition): (1) student present CC and presumptive diagnosis, (2) student begins a write-up and preceptor evaluates the pt, (3) preceptor discusses case with student, (4) preceptor reviews and signs medical record • "Activated demonstration": (1) assess student relevant knowledge, (2) determine what the student should learn from the skill demonstration, (3) guidance for student participation during skill demonstrate clinical skill, (5) discuss learning points with student, (6) set an agenda for future learning	demonstration need further assessment
Hart, A. M., &	None	retrospective	explore	opportunities.2004 study of n=562 NPs,	S:
Bowen, A. (2016). New nurse practitioners' perceptions of preparedness for and transition into practice. The Journal for Nurse		cohort study, qualitative and quantitative LOE: IV	perceptions of preparedness and transition into practice	 9.8% very well prepared, 38.4% generally prepared, 38.2% somewhat prepared, 11.7% minimally prepared, 1.9% very unprepared. Respondents felt most prepared for health assessment, differential 	 Identify area that can enhance transition to practice that could be incorporated in program Strong recommendations

Practitioners, 12(8),		diagnosis,	for mentors
545-552. doi:doi:		pathophysiology,	Strong statistical
http://dx.doi.org/10.		pharmacology, health	study similar to
1016/j.nupra.2016.0		teaching and management	previous survey
4.018.		of acute illnesses.	previous survey
		 Least prepared for billing 	
		and coding, simple office	
		procedures, EKG and	
		radiology interpretation,	
		microscopy and mental	
		illness management.	
		• 2012 3.3% very well	
		prepared, 38.9% generally	
		well prepared, 43%	
		somewhat prepared, 11.1%	
		minimally prepared, 3.7%	
		very unprepared.	
		 Most prepared for 	
		assessment,	
		pathophysiology, wellness,	
		patient rapport, and	
		relationship building and	
		episodic care	
		 Least prepared for 	
		interpreting diagnostic tests	
		(EKGs, xray, and labs) and	
		specialty areas (derm,	
		ortho, cardiology).	
		• First year of practice	
		adequate clinical support:	
		19.8% strongly agree, 42%	
		agree, 11.3% neither agree	
		or disagree, 6.7% strongly	
		disagree.	
		uisagice.	

E 1
Formal mentor: 17% had a
formal mentor, 40.1% had
informal mentor, 18.6%had
both formal and informal
mentors, 24.3% no mentors
during first year.
Mentors 65% physicians,
27.88% NPs, 2.79% PA
Postgraduate residency:
58% extremely interested,
32% somewhat interested,
6% neither interested or
disinterested, 2%
disinterested. 47% wanted
a 6-month program and
47% wanted 1 year.
• Most NPs wanted >50K,
>60K 42.6%, 51-60k
26.4%, 41-50K 20%, 20-
40K 9.5%, , < 20K 0.6%.
• 50% of NPs wanted help
transitioning into practice,
90% of these mentioned
postgraduate training. 49%
of respondent felt they
practiced outside their
competence level. complex
patient, emergent needs,
obstetric patients, mental
health concerns, chronic
pain management, EKG
and x-ray interpretation,
being on call, hospital
admission.

				 Complex patients most common themeFew differences in studies. Participants desired help transitioning into practice and are interested in postgraduate residencies. Mentoring and formal orientation is important to successful new NP transition but most lacked formal mentors. Physicians provided most of mentoring but have different education and may not understand role. Transition experience new NPs including development of EB recommendations for transitioning into practice, guides for mentors of NPs, and postgraduate residencies and fellowships.
Bush, C. T., & Lowery, B. (2016). Postgraduate nurse practitioner education: Impact on job satisfaction. The Journal for Nurse Practitioners, 12(4).	None	convenience cohort study. 182 completed surveys returned. LOE: IV	identify factors that influence job satisfaction of NPs	 Literature review: almost all programs self-funded program not standardized, notable variation in objectives, clinical competencies, terminology describing participants role. Training not expected to statistically sound study n=182 recommends modernization of regulatory environment to positively impact NP satisfaction

doi:http://dx.doi.org/		prepare NPs to work	W:
10.1016/j.nurpa.201		beyond their population-	 study speaks to job
5.11.018		focused educational	satisfaction only
		training and associated	• consistent
		certification.	regarding no
		 Postgraduate education has 	evidence
		a statistically significant	supporting
		positive impact on NP job	improved clinical
		satisfaction	outcomes
		 Years of experience have a 	 Does not speak
		greater impact on job	specifically to
		satisfaction among NPs	professional
		without postgrad training	development but
		compared to those with	does address issues
		postgrad training.	that could be
		 Regulatory autonomy did 	considered linked
		not influence satisfaction	to professional
		overall however, those	development (i.e.
		most satisfied had > 3	collegiality,
		years of experience,	autonomy, growth)
		completed formal PG	1
		education and practice in	
		plenary authority state	
		 Regulatory autonomy may 	
		influence job satisfaction	
		more strongly among NPs	1
		with the most experience	
		and clinical expertise.	
		 Postgrad training is 	
		expensive and no evidence	
		supporting improved	
		patient satisfaction of	
		clinical outcomes.	
		 Mandating postgrad 	

				training could prolong ability to practice. Naming the postgraduate program is an issue and can be confusing. These authors suggest fellowship
Stuckey, J. C. (2017). Do new nurse practitioners support a post-graduate residency for the transition to practice? Virginia Henderson Global Nursing e-Repository Retrieved June 12, 2018 http://www.nursinglibrary.org/vhl/handle/10755/621566	None	pilot study, quantitative descriptive survey. LOE: IV	describe NPs perception of residency program effectiveness and impact on transition to practice	 Main finding: 12 surveys, 145 questions, perceived preparation in 5 different areas: (1) specialty area, (2) specific disorders seen in practice, (3) procedural skills, (4) clinical skills preparation, and (5)"other". Instrument was reliable and valid. Data: no relationship between perceived preparation for practice and the importance of preparation*. Qualitative data support perceived important of NP residency and clinical residency knowledge Statistically sound, instrument valid and reliable - Qualtrics (survey data) No comparison data. No professional development noted
Langley, T. M., Dority, J., Fraser, J. F., & Hatton, K. W. (2018). A Comprehensive Onboarding and Orientation Plan for Neurocritical Care	Medical model	Descriptive study. 12 NPs have completed the postgraduate development program	To describe the onboarding process of APPs in a neurocritical care service line.	 Neurologist group program Referred to "orientation" Candidate selection: dedicated to setting strong clinical experience, sound clinical judgment Requires 3 years critical care experience S: Very structured W: No quality, or professional development, very clinically focused

Advanced Practice		Proceeding hours 2 years of
Providers. Journal		Proctors have 2 years of Which is NGC.
	LOE, WI	experience within NCC
of Neuroscience	LOE: VI	3-phase orientation: Phase
Nursing, 50(3), 157-		1 – observes proctor,
160.		reading assignments, study
doi:10.1097/JNN.00		guide, has to pass
00000000000359		computer-based exam to
		move on. Phase II -
		expectation in case and
		management, weekly
		reading, has pt assignment
		working with proctor,
		round with MD and
		primary service line to
		deliver succinct and
		accurate information,
		assessment of patients,
		under direct supervision,
		should be able to
		independently manage 12
		pts with MD led team. Trainee starts to learn
		invasive procedures. Have
		to pass computer-based
		exam, oral examination
		administered by 2 MDs pt
		scenarios – high stress
		component need to
		demonstrate decision
		making capacity in
		stressful situation. Phase
		III – self-directed learning,
		independent, reading plan
		with study guide, develop

deeper complex knowledge base, concludes with computer-based exam
 Remediation available Mentorship aspect
 6-month program 85% retention rate of APPs

Appendix B: Consultation Summary

Expert	Organization	Date	Summary of Consultation	Take-Aways
Suzanna Fitzpatrick	University of Maryland Medical Center	6/7/2018	 University of Maryland Medical Center is largest hospital in the state of Maryland with 9 ICUs, > 350 APPs. Most are NPs. Started with 2 novice NPs meeting regularly and sharing their experiences and identifying challenges and solutions, grew to a formal every other month meeting that reviewed journal articles, challenges, resources, leadership topics, publishingrandom topics. States postgraduate residency program was a "very organic" project. Each department has its own method of evaluation and orientation. Weekly evaluations with preceptor: (1) important to keep it real-time (formative), (2) have learning objectives, (3) on-going conversation. Thursdays are didactic and simulation training, "topic of the week" to expand clinical knowledge. No patient assignments that day. Provide resident with 5 conference days per year. Departments are encouraged to create orientation manuals for NPs. Sustainability: Goal is to have every encounter billable. Some service-lines are bundled and don't bill all encounters 	 Interprofessional training is valuable for collaborative care 2 different hiring processes with 2 different resident tracks Active preceptor program Regularly scheduled didactic Did not mention QI NPs contribute to the long-term continuity of care in a model with medical residents

Dr. JoAnne	UCSF-	6/14/2018	but important that NPs understand the professional obligation for documentation and performance to bill. Standardized for all NPs. Very collegial relations with residents and physicians. Medical staff supportive. NPs round with physicians, take call, etc. Overview: NPs are the continuity of care and residents are sprinters (lots of turnover). More senior NPs teach NP and medical residents. Creates good collaborative relationships. 2 ways to on-board NPs – (1) if hired to the department, 100% of pay, (2) if hired to residency, 70% of pay with full benefits. 12-month long program open to novice NPs and NPs changing specialties.
Saxe	Berkley Glide Clinic UCSF VA	1130	evolution of APNs has mirrored societal needs. Started as an apprentice type job • Recommends supporting team approach • Talk about team approach and benefits • Framework highly effective teams –

Hospital	and has progressed to a professional	training for trainers
	level, assuring standards and patient	 All considered "faculty" of training
	safety. Not surprising there is a variety	program. Honors the contribution of
	of curriculum and frameworks but this	team members.
	doesn't have to be negative. Best	 Team Steps Program.
	practices are available.	https://www.ahrq.gov/teamstepps/index.
	 VA is rich in data and is the largest 	html
	education model in the county.	 VA struggled with what to call novice
	 Utilizes interprofessional core teams. 	NPs. Thought they should be called
	 Allows novices to develop expertise in 	fellows because they are fully
	QI, leadership, teaching.	credentialled and practicing
	 Entrustable Professional Activities 	professionals, but this never caught on.
	(EPA): bundles of competencies.	Resident title became organically
	 Interprofessional approach: Medicine 	established.
	and nursing have common knowledge	 Anna Struler
	skillset and medicine and nursing have	
	unique and distinct skill set.	
	Interprofessional approach develops	
	highly functioning teams and increases	
	quality of care, safety and comfort.	
	 Teams important because each 	
	profession socializes their respective	
	members differently. Working in teams	
	maximizes skillset, allowing	
	performance at highest level of scope	
	and practice.	
	 Leadership in teams are not defined by 	
	title. Defined by needs and skillset.	
	 Teams promote mutual respect and 	
	appreciation.	
	Workplace learning curriculum - focus	
	on skills to be highly functioning teams.	
	Consisted of LVNs, clerks, MAs, etc.	
	communication for well-coordinated	

		7/0/2013	 Teamwork: (1) promotes safety, (2) vets feel part of the team, (3) decrease turnover of staff, (4) happier work environment. Sustainability: residents fully credentialed, salary is competitive "new graduates can go work for 100% salary anywhere" Options: (1) 50/50: didactic and clinical. Provides for more educational training: journal club, preceptor, case presentation, Select a QI project to develop skills, commit to dissemination of evidence or publish article or (2) 40/60 which focuses less on "other" and more on clinical hours. Mental health, psych, wound care, cardiology. Community based legal services, food program, outreach services, etc. Everyone rotates through specialty rotations that impact their primary job. Anna Struler, co-director, responsible for the content and administration of residents. 	
Dr. Margaret Flinter	Community Health Center, Inc.	7/9/2018	 Language is important, don't call this an orientation When discussing didactic, need to consider multiple co-morbidities at presentation including high burden high riskcomplex Didactic can include most common 	 Recommends adding high risk high burden health problems into didactic to best prepare NP Use broad topics in didactic Recommends heavy use of case studies for learning Validated quality improvement and

Appendix C: Program Content Overview

Immersion Block I: Orientation	Welcome	Medical Director, NP Director, NPs, Medical Staff - Meet and greet Discuss program expectation and objectives	
	EHR	Information Services	
Length: 2	Documentation	Clinical Documentation Specialists, NP	
weeks	Resources for Efficiency and Throughput	Pharmacy, Clinical Documentation Specialists, Patient Family Services, Physical Therapy, Speech Therapy, Occupational Therapy, Registered Dietician, Information Services, Performance Improvement, Home Health	
Immersion	IPE: (1) Hospitalist Rotation	Assignment X 8 weeks and (2) Ancillary Department	
Block II (8	Experience X 2		
weeks)	D: (1) Weekly primary didact	tic education with simulation training, (2) weekly case	
	studies, and (3) monthly gran		
		et and resources, Performance Improvement	
	presentation		
		ith mentor (2) weekly self-reflection journaling, (3)	
т ,	join professional organization		
Immersion		ignment X 8 weeks and (2) Ancillary Department	
Block III (8	Experience X 2	i dtiith -il-ti ti-i (2)l-l	
weeks)		tic education with simulation training, (2) weekly case	
	studies, and (3) monthly grand rounds QI: Approve project and begin work		
	PD: (1) Meet with mentor (2) Weekly self-reflection journaling, (3) Monthly journal		
	club		
Immersion		weeks each & 4 weeks in hospitalist rotation	
Block IV (8	assignment and (2) Ancillary		
weeks)	D: (1) Weekly secondary didactic education, (2) weekly case studies, and (3)		
	presentation case study in grand rounds		
	QI: Continue work on QI project		
		ce (2) Weekly self-reflection journaling, (3) Monthly	
	journal club		
Immersion		weeks each & 4 weeks in hospitalist rotation	
Block V (8	assignment and (2) Ancillary Department Experience X 2 D: Weekly secondary curriculum, (2) weekly case studies, and (3) presentation case		
weeks)	study in grand rounds	ium, (2) weekly case studies, and (3) presentation case	
	QI: Continue work on QI pro	iect	
		ce (2) Weekly self-reflection journaling, (3) Monthly	
	journal club	ce (2) conf son reflection journaing, (3) Wolling	
Immersion	3	weeks each & 4 weeks in hospitalist rotation	
Block VI (8	assignment and (2) Ancillary Department Experience X 2		
weeks)		h simulation, (2) weekly case studies, and (3)	
Í	presentation case study in gra	· · · · · · · · · · · · · · · · · · ·	
		QI project results with recommendations	
		ce (2) Weekly self-reflection journaling, (3) Monthly	
	journal club		

Immersion	IPE: Elective rotation
Block VII:	D: Elective didactic, Wrap-up/debriefing
Wrap-up	QI: Wrap-up, present and disseminate QI project results with recommendations
(2 weeks)	PD: Professional Development Plan

Appendix D: Heart Failure Lesson Plan

Goal: Nurse Practitioners will be knowledgeable in the management of the patient in the

acute care setting who presents with acute exacerbation of heart failure.

Objectives	Content	Methods and Materials
Student will:	Faculty will:	Wiethous and Waterials
1. Comprehend and apply the pathophysiology of heart failure (HF).	1. Discuss pathophysiology of HF: • Frank-Starling Principle • HFrEF • HFpEF • LV failure • RV failure • Cardiac response • Hemodynamic responses • Changes with aging	Lecture, outline, images, and video
Comprehend and apply etiology of acute HF	2. Etiology:CardiacSystemic	2. Lecture and images
3. Apply appropriate diagnostic and laboratory testing to diagnose HF.	 3. Classification; HFrEF HFpEF RV failure Biventricular failure High-output failure Cardiomyopathy 	3. Lecture, outline, and handouts.
4. Comprehend and identify patient specific history of HF.	4. Discuss history:LV failureRV failure	4. Lecture and outline
5. Will analyze and evaluate physical findings of the patient in acute HF.	 5. Discuss examination: Vital signs Mentation Chest inspection and palpation Cardiac percussion, palpation, and auscultation Lung examination, percussion, palpation, and auscultation Extremity and abdomen examination LV failure Cyanosis Laterally displaced apical impulse S3 4th heart sounds Orthopnea Dyspnea 	5. Lecture and outline

6. Identify appropriate diagnosis of acute HF.	 Paroxysmal nocturnal dyspnea Edema Neck veins Hepatospleomegaly] Exertional intolerance Increased systemic resistance Acute kidney injury Pulmonary edema Discuss diagnosis: Clinical exam Chest x-ray Echocardiography 	6. Lecture, outline, and images
7. Synthesize patient information to accurately evaluate prognosis and those factors that impact prognosis of HF.	 ECG BNP Discuss prognosis: Factors that suggest a poor prognosis Risk scores Clinical course End-of-life 	7. Lecture, outline, and risk tools.
8. Analyze and apply appropriate treatment of acute and chronic HF.	 8. Treatment: Disease management Drug therapy: diuretics, nitrates, digoxin, ACE, ARBs, angiotensin receptor/neprilysin inhibitors Arrhythmias: electrolytes, control rate, antiarrhythmics Device therapy: AICD, vests, CRT, ultrafiltration, IABP, LV assist devices Surgery: revascularization Persistent heart failure 	8 Lecture, outline, and handouts.
9. Evaluate and implement referral resources for the patient with acute and chronic HF.	 9. Referring the patient: Cardiology Chronic Disease Management Clinic 	9. Lecture

10. Comprehend	10. Questions and answers.	10. Case study and discussion
management of		
the patient in the		
acute care setting		
who presents		
with acute		
exacerbation of		
heart failure.		

Note: The NP must successfully pass an examination and HF related simulation lab scenario.

Heart Failure Lesson Examination

Choose the best answer.

1.	Heart failure with reduced ejection fraction:	 a. Occurs when the heart does not fill properly b. Occurs when the heart does not empty properly c. When the walls of the heart have thinned out. d. All of the above
2.	Heart failure with preserved ejection fraction:	 a. Occurs when the heart does not fill properly b. Occurs when the heart does not empty properly c. When the walls of the heart have thinned out. d. All of the above
3.	Starling's principle states:	 a. The heart contracts and empties most efficiently with a specific amount of preload b. The heart contract and empties most efficiently with a specific amount of afterload c. Stroke volume decreases with normal preload volumes d. Preload is not related to Starlings principle
4.	Decreased perfusion to the kidneys activates:	 a. Renin-angiotensin-aldosterone system which increases sodium and water retention b. Renin-angiotensin-aldosterone system which decreases sodium and water retention c. Renin-angiotensin-aldosterone system causes vasodilation d. Renin-angiotensin-aldosterone system is a temporary response and does not cause any long-term deleterious effects
5.	Which of the following does not occur with heart failure?	a. Myocardial infarctionb. Aortic stenosisc. Hyperthyroidismd. Hypertension

		e.	All of the above
		f.	None of the above
6.	Choose the symptoms not associated with LV	a.	Hypertension
٠.	failure:	b.	Cardiomyopathy
	141101201	c.	Aortic stenosis
		d.	Core pulmonale
7.	An example of NYHA Class III HF is:	a.	Ordinary physical activity does not
,.			cause undue fatigue, dyspnea, or palpitations
		b.	Ordinary physical activity causes
			fatigue, dyspnea, or palpitations
		c.	
			ordinary physical activity causes
			fatigues, dyspnea, palpitations, or angina
		d.	Symptoms occur at rest, any physical
		u.	activity increases discomfort.
8.	The first line diagnostic test for acute HF is:	a.	Echocardiogram
		b.	EKG
		c.	Chest x-ray
		d.	BNP
9.	The first line of treatment for acute HF is:	a.	Diuretics
		b.	Sodium restriction
		c.	ACE/ARBS
		d.	Symptom relief and treatment of the
			underlying cause
10.	In a patient that presents in acute HR in atrial	a.	Betablockers
10.	fibrillation with an uncontrolled ventricular	b.	Digoxin
	heart rate, the drug of choice is:	c.	Amiodarone
	,	d.	cardioversion

Critical Criteria for Heart Failure Simulation Scenario

	Criteri	a met	
	Yes	No	Comments
Competency 1: Assessment and			
recognition of the signs and symptoms			
of acute exacerbation of HF:			
Assess for respiratory			
problems related to HF			
Assess vital signs related to			
acute exacerbation of HF			
Asses for dysrhythmias			
Assess intake and output for			
other signs of fluid retention			
Competency 2: Initiates and interprets			
diagnostic and laboratory tests to			
diagnose acute exacerbation of HF			
Metabolic panel			
BNP			
Chest x-ray			
Echocardiogram if not			
already completed			
EKG			
Competency 3: Initiates			
nonpharmacological treatment			
necessary to treat or manage acute			
exacerbation of HF.			
Chooses appropriate			
administration of supplemental			
oxygen.			
Monitors oxygen saturation.			
Foley catheter			
IV access: peripheral access vs			
central line			
Competency 4: Initiate treatment for			
acute HF based on findings and			
understands those treatments not			
appropriate based on co-morbidities.			
Lasix			
ACE/ARBs			
Electrolytes			
Rate control medication			
Competency 5: Demonstrates			
interprofessional collaboration			
Communicates succinctly and clearly			
with receiving provider during transfer			

to higher level of care.		
Coordinates care efficiently and		
effectively across disciplines such		
as radiology, laboratory, pharmacy		
in the care of patient.		
Utilizes interprofessional		
resources for input (cardiology,		
nursing, etc.).		
Competency 6: Patient-Centered Care	1	
Communicates information with		
patient and family clearly with		
empathy.		
Elicits input from patient and		
family regarding treatment wishes		
as appropriate.		
Works with interprofessional team		
to efficiently stabilize patient.		

Note: NP must meet each critical criterion to successfully pass scenario training session.

Appendix E: Evaluation Tool

_		_
LO	ЕГ	_
		 _

Name of Trainee: Evaluation:

Name of Preceptor:

Date: Completed by:

Please rate NP Trainee's level of skill, knowledge and abilities on the following PACT Nurse Practitioner professional activities:

To be completed by Nurse Practitioner Trainee and Preceptor/Mentor at 1, 6 and 12 months of training.

Scale

1 = Observes task only 4 = Able to perform without supervision

2 = Needs direct supervision 5 = Able to supervise others

3 = Needs supervision periodically NA = Not applicable, Not Observed or Not performed

Clinical Competency in Planning and Managing Care			
Able to perform comprehensive history and physical exam			
Construct pertinent differential diagnosis			
Order appropriate screening and diagnostic tests			
Order appropriate consults			
Order appropriate medications			
Perform comprehensive medication review and reconciliation			
Present case to preceptor in clear, concise and organized fashion			
Able to assess for, diagnose, treat and manage over time common medical conditions experienced by patients in primary care:			
Hypertension			
Obesity			
Diabetes Mellitus			
Depression			
Ischemic heart disease			
Gastroesophageal reflux			
Heart Failure			
Enlarged prostate			
• COPD			

1

CoEPCE

Name of Trainee:	Evaluation:
------------------	-------------

Name of Preceptor:

Date: Completed by:

Please rate NP Trainee's level of skill, knowledge and abilities on the following PACT Nurse Practitioner professional activities:

To be completed by Nurse Practitioner Trainee and Preceptor/Mentor at 1, 6 and 12 months of training.

Scale:

1 = Observes task only 4 = Able to perform without supervision

2 = Needs direct supervision 5 = Able to supervise others

3 = Needs supervision periodically NA = Not applicable, Not Observed or Not performed

Clinical Competency in Planning and Managing Care		
Able to perform comprehensive history and physical exam		
Construct pertinent differential diagnosis		
Order appropriate screening and diagnostic tests		
Order appropriate consults		
Order appropriate medications		
Perform comprehensive medication review and reconciliation		
Present case to preceptor in clear, concise and organized fashion		
Able to assess for, diagnose, treat and manage over time common medical conditions experienced by patients in primary care:		
Hypertension		
Obesity		
Diabetes Mellitus		
Depression		
Ischemic heart disease		
Gastroesophageal reflux		
Heart Failure		
Enlarged prostate		
• COPD		

Appendix F: Project Team Meeting



INTRODUCTION

- Increasing demand for access to quality, cost-effective, and timely healthcare.
- ▶ Nurse practitioners (NPs) roles are expanding.
- ▶ Novice NPs are at risk for job dissatisfaction and attrition.
- ▶ Transition to practice programs.

PROBLEM

- NPs fastest growing segment of healthcare
- > 75% turn-over within the CDU during the first year.
- NPs may not be prepared to practice after graduation.



PURPOSE

- ► Gap in practice.
- ▶ Create a program to bridge this gap.



Nature of the Project

- ▶ Staff education project
 - Produce an evidence-based nursing staff development program to bridge novice NPs through their first 12 months o practice.



➤ Nursing Abandon outdated and ineffective onboarding strategies. Transferability. Scholarly and professional development framework to cultivate an expert NP workforce.

RELEVANCE TO NURSING PRACTICE

History of Postgraduate Training Current State of Postgraduate Training

Previous Strategies

LOCAL BACKGROUND AND CONTEXT

- ► Academic medical center.
- ▶ No formal transition to practice program.
- Observation unit.
- Expanding NP opportunities across specialties.

SOURCES OF EVIDENCE

- ▶ Electronic databases
- Best-practices
- ▶ Curricula from established postgraduate programs
- Professional organizations
- ► Consultation with experts for insight



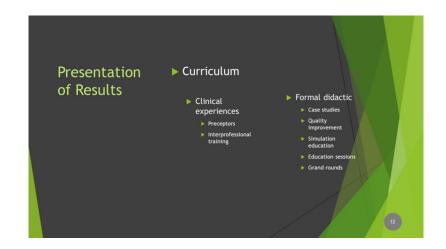
ANALYSIS AND SYNTHESIS OF EVIDENCE

- Hierarchy of Evidence for Intervention Studies (Fineout-Overholt, Melnyk, Stillwell, & Williamson, 2010).
- Search log.
- Elkins literature review matrix (Elkins, 2010).

Presentation of Results

- Common Themes Identified in Postgraduate Development Programs
 - Guided clinical experiences
 - Formal didactic
 - Professional development
 - Quality Improvement











Implications for Evidence-Based Practice • Recommendations: Formal Didactic • Weekly sessions • Objectives • Simulation training • Grand Rounds (monthly) • Case Studies (weekly)





Implications for Evidence-Based Practice

- Recommendations: Professional Development
 - ▶ Self-Reflection (weekly)
 - ► Mentor (monthly)
 - ▶ Professional organization
 - ▶ Journal club (monthly)

Implications for Evidence-Based Practice

- ▶ Recommendations: Quality Improvement
 - ▶ Identify practice problem
 - ▶ Study, evaluate, and make recommendations
 - ▶ Present findings
 - ▶ Disseminate findings to organization



Implications for Evidence-Based Practice Recommendations: Evaluation of Novice NP Summative evaluation Faculty/preceptors formal evaluation of NP Goal: Independently manage a full patient assignment safely, using preceptor as resource only. Successful complete on of the NNPRFTC Competency Doman NP complete pre and post evaluation. Assist measure progress, satisfaction, perceived value of program, and guide how to improve future programs.

Food for Thought

- ► How many NPs at a time?
- Current NPs able to attend didactic sessions
- ► Current NPs present didactic
- ► Implementation



SUMMARY

- ▶ The number of NPs is growing both in the United States and at KDH.
- ▶ The first 12 months of practice is challenging and traditional strategies are not effective.
- Comprehensive search of the evidence to produce a scholarly and professional staff development program for novice NPs in acute care at KDH.

SUMMARY continued

- ▶ Goal: Develop a competent NP workforce at KDH
- Recommendations to bridge the gap between academia and practice:
 - > 12 month postgraduate program
 - ▶ Guided clinical experience informed by Benner's skill acquisition in nursing theory
 - Formal didactic enhanced with simulation education
 - Professional development content
 - Quality Improvement content
 Interprofessional Training





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Appendix G: Permission to Reprint NNPRFTC Information

Re: DNP project

Flinter, Margaret

9/11/2018 5:40 PM

To: Carolyn Ann Cc: Candice Rettie

Hi there

As long as you cite it appropriately, with the language that it is reprinted with permission of NNPRFTC, you can consider the consent granted by me as chairperson of the NNPRFTC (the exec director is on holiday)

We are pleased to see it is of use.

Margaret Flinter

Sent from my iPad

On Sep 11, 2018, at 7:35 PM, Carolyn Ann

CAUTION: This email originated from outside of the Community Health Center. Do not click links or open attachments in this email unless you recognize the sender and have verified the content is authentic.

Hi Dr. Flinter,

You were kind enough to speak to me regarding my DNP project a few months ago. One of the resources I have been using is the NNPRFTC accreditation standards. I created 2 tables from the accreditation standards and was hoping to use this information in my project (see below). Who would I speak to regarding permission?

Sincerely, Carolyn Berglund

Table 1

NNPRFTC Competency Domains

- 1. Provide compassionate, valued, effective patient-centered care
- 2. Demonstrate knowledge of established and evolving bio-psycho-social, clinical,

epidemiological, and nursing sciences, for provision of evidence-based patient care

- 3. Ability to evaluate one's own practice and improve outcomes of patient care based on best available evidence, constant self-evaluation and life-long learning
- 4. Demonstrate effective communication and collaboration with patients, families, and interprofessional colleagues
- 5. Demonstrate a commitment to carrying out professional roles and responsibilities and adherence to ethical principles
- 6. Demonstrate awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care
- 7. Demonstrated the ability to practice within an inter-professional team in a manner that optimizes safe, effective patient and population-centered care
- 8. Demonstrate qualities required to sustain lifelong growth as a healthcare professional and leader

Note: Adapted from NNPRFTC, 2015. Postgraduate Nurse Practitioner Training Program Accreditation Standards, Program Competency Domains, pg. 6. Copyright 2015 National Practitioner Residency & Fellowship Training Consortium.

Table 2 NNPRFTC Patient Care Domain with Sub-Domains

- 1. Patient Care: Provide patient-centered care that is compassionate, valued, appropriate, and effective for the treatment of health problems and the promotion of health.
- 1.1 Perform all screening, diagnostic assessments, and procedure that are essential for practice and patient population.
- 1.2 Gather essential and accurate information about patients and their conditions through review of records, history-taking, physical examination, and assessment and review of data derived from laboratory and imaging testing.
- 1.3 Organize and prioritize responsibilities to provide care that is safe, effective, and efficient
- 1.4 Interpret laboratory data, imaging studies, other tests required for the area of practice

- 1.5 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preference, evidence- based information and clinical judgment
- 1.6 Develop and carry out patient management plans
- 1.7 Counsel and educate patients and their families to empower them to participate in their care and enable shared decision-making
- 1.8 Provide appropriate referral of patients including ensuring continuation of care throughout transition between providers or settings, and following up on patient progress and outcomes
- 1.9 Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health
- 1.10 Provide appropriate role modeling for the interprofessional team

Note: Adapted from NNPRTC (2015). Postgraduate Nurse Practitioner Training Program Accreditation Standards. Competency Domains and sub-domains, page 6-7. Copyright 2015 National Practitioner Residency & Fellowship Training Consortium.

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Appendix H: Permission to Adapt VA Competency Tool

RE: [EXTERNAL] Competency tool Rugen, Kathryn 8/6/2018 1:30 PM Hi Carolyn – I give you permission to adapt the tool for acute care setting.

Kathryn Wirtz Rugen, PhD, FNP-BC, FAAN, FAANP National Nurse Practitioner Consultant, Centers of Excellence in Primary Care Education Office of Academic Affiliations Veterans Health Administration Washington, DC 20420

Clinical Associate Professor University of Illinois at Chicago College of Nursing

http://www.va.gov/OAA/coepce/index.asp

From: Carolyn Ann Sent: Monday, August 06, 2018 3:05 PM

To: Rugen, Kathryn

Subject: RE: [EXTERNAL] Competency tool

Hi Dr. Rugen,

Thank you again for sharing your competency tool. I am attempting to wrap up my DNP project in the next 4-6 weeks. I was hoping to obtain your permission to adapt this tool to an acute care setting. It would be useful to use with the NPs during different rotations and could be adapted as a summative evaluation of competencies.

Sincerely, Carolyn

Sent from Mail for Windows 10

From: Carolyn Ann

Sent: Wednesday, May 16, 2018 12:20:56 PM

To: Rugen, Kathryn

Subject: Re: [EXTERNAL] Competency tool

Thank you Dr Rugen. I will keep you up to date.

Sincerely, Carolyn Berglund

On Wed, May 16, 2018 at 11:51 AM, Rugen, Kathryn wrote:

Hi Carolyn – attached is our competency tool. Please let me know how you use it or adapt it.

Kathryn Wirtz Rugen, PhD, FNP-BC, FAAN, FAANP National Nurse Practitioner Consultant, Centers of Excellence in Primary Care Education Office of Academic Affiliations Veterans Health Administration Washington, DC 20420

Clinical Associate Professor University of Illinois at Chicago College of Nursing

http://www.va.gov/OAA/coepce/index.asp

From: Carolyn Ann

Sent: Tuesday, May 15, 2018 4:52 PM

To: Rugen, Kathryn

Subject: [EXTERNAL] Competency tool

Dear Dr. Rugen,

I would very much like to receive a copy of the competency tool described in the article Veterans Affairs Interprofessional Nurse Practitioner Residency in Primary Care: A Competency-based Program. Currently, I am working on my DNP project and attempting to create a postgraduate development program for novice acute care NPs and would very much like to review your competency tool.

Thank you for your assistance, Carolyn Berglund MSN, NP-C