2019

Nursing Staff Development for Novice Nurse Practitioners in Acute Care

Carolyn Berglund
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Carolyn Berglund

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Anne Vitale, Committee Chairperson, Nursing Faculty
Dr. Tanya Cohn, Committee Member, Nursing Faculty
Dr. Casey Cole, University Reviewer, Nursing Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

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-acquisition-in-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.

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

January 2019

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.

Table of Contents

List of Tables

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-to-practice 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 **t**o 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 NP**s** 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 acute-care 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

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).

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 **s**hould 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 block**s** 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 sub-domains 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).

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 self-assessment 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.

References

Abell, C. H., & Garret Wright, D. M. (2016). Critiquing quantitative research reports: Key points for the beginner. *International Journal of Faith Community Nursing, 2*(3), 1-4. Retrieved from https://digitalcommons.wku.edu/ijfcn/vol2/iss3/1

American Association of Nurse Practitioners. (2017). California. Retrieved November 27, 2017 http://memberdocs.aanp.org/factsheets/california.pdf

American Nurses Credentialing Center. (2016). ANCC practice transition accreditation program (PTAP™). Retrieved May 22, 2018 http://www.wyonurse.org/ancc-practice-transition-accreditation-program-ptap/

Andrade, N. (2015). Postgraduate Fellowships: What Is in It for New Acute Care Nurse Practitioners? *AACN Advanced Critical Care, 26*(3), 197-200. doi:10.1097/NCI.0000000000000080

Bargagliotti, L. A., & Davenport, D. (2017). Entrustables and entrustment: Through the looking glass at the clinical making of a nurse practitioner. *The Journal for Nurse Practitioners, 13*(8), e367-e374. doi:10.1016/j.nurpra.2017.05.018

Benham, A. J., & Geier, A. (2014). Preparing nurse practitioners to provide orthopedic primary care. *The Journal for Nurse Practitioners, 10*(8), 603-606. doi:10.1016/j.nurpa.2014.04.015

Benner, P. (2001). *From novice to expert: Excellence and power in clinical nursing practice* (Commemorative ed.). Upper Saddle River, New Jersey: Prentice Hall.

Benner, P., Hooper Kyriakidis, P., & Stannard, D. (2011). *Clinical wisdom and interventions in acute and critical care: A thinking-in-action approach* (Second ed.). New York, NY: Springer Publishing Company.

Benner, P. E., Tanner, C. A., & Chesla, C. A. (1996). *Expertise in nursing practice : caring, clinical judgment, and ethics*. New York, NY: Springer Pub. Co.

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.0000000000000117

Brown, K., Poppe, A., Kaminetzky, C. P., Wipf, J. A., & Woods, N. F. (2016). Reflections of the Veterans Administration Puget Sound Health Care System Regional Nurse Practitioner Residency Forum. *Nursing Forum, 51*(1), 70-76. doi:10.1111/nuf.12127

Bush, C. T. (2014). Postgraduate nurse practitioner training: what nurse executives need to know. *Journal of Nursing Administration, 44*(12), 625-627. doi:10.1097/NNA.0000000000000138

Bush, C. T., & Lowery, B. (2016). Postgraduate nurse practitioner education: Impact on job satisfaction. *The Journal for Nurse Practitioners, 12*(4). doi:10.1016/j.nurpra.2015.11.018

Carolinas Healthcare System. (2017). Center for advance practice fellowship, . Retrieved December 17, 2017 https://www.carolinashealthcare.org/education/Center-for-Advanced-Practice/Fellowships/Hospitalist

Chang, W. C., Mu, P. F., & Tsay, S. L. (2006). The experience of role transition in acute care nurse practitioners in Taiwan under the collaborative practice model. *Journal of Nursing Research, 14*(2), 83-92. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/16741858

Chappell, K. (2014). The value of RN residency and fellowship programs for Magnet(R) hospitals. *Journal of Nursing Administration, 44*(6), 313-314. doi:10.1097/NNA.0000000000000073

Chappell, K. (2015, June 22, 2015). *Nurse residency programs: A critical imperative for nursing's future.* Paper presented at the International Counsel of Nurses, Retrieved from https://www.hrhresourcecenter.org/icn_2015.html.

Commission on Collegiate Nursing Education. (2016). Retrieved from http://www.aacnnursing.org/Portals/42/CCNE/PDF/3-23-16-APRN-Residency-Taskforce-Announcement.pdf

Community Health Center. (2018). Structure and program elements. Organizaton website Retrieved May 16, 2018 http://npresidency.com/index.php

Corbridge, S. J., Tiffen, J., Carlucci, M., & Zar, F. A. (2013). Implementation of an interprofessional educational model. *Nurse Educator, 38*(6), 261-264. doi:10.1097/01.NNE.0000435271.40151.23

Dillon, D. L., Dolansky, M. A., Casey, K., & Kelley, C. (2016). Factors Related to Successful Transition to Practice for Acute Care Nurse Practitioners. *AACN Advanced Crital Care, 27*(2), 173-182. doi:10.4037/aacnacc2016619

Duchscher, J. (2010). Transition theory. Retrieved April 16, 2018 http://nursing thefuture.ca/transition_theory

Elkins, M. Y. (2010). Using PICO and the brief report to answer clinical questions. *Nursing*, *40*(4), 59-60. doi:10.1097/01.NURSE.0000369871.07714.39

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

Fitzpatrick, S., & Gripshover, J. (2016). Expert nurse to novice nurse practitioner: The journey and how to improve the process. *The Journal for Nurse Practitioners, 12*(10), e419-e421. doi:10.1016/j.nurpra.2016.05.012

Flinter, M. (2005). Residency programs for primary care nurse practitioners in federally qualified health centers: A service perspective. Retrieved September 15, 2017 https://search-proquest-com.ezp.waldenulibrary.org/nahs/docview /229621301/fulltextPDF/D869914078E0478BPQ/1?accountid=14872

Flinter, M. (2011). From new nurse practitioner to primary care provider: bridging the transition through FQHC-based residency training. *Online Journal of Issues in Nursing*, *17*(1), 6. doi:10.3912/OJIN.VolNo01PPT04

Furfari, K., Rosenthal, L., Tad-y, 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:10.1016/j.nurpra.2014. 03.022

Gaudio, F. G., & Borensztein, R. (2018). An Emergency Medicine Residency for Nurse Practitioners: The New York Presbyterian-Weill Cornell Medicine Experience. *Advanced Emergency Nursing Journal, 40*(2), 119-126. doi:10.1097/ TME. 0000000000000186

Glick, M. (2017). Believing is seeing: Confirmation bias. *The Journal of American Dental Association, 148*(3), 131-132. doi:10.1016/j.adaj.2017.01.009

Harris, C. (2014). Bridging the gap between acute care nurse practitioner education and practice: The need for postgraduate residency programs. *The Journal for Nurse Practitioners, 10*(5), 331-336. doi:10.1016/j.nurpra.2014.03.003

Hart, A. M., & Bowen, A. (2016). New nurse practitioners' perceptions of preparedness for and transition into practice. *The Journal for Nurse Practitioners, 12*(8), 545-552. doi:10.1016/j.nurpra.2016.04.018

Institute of Medicine. (2011). The future of nursing: Leading change, advancing health. (978-0-309-15823-4). Retrieved December 17, 2017, from http://www.nationalacademies.org/hmd/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx

Kells, M., Dunn, K., Melchiono, M., & Burke, P. (2015). Advanced practice nurse fellowships: Creating awareness, creating opportunities. *Journal of Pediatric Health Care, 29*, 297-301. doi:10.1016/j.pedhc.2014.10.003

Martsolf, G. R., PhuonGiang, N., 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:10.1016/j.nurpra.2017.05.013

Mayo Clinic. (2018). Cardiology nurse pratitioner fellowship. Retrieved July 1, 2018 http://www.mayo.edu/mayo-clinic-school-of-health-sciences/careers/nurse-practitioner/cardiology-nurse-practitioner-fellowship-arizona?_ga=2.112924615.2119743450.1527031900-1635018107.1527031900

Merriam-Webster On-line Dictionary. (2019). Onboarding. Retrieved January 6, 2019 https://www.merriam-webster.com/dictionary/onboarding

Moore, V. G. (2017). *Essential frameworks of postgraduate certified nurse practitioner training programs: An e-Delphi study.* (Doctoral thesis), Retrieved from https://search-proquest-com.ezp.waldenulibrary.org/central/docview/1925938922/7B5230CE01304560PQ/2?accountid=14872 ProQuest database. (10285435)

Morgenlander, J. C., & Blessing, R. (2016). The Duke neurology advanced practice provider residency: Its time has come. *Neurology Clinical Practice, 6*(3), 277-280. doi:10.1212/CPJ.0000000000000249

National Nurse Practitioner Residency and Fellowship Training Consortium. (2015). Postgraduate nurse practitioner training program accreditation standards. . Retrieved December 11, 2017 https://www.nppostgradtraining.com/Portals/0/Documents/2.0_NNPPTC_Accreditation_Standards_1.5.16.pdf?ver=2016-01-13-070416-923

National Organization of Nurse Practitioner Faculties. (2017). Nurse practitioner core competencies content. Retrieved April 1, 2018 https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/competencies/2017_NPCoreComps_with_Curric.pdf

NLN Board of Governors. (2015). Interprofessional collaboration in education and practice. Retrieved June 29, 2018, from National League for Nursing http://www.nln.org/docs/default-source/default-document-library/ipe-ipp-vision.pdf?sfvrsn=14

NNPRFTC. (2015). Postgraduate nurse practitioner training program accreditation standards (accreditation standards). Professional organization website Retrieved May 13, 2018 https://www.nppostgradtraining.com/Portals/0/Documents/2.0_NNPPTC_Accreditation_Standards_1.5.16.pdf?ver=2016-01-13-070416-923

Norwick, R. M. (2016). Family nurse practitioner residency for recruiting and retention. *The Journal for Nurse Practitioners, 12*(5), e231-e233. doi:10.1016/j.nurpra.2016.01.014

Rauch, K. D. (2013). Are residencies the future of nurse practitioner training? Retrieved November 3, 2017 http://scienceofcaring.ucsf.edu/education/are-residencies-future-nurse-practitioner-training

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.0000000000000155

Rugen, K. W., Dolansky, M. A., Dulay, M., King, S., & Harada, N. (2017). Evaluation of Veterans Affairs primary care nurse practitioner residency: Achievement of competencies. *Nursing Outlook*. doi:10.1016/j.outlook.2017.06.004

Rugen, K. W., 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.outlook.2017.06.004

Rugen, K. W., Watts, S. A., Janson, S. L., Angelo, L. A., Nash, M., Zapatka, S. A., . . . Saxe, J. M. (2014). Veteran Affairs Centers of Excellence in Primary Care Education: transforming nurse practitioner education. *Nursing Outlook, 62*(2), 78-88. doi:10.1016/j.outlook.2013.11.004

Sargent, L., & Olmedo, M. (2013). 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.NNA.0000434506.77052.d2

Schofield, D. L., & 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/10.1016/j.nurpra.2014.11.001

Sciacca, K., & Reville, B. (2016). Evaluation of nurse practitioners enrolled in fellowship and residency programs: Methods and trends. *The Journal for Nurse Practitioners 2*(6), e275-e280. doi:http://dx.doi.org/10.1016/j.nurpra.2016.02.011

Stillwell, S. B., Fineout-Overholt, E., Melnyk, B. M., & Williamson, K. M. (2010). Evidence-based practice, step by step: searching for the evidence. *American Journal of Nursing, 110*(5), 41-47. doi:10.1097/01.NAJ.0000372071.24134.7e

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.0000000000000198

Technology Evaluation Centers. (2018). What is a decision matrix? Retrieved from http://www.rfp-templates.com/What-is/Decision-Matrix

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

Walden University. (2017). Manual for staff education project: Doctor of nursing practice (DNP) scholarly project. Retrieved March 9. 2018 file:///C:/Users/Carol/Documents/Walden%20DNP/8700%20DNP%20Project%20Mentoring/Staff_Education_Manual_Final.pdf

Wallace, D., & Boller, J. (2014). *New nurse practitioner competencies: Skill development and reflective writing rubrics.* (10), ProQuest database. (7)

Wiltse Nicely, K. L., & Fairman, J. (2015). Postgraduate nurse practitioner residency programs: supporting transition to practice. *Academic Medicine, 90*(6), 707-709. doi:10.1097/ACM.0000000000000567

Wirtz Rugen, K., Speroff, E., Zapatka, S., & Brienza, R. (2016). Veteran's affairs interprofessional nurse practitioner residency in primary care: A competency-based program. *The Journal for Nurse Practitioners, 12*(6), e267-e273. doi:http://dx.doi.org/10.1016/j.nurpra.2016.02.023

Zapatka, S., Conelius, J., Edwards, J., Meyer, E., & Brienza, R. (2014). Pioneering a primary care adult nurse practitioner interprofessional fellowship. *The Journal for Nurse Practitioners, 10*(6), 378-386. doi:https://doi.org/10.1016/j.nurpra.2014.03.018

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.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

				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 potential new hires. 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). Bridging the gap between acute care nurse practitioner education and practice: The need for postgraduate residency programs. The Journal for Nurse Practitioners, 10(5), 331-336.	None	Literature review. LOE: VI	Examine the need for postgraduate development (specialized training) for postgraduate ACNPs	• 12 months in length. • Formal application process • rotate through various specialties and units that impact primary work. • Trainees attend grand rounds, journal clubs, weekly lectures, certification is expected. • Continue to develop NPs on foundation of ACNPs	S: • Acute care context • Develop skills set specific to acute care, • utilizes preceptor • professional development • refers to ACNP academic competencies to

doi:http://dx.doi.org/10.1016/j.nurpra.2014.03,003				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.	build-off • Interprofessional W: • No specifics • implies didactic but does not specifically address
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 Interprofessional 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.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.	mentorship and role development W: • small (n=53) and regional • may not be generalizable
National Nurse Practitioner	None	Accreditation standards/guid	Outlines standards for	• Standards include: (1) Mission, Goals,	S: • Good for general

Residency & Fellowship Training Consortium. (2015). Postgraduate nurse practitioner training program accreditation standards (accreditation standards). Retrieved May 13, 2018 https://www.nppostgradtraining.com/Portals/0/Documents/2.0_NNPPTC_Accreditation_Standards_1.5.16.pdf?ver=2016-01-13-070416-923		elines - expert opinion	accreditation of postgraduate training for novice NPs to meet NNPRFTC standards. LOE: VII	Objectives, (2) Curriculum, (3) Evaluation, (4) Program Eligibility, (5) Administration, (6) Operations, (7) Staff, (8) Postgraduate Trainee Services. • 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,	overview of administration, eligibility, length of program, • good descriptive statistics 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.2017.05.013		programs across the United States	available information about NP residency and fellowship programs to systematically describe the program's key characteristics. 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

				• 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 help addresses the increased complexity of clinical demands. to addresses the increased complexity of clinical demands.	
Fitzpatrick, S., & Gripshover, J. (2016). Expert nurse to novice nurse practitioner: The journey and how to improve the process. The Journal for Nurse Practitioners, 12(10), e419-e421. doi:http://dx.doi.org.ezp.waldenulibrary.	References Benner's theory but does not appear to be informed by theory	Literature review. Describe organization experience. This program accepts 2-6 novice NPs for the postgraduate program	describe urban hospital experience with attempting to manage transition shock for novice NPs…decrease turn	• Current residency program in place that focuses on transition and use of clinical case studies. • Implemented a monthly meeting with 2 senior NPs, director of NPs, and all novice NPs and PAs (< 2 years of experience). Pre-determined topics such as leadership, publishing, workplace civility,	S: • Large university hospital • Identifies potential but important gap in residency/postgrad program (wellbeing) • >350 APPs W: • Did not describe

org/10.1016/j.nurpra.2016.05.012		annually. Employs 250 NPs LOE: VI	over, increase satisfaction	transition from bedside nurse to NP, and emotional intelligence. • NPs identified role-transition challenging. • 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.	evaluation or effectiveness of strategy
Wirtz Rugen, K., Speroff, E., Zapatka, S., & Brienza, R. (2016). Veteran's affairs interprofessional nurse practitioner residency in primary care: A competency-based program. The	None	development of tool with curricular examples to promote transition to practice. 38 novice NPs and their	describe development and testing of interdisciplinary education model for novice NPs. In use at 5	• Interdisciplinary learning experiences to advance clinical, diagnostic, leadership, and scholarship skills. • Work in a team, within a patient-centered model. • NPs are assigned patients they share with physician residents.	S: • EPA is an established tool for evaluation and correlates across evaluations (resident, mentor, qualitative comments),

Journal for Nurse Practitioners, 12(6), e267-e273. doi:http://dx.doi.org/10.1016/j.nurpra.2016.02.023		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.

				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 interprofessional 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: • Used same evaluation CoEPCE as Rugen study. • Consistent with Rugen study W: • Doesn't mention leadership as noted

Practitioners, 10(6), 378-386. doi:https://doi.org/10.1016/j.nurpra.2014.03.018		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.com/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	• first program in US W: • FQHC setting
Corbridge, S. J., Tiffen, J., Carlucci, M., & Zar, F. A. (2013). Implementation of an interprofessional educational model. Nurse Educator,	Framework for Action on Interprofessional Education and Collaborative Practice, Knowles adult	descriptive article of educational model. Participants: n = 14 NPs, n = 14 medical	describes development, implementation 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.	S: • Provides support for interprofessional training which could translate to context of postgraduate

38(6), 261-264. doi:10.1097/01.NNE.0000435271.40151.23	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/responsibilities, (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 not night. • Lickert-type scale based on a lit review for evaluation was developed to understand perceptions of roles and collaboration. Validity established.	training • work to develop strong working relationships in acute care W: • specific to NP student curriculum

				• 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 practitioners enrolled in fellowship and residency programs: Methods and trends. The Journal for Nurse Practitioners 12(6), e275-e280. doi:http://dx.doi.org/10.1016/j.nurpra.2016.02.011	expert framework	LOE: VI	theoretical framework, and evaluation methods to assess competency of postgraduate NPs	methods: self-assessment, competency measures, mentoring, portfolios (capture linear growth, evidence and narrative reflections), simulation-based learning & written evaluation. • Capability tool: competencies and role descriptions published by accrediting bodies for NP practice used a foundation to evaluate NP residents. • 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	comprehensive search of 673 articles, 19 met criteria. • Speaks to how to best evaluate postgraduate NPs in programs. • Promotes use of portfolios W: • No discussion of sustainability

				tool...tailor 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 and entrustment: Through the looking glass at the clinical making of a nurse practitioner. The Journal for Nurse Practitioners, 13(8), e367-e374. doi:http://dx.doi.org/10.1016/j.nurpra.2017.05.018		descriptive article LOE: VI	entrustables and entrustments could standardize NP education and bridge transition to practice in fellowship programs mirroring medical students education model.	and NPs • Expertise evolves in additive ways. • An entrustable professional activity (EPA) is a competency that is operationalized through discrete, measurable, observable activities. • Standardizing EPAs will enhance reliability novice NPs skills, and physicians. • EPA is a professional activity that requires skill, judgment, and supervision. • Milestones represent the marker points (competencies) in a curriculum when EPAs should be accomplished. • Currently, National Organization of Nurse Practitioner Faculties and AACN have developed competencies NPs must meet in academia but not how those competencies are met. • Postgraduate Programs: The authors suggest EPA would provide a common language that would help the learner progress toward safer and more confident	• Standardize milestones and when they should be met in education and postgraduate programs. • Provide common dialogue about when, where, and how students and postgrads can obtain this clinical experience and how much experience and supervision is required for entrustment of independent practice. • Provides a method for transition to practice. • Authors report strategy brings nursing and medicine closer, easily adaptable with GME program W: • builds from education to postgraduate • medical model but

				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.2015,08,037		LOE: VII	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.outlook.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 competencies with respect to NP progress and identification 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. W: • 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.0000000000000186		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 alongside physician residents and PA residents. • Paired with senior ENPs. • ENPs work in consultation services such as inpatient, general surgery, orthopedic, ophthalmology, dermatology, neurology. • Complete online learning modules, didactic sessions, lectures, and labs throughout fellowship. • Case-based morning report sessions, grand rounds, Advanced Trauma Life Support, formal airway, ultrasound courses, regional conference. • 3 comprehensive examinations over 15	• No specific mention of leadership though somewhat implied • Small, qualitative data to report residents insight.

				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.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

				• 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.	
Sargent, L., & Olmedo, M. (2013). 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.NNA.0000434506.77052.d2	Benner's skill acquisition in nursing theory	Descriptive article 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	Describes one organization 's efforts to implement a novice NP postgraduate program	• Stakeholders surveyed before any residency was 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	S: • Comprehensive 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: • context is primary

				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 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	care

				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	

				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.	
Schofield, D. L., & 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/	Theory of Diffusion of Innovations, process map	None. This program accepts 2 NPs per 9-month program. LOE: IV	Describe the planning, implementation, and evaluation of the initial cohort of NP fellowship program for critical care	• 9-month 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	S: • 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.2014.11.001				diseases, pain management and palliative care. • Pharmacy, nursing and social work participated in didactic portion of the curriculum. rotations through 5 specialty 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	unable to bill for NP • small group (n=6) • no professional development activities explicitly noted

				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 fellow provider. • Enter orders under supervision of preceptors. • Rated skills before and after each rotation (Lickert-like...no 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	

				experienced NPs to get additional education.	
Mayo Clinic (2018). Cardiology nurse practitioner fellowship (Arizona). Retrieved May 22, 2018 from http://www.mayo.edu/mayo-clinic-school-of-health-sciences/careers/nurse-practitioner/cardiology-nurse-practitioner-fellowship-arizona?_ga=2.112924615.2119743450.1527031900-1635018107.1527031900	None	Webpage. 2 NPs are accepted for each fellowship offered. LOE: VII	Organization 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, cost-effective 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: • Prestigious facility • Comprehensive program W: • 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,	

				PA, allied health and MDs	
American Nurses Credentialing Center (2019). ANCC practice transition accreditation program (PTAPTM). Retrieved May 22, 2018 http://www.wyonurse.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., Tad-y, 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,2014.03.022	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?

				with ramping down of 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%.	
Andrade, N. (2015). Postgraduate Fellowships: What Is in It for New Acute Care Nurse Practitioners? Advanced Critical Care, 26(3), 197-200. doi:10.1097/NCI.0000000000000080	None	Literature review, descriptive article. LOE: VI	provide background to support postgraduate training in acute care, summarizes the residencies in the US	• 11 acute care programs 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	S: • 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.0000000000000155	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 W: • 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.	of competency. • No professional development noted
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, <	S: • Consistent with other studies that call for building and standardizing curriculum for

Journal for Nurse Practitioners, 10(8), 603-606. doi:http://dx.doi.org/10.1016/j.nurpra.2014.04.015		this study LOE: V		15 hours of their academic program dedicated to ortho • Felt they were not prepared. • 20-60% of primary care visits include an orthopedic complaint. • Provided test to assess competency before - 0% passed, after fellowship, 62% pass rate. • AAMC report: skills, attitudes, knowledge required, with curriculum development, implementation and evaluation • National Assoc. of Orthopaedic nurses core curriculum for Orthopaedic Nursing, AACN Essential of Doctoral education for DNP as guide for curriculum aimed at NPs ortho knowledge postgraduate.	developing evidence-based best practices for improving NP knowledge and skill, multidisciplinary, educational objectives, and strategies used in med school, PA training programs, and nursing school. • Speaks to NPs who specialize without specific specialization education (academic) program (FNPs who work in ortho). • Discusses moving some ortho specialty under the 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 only...no 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 W: • some of the 92 competencies are not specific, i.e.

https://search-proquest-com.ezp.waldenulibrary.org/central/docview/1925938922/7B5230CE01304560PQ/2?accountid=14872 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.waldenulibrary.org/sp-3.30.0b/ovidweb.cgi?&S=MIOBPDHODHHFLOJNFNEKLDBGOMKAAA00&Link+Set=S.sh.21	Protocol	Systematic review LOE: I	Identify effective orientation program and their effects on professional competence and organizational 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.aorn.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 recommendations for implementation in perioperative 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 real-world 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	S: • identifies those issues important to novice NPs • Can incorporate into program W: • primary care context

				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	
Norwick, R. M. (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	Modeled after Flinter's work	Retrospective description of NP residency program. 12 NPs have completed program. Program accepts 3-4 NPs every 6 months. LOE: VI	Purpose was to describe the residency program implemented in Santa Rosa community health clinic	• Candidates - spoke 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. • 1st Fundamental component: Consistent with Flinter: 1 year long, supportive environment to develop in new role, orientation, assigned	S: • 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 W: • 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 reexamine patient. • Review all notes, no extra time, high satisfaction due to lower stress and immediate reward of teaching, preceptors	• Does not address professional development though likely incorporated as program is modeled after Flinter

				include NP, pediatrician, interns, and a family physician. • 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	

				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	
Cayley, W. E., Jr. (2011). Effective clinical education: strategies for teaching medical students and residents in the office. WMJ, 110(4), 178-181; quiz 203.	"one-minute preceptor", "SNAPPS"	Literature review LOE: VI	Describe effective strategies for teaching	• OMP: (1) get a commitment, (2) probe for supporting evidence, (3) Teach general rules, (4) reinforce what was done right, (5) correct mistakes, • SNAPPS: (1) summarize 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, (6) select a case-related	S: • Quick, simple tools OMP and SNAPPS improve educational processes and outcomes W: • Developed for medical teaching but transferability should not be a problem • 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 demonstration, (4) demonstrate clinical skill, (5) discuss learning points with student, (6) set an agenda for future learning opportunities.	demonstration need further assessment
Hart, A. M., & Bowen, A. (2016). New nurse practitioners' perceptions of preparedness for and transition into practice. The Journal for Nurse	None	retrospective cohort study, qualitative and quantitative LOE: IV	explore perceptions of preparedness and transition into practice	• 2004 study of n=562 NPs, 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	S: • Identify area that can enhance transition to practice that could be incorporated in program • Strong recommendations

Practitioners, 12(8), 545-552. doi:doi: http://dx.doi.org/10.1016/j.nupra.2016.04.018.				diagnosis, pathophysiology, pharmacology, health teaching and management of acute illnesses. • 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.	for mentors • Strong statistical study similar to previous survey

				• 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 theme...Few 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	S: • statistically sound study n=182 • recommends modernization of regulatory environment to positively impact NP satisfaction

doi:http://dx.doi.org/10.1016/j.nurpa.2015.11.018				prepare NPs to work beyond their population-focused educational training and associated certification. • Postgraduate education has a statistically significant positive impact on NP job satisfaction • Years of experience have a greater impact on job satisfaction among NPs without postgrad training compared to those with postgrad training. • Regulatory autonomy did not influence satisfaction overall however, those most satisfied had > 3 years of experience, completed formal PG education and practice in plenary authority state • Regulatory autonomy may influence job satisfaction more strongly among NPs with the most experience and clinical expertise. • Postgrad training is expensive and no evidence supporting improved patient satisfaction of clinical outcomes. • Mandating postgrad	W: • study speaks to job satisfaction only • consistent regarding no evidence supporting improved clinical outcomes • Does not speak specifically to professional development but does address issues that could be considered linked to professional development (i.e. collegiality, autonomy, growth)

				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	S: • Statistically sound, instrument valid and reliable - Qualtrics (survey data) W: • Small study • Only surveyed postgrads at one site. • 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 Providers. Journal of Neuroscience Nursing, 50(3), 157-160. doi:10.1097/JNN.0000000000000359		LOE: VI		• Proctors have 2 years of experience within NCC • 3-phase orientation: Phase 1 – observes proctor, reading assignments, study guide, has to pass 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, publishing…random 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

			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 turn-over). • 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.	
Dr. JoAnne Saxe	UCSF-Berkley Glide Clinic UCSF VA	6/14/2018 1130	• Standardization of curriculum: The 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 level, assuring standards and patient safety. Not surprising there is a variety of curriculum and frameworks but this doesn't have to be negative. Best practices are available. • VA is rich in data and is the largest education model in the county. • Utilizes interprofessional core teams. • Allows novices to develop expertise in QI, leadership, teaching. • Entrustable Professional Activities (EPA): bundles of competencies. • Interprofessional approach: Medicine and nursing have *common* knowledge 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	training for trainers • All considered "faculty" of training program. Honors the contribution of team members. • Team Steps Program. https://www.ahrq.gov/teamstepps/index.html • VA struggled with what to call novice NPs. Thought they should be called fellows because they are fully credentialled and practicing professionals, but this never caught on. Resident title became organically established. • Anna Struler

			care. • 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 risk…complex • 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

			diagnoses but should reflect what that looks like at presentation with other common diagnoses • Novice NPs can care for a diabetic patient. What they struggle with is a diabetic in DKA with kidney failure and respiratory issues. • Include social complexities that influence management of health problems. • Residency provides NP with tools to be active team member compared to novices without postgrad training who struggle to be an active member because they are unsure of themselves • Residency has cut turnover by 50%. NPs feel very loyal after residency and tend to stay. • Choose presenters wisely and let evaluations inform decisions. • The first year NPs are the co-creators. Evaluation is important to refine program. Dr Flinter eliminated a large portion of her didactic based on feedback from NPs. • Agrees that content and evaluation lack standardization across programs but sees value in VA's EPA evaluation tool.	leadership/professional development is important in postgraduate program.

Appendix C: Program Content Overview

Immersion Block I: Orientation Length: 2 weeks	Welcome	Medical Director, NP Director, NPs, Medical Staff - Meet and greet Discuss program expectation and objectives
	EHR	Information Services
	Documentation	Clinical Documentation Specialists, NP
	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 Block II (8 weeks)	IPE: (1) Hospitalist Rotation Assignment X 8 weeks and (2) Ancillary Department Experience X 2 D: (1) Weekly primary didactic education with simulation training, (2) weekly case studies, and (3) monthly grand rounds QI: Discuss upcoming project and resources, Performance Improvement presentation PD: (1) Establish and meet with mentor (2) weekly self-reflection journaling, (3) join professional organization	
Immersion Block III (8 weeks)	IPE: Hospitalist Rotation Assignment X 8 weeks and (2) Ancillary Department Experience X 2 D: (1) Weekly primary didactic 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 Block IV (8 weeks)	IPE: 2 Specialty Rotations 2 weeks each & 4 weeks in hospitalist rotation assignment and (2) Ancillary Department Experience X 2 D: (1) Weekly secondary didactic education, (2) weekly case studies, and (3) presentation case study in grand rounds QI: Continue work on QI project PD: (1) Meet with mentor once (2) Weekly self-reflection journaling, (3) Monthly journal club	
Immersion Block V (8 weeks)	IPE: 2 Specialty Rotations 2 weeks each & 4 weeks in hospitalist rotation assignment and (2) Ancillary Department Experience X 2 D: Weekly secondary curriculum, (2) weekly case studies, and (3) presentation case study in grand rounds QI: Continue work on QI project PD: (1) Meet with mentor once (2) Weekly self-reflection journaling, (3) Monthly journal club	
Immersion Block VI (8 weeks)	IPE: 2 Specialty Rotations 2 weeks each & 4 weeks in hospitalist rotation assignment and (2) Ancillary Department Experience X 2 D: Secondary curriculum with simulation, (2) weekly case studies, and (3) presentation case study in grand rounds QI: Present and disseminate QI project results with recommendations PD: (1) Meet with mentor once (2) Weekly self-reflection journaling, (3) Monthly journal club	

Immersion Block VII: Wrap-up (2 weeks)	IPE: Elective rotation D: Elective didactic, Wrap-up/debriefing QI: Wrap-up, present and disseminate QI project results with recommendations 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:	
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	1. Lecture, outline, images, and video
2. Comprehend and apply etiology of acute HF	2. Etiology: • Cardiac • Systemic	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 failure • RV 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 • 4^{th} heart sounds • Orthopnea • Dyspnea	5. Lecture and outline

	• Paroxysmal nocturnal dyspnea • Edema • Neck veins • Hepatospleomegaly] • Exertional intolerance • Increased systemic resistance • Acute kidney injury • Pulmonary edema	
6. Identify appropriate diagnosis of acute HF.	6. Discuss diagnosis: • Clinical exam • Chest x-ray • Echocardiography • ECG • BNP	6. Lecture, outline, and images
7. Synthesize patient information to accurately evaluate prognosis and those factors that impact prognosis of HF.	7. 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 management of the patient in the acute care setting who presents with acute exacerbation of heart failure.	10. Questions and answers.	10. Case study and discussion

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 infarction b. Aortic stenosis c. Hyperthyroidism d. Hypertension

		e. All of the above f. None of the above
6.	Choose the symptoms not associated with LV failure:	a. Hypertension b. Cardiomyopathy 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. Comfortable at rest, less than ordinary physical activity causes fatigues, dyspnea, palpitations, or angina d. Symptoms occur at rest, any physical 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 fibrillation with an uncontrolled ventricular heart rate, the drug of choice is:	a. Betablockers b. Digoxin c. Amiodarone d. cardioversion

Critical Criteria for Heart Failure Simulation Scenario

Criteria 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			
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

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
2 = Needs direct supervision
3 = Needs supervision periodically
4 = Able to perform without supervision
5 = Able to supervise others
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:

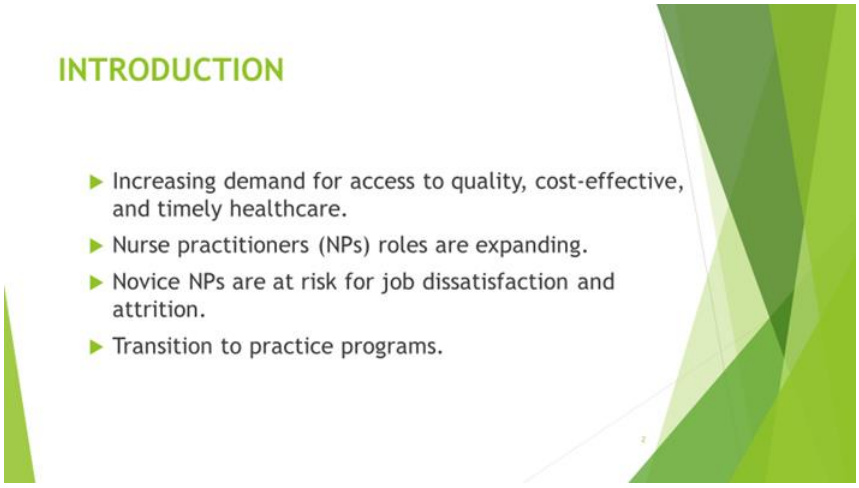
To be completed by Nurse Practitioner Trainee and Preceptor/Mentor at 1, 6 and 12 months of training.

Scale:

1 = Observes task only
2 = Needs direct supervision
3 = Needs supervision periodically
4 = Able to perform without supervision
5 = Able to supervise others
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



PROBLEM

- NPs fastest growing segment of healthcare providers.
- 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 of practice.

SIGNIFICANCE

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

RELEVANCE TO NURSING PRACTICE

LOCAL BACKGROUND AND CONTEXT

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

SOURCES OF EVIDENCE

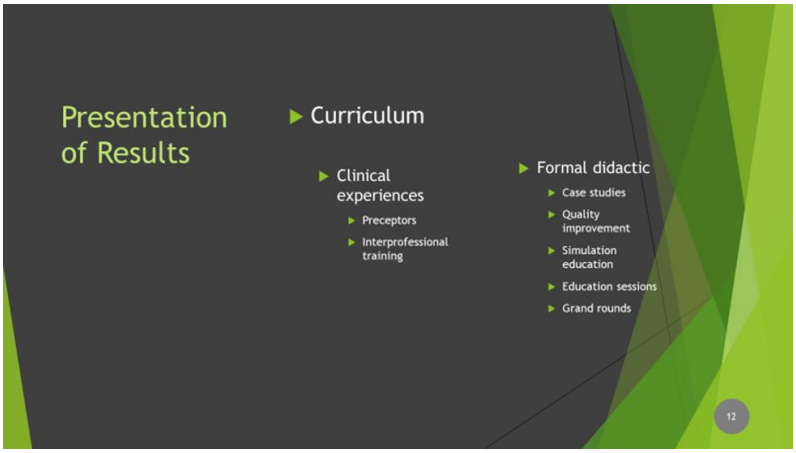
- Electronic databases
- Best-practices
- Curricula from established postgraduate programs
- Professional organizations
- Consultation with experts for insight

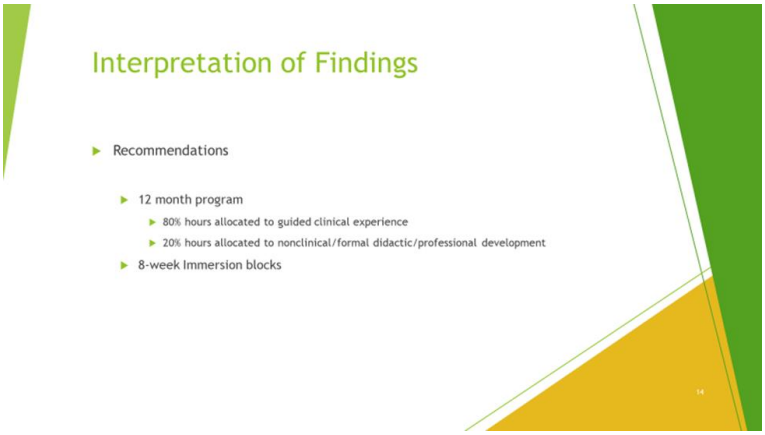
ANALYSIS AND SYNTHESIS OF EVIDENCE

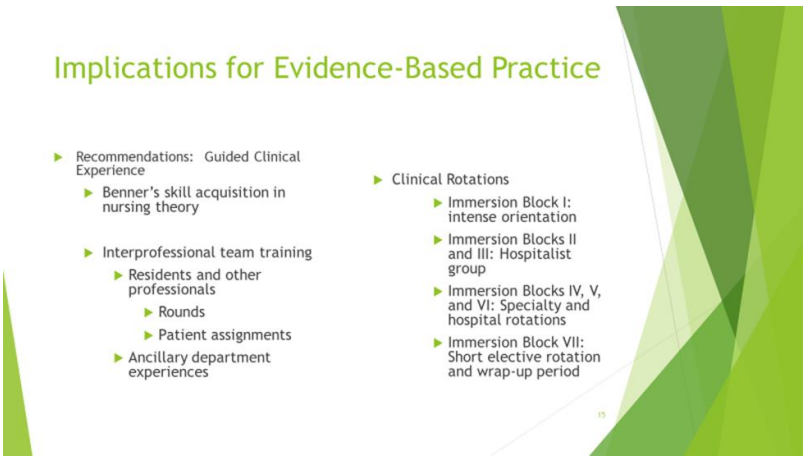
- Hierarchy of Evidence for Intervention Studies (Fineout-Overholt, Melnyk, Stillwell, & Williamson, 2010).
- Search log.
- Elkins literature review matrix (Elkins, 2010).

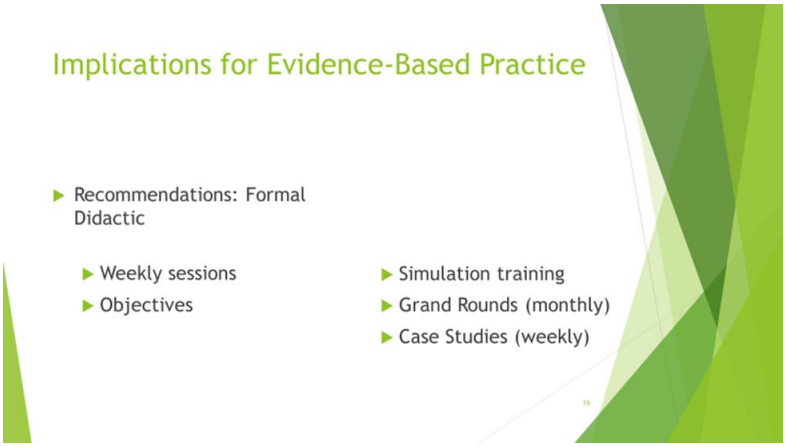
Presentation of Results

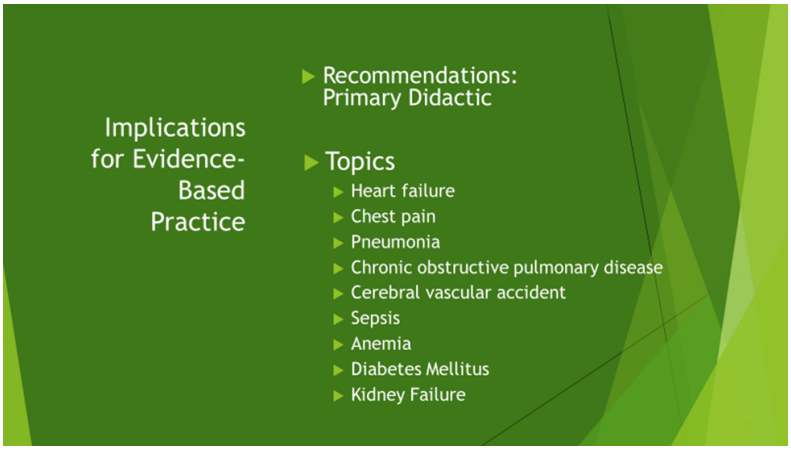
- Common Themes Identified in Postgraduate Development Programs
  - Guided clinical experiences
  - Formal didactic
  - Professional development
  - Quality Improvement











Implications for Evidence-Based Practice

- Program overview 8700 DNP Project Mentoring\Section 4\Section 4 template and checklist\Program Overview.docx

21

Implications for Evidence-Based Practice

- Recommendations: Evaluation Novice NP
  - Formative evaluation:
    - Weekly review of objectives with preceptor
    - Demonstrate comprehension of didactic
    - Completion of each Immersion Block:
      - 8700 DNP Project Mentoring\Section 4\COE NP Trainee Competency 20121205 pdf form[7075].pdf
    - Competencies reflect National Nurse Practitioner Residency and Fellowship Training Consortium competency domains.
      - 8700 DNP Project Mentoring\Section 4\Literature review and search log\NNPRFTC Competencies.docx
      - 8700 DNP Project Mentoring\Section 4\NNPRFTC Domain and sub-domain.docx

22

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 completion 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.

23

Food for Thought

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

25

SUMMARY

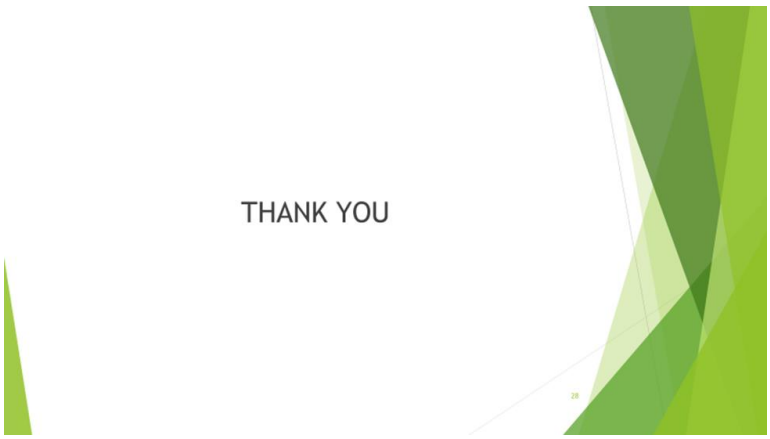
- The number of NPs is growing both in the United States and at KDH.
- The first 12 months of practice is challenging and traditional strategies are not effective.
- Comprehensive search of the evidence to produce a scholarly and professional staff development program for novice NPs in acute care at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

26

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

27



References

Benner, P. (2001). *From novice to expert: Excellence and power in clinical nursing practice* (Commemorative ed.). Upper Saddle River, New Jersey: Prentice Hall.

Benner, P., Hooper Kyriakidis, P., & Stannard, D. (2011). *Clinical wisdom and interventions in acute and critical care: A thinking-in-action approach* (Second ed.). New York, NY: Company.

Benner, P. E., Tanner, C. A., & Chesla, C. A. (1996). *Expertise in nursing practice : caring, clinical judgment, and ethics*. New York, NY: Springer Pub. Co.

DNP Essentials Task Force (Ed.) (2006). *The essentials of doctoral education for advanced nursing practice* (October ed.): American Association of Colleges of Nursing. Retrieved March 20, http://www.aacnnursing.org/ Portals /42/Publications/DNPEssentials.pdf

Elkins, M. Y. (2010). Using PICO and the brief report to answer clinical questions. *Nursing, 40*(5), 59-60. doi:10.1097/01.NURSE.0000369871.07714.39

Fineout-Overholt, E., Melnyk, B. M., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice step by step: Critical appraisal of the evidence: part I. *American Journal of Nursing, 110*(doi:10.1097/01.NAJ.0000383935.22721.9c

Flinter, M. (2005). Residency programs for primary care nurse practitioners in federally qualified health centers: A service perspective. *Online Journal of Issues in Nursing, 10*(3). Retrieved Sep 2017 https://search.proquest.com.ezp.waldenulibrary.org/nahs/docview/229621301/fulltextPDF/D869914078E04788PQ/1?accountid=14872

Flinter, M. (2011). From new nurse practitioner to primary care provider: bridging the transition through FQHC-based residency training. *Online Journal of Issues in Nursing, 17*(1), 6. doi:10.3912/OJIN.Vol16No01PPT04

Giled, S., & Ma, S. (2015). How will the affordable care act affect the use of health care services? Retrieved March 18, 2018, http://www.commonwealthfund.org /~/media/files/publications/issue brief/2015/feb/1804_giled_how_will_ aca_affect_use_hlt _care_svcs_ib_v2.pdf?la=en_care_svcs_ib_v2.pdf?la=en

References continued:

Harris, C. (2014). Bridging the gap between acute care nurse practitioner education and practice: The need for postgraduate residency programs. *The Journal for Nurse Practitioners, 10*(5), 331-336. doi: http://dx.doi.org/10.1016/j.nurpra.2014.03.003

Hart, A. M., & Bowen, A. (2016). New nurse practitioners' perceptions of preparedness for and transition into practice. *The Journal for Nurse Practitioners, 12*(8), 545-552. doi: http://dx.doi.org/10.1016/j.nupra.2016.04.018.

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

Martsolf, G. R., PhuonGiang, N., 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.2017.05.013

Nurse Journal Social Community for Nurses Worldwide. (2017). 7 future job trends for nurse practitioners. Retrieved March 18, 2018 https://nursejournal.org/nurse-practitioner/7-future-job-trends-for-nurse- practitioners/

Associated Press (Producer). (2010). Obama signs historic health reform into law. [Video file] Retrieved from https://www.youtube.com/watch?v=8cHuQGZMRYw

Walden University. (2017). Manual for staff education project: Doctor of nursing practice (DNP) scholarly project. Retrieved March 9, 2018 From: file:///C:/Users/Carol/Documents/Walden%20DNP/8700%20DNP%20 Project%20Mentoring/Staff_Education_Manual_Final.pdf

Zapatka, S., Conelius, J., Edwards, J., Meyer, E., & Brienza, R. (2014). Pioneering a primary care adult nurse practitioner interprofessional fellowship. *The Journal for Nurse Practitioners, 10*(6), 378-386. doi: https://doi.org/10.1016/j.nurpra.2014.03.018

OK

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.

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