

Effect of an APRN Fellowship Program  
on Job Satisfaction and Retention

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### Abstract

Transition from the role of registered nurse to APRN can be stressful and frustrating as the novice navigates the first year of being a provider. Role confusion, uncertainty, lack of support, and self-doubt are a few obstacles that an APRN faces during the first year, possibly leading to job dissatisfaction or leaving the profession. Results indicate that with the increasing complexity of healthcare and rising patient acuity, transition-to-practice programs are needed to bridge the gap between graduation and professional practice as an APRN. The Institute of Medicine recommends APRN postgraduate training to provide valuable mentorship and the development of clinical skills. The purpose of the project was to determine how an APRN fellowship program affects job satisfaction and retention after the first year of practice as a provider. The Misener Nurse Practitioner Job Satisfaction Scale was administered to a convenience sample of nine novice APRNs two to six months after completing the APRN fellowship program at a large Midwestern children's hospital. Job satisfaction scores ranged from *minimally satisfied* to *very satisfied*, and the retention rate at one year after graduation from the program was 100%. Development of an APRN fellowship program can improve the transition experience for novice APRNs, increasing job satisfaction and retention.

*Keywords:* nurse practitioner, role transition, transition-to-practice, fellowship program, novice to expert, job satisfaction, retention

### Effect of an APRN Fellowship Program on Job Satisfaction and Retention

Transitioning from the role of registered nurse (RN) to advanced practice registered nurse (APRN) can be difficult during the first year of clinical practice. Even new APRNs who demonstrated expertise in their roles as an RN must now adapt to being a novice in their APRN roles (Barnes, 2015a). The APRN scope of practice is different from that of an RN, as the APRN is in a provider role and more autonomous, has prescriptive authority, and can diagnose and treat acute and chronic illnesses. The change in professional identity can contribute to feelings of frustration, inadequacy, and role confusion that can lead to decreased job satisfaction, frequent job turnover, or leaving the profession (Barnes, 2015a; Cusson & Strange, 2008). Brown and Olshansky (1997) developed a theoretical model *From Limbo to Legitimacy* describing the novice nurse practitioner (NP) role transition during the first year of practice. In developing the model, they described the process of professional development practice that novice APRNs experience during their first year following graduation. New RNs receive extensive orientation for their role, but NPs do not receive the same support, negatively affecting their transition-to-practice (Cusson & Strange, 2008).

The Institute of Medicine (IOM) recognized the dilemma and recommended that institutions provide resident and fellowship programs to help nurses transition to their new clinical roles (Institute of Medicine, 2011). Although residency programs for RNs are more common, APRN fellowship programs have been in existence since 2007 with the goals of retaining APRNs and preparing them as they transition to their role as providers (Flinter, 2011). A review by Faraz (2016) found that providing a program to address role ambiguity was critical in the successful transition of novice NPs in primary care (See Appendix A for Definition of Terms).

### **Significance**

With the enactment of the 2010 Affordable Care Act, more APRNs have been needed to meet the demands of the rapidly changing health care system. The Health Resources and Services Administration projected a 30% increase in primary care NPs between 2010 and 2020 (Health Resources and Services Administration, 2013). Additionally, it is estimated that 23,000 new NPs graduated in 2015-2016, further adding to the volume of novice APRNs (Fang, Li, Kennedy, & Trautman, 2017). Not only are there more new graduates, but patients have higher acuity and their needs are more complex than in the past, adding to the stress of the new graduate (Scholtz, King & Kolb, 2014).

### **Local Issue**

Administration at a large Midwestern children's hospital recognized the struggles of novice APRNs and sought to provide support during the first year of practice. Development of an APRN fellowship program was listed as an essential function in the job description of the Director of Advanced Practice. To gain further information about the challenges of role transition during the first year as a provider, a survey was sent to all 346 acute and primary care APRNs at the hospital, resulting in 161 responses (46.5%). It was evident from the responses that there was a need for a consistent transition-to-practice program to support novice APRNs during their first year of practice.

### **Diversity Considerations**

Considering diverse perspectives and values adds validity to science and can aid in problem-solving (Medlin & Lee, 2012). There were two APRN fellowship cohorts for the project, consisting of three and six novice APRNs, and all were Caucasian. Together, they brought a collection of diverse experiences to the program. The first cohort consisted of three

female APRNs, a neonatal nurse practitioner (NNP) and two family nurse practitioners (FNPs). Two had worked as RNs at the study site hospital and the other as an RN at an outside hospital in the site city. All three were graduates of Master of Science in Nursing (MSN) programs.

The second cohort had six APRNs, four females and two males, and all were graduates of Bachelor of Science in Nursing–Doctor of Nursing Practice (BSN-DNP) programs. One was a pediatric clinical nurse specialist (PCNS), one was a pediatric nurse practitioner (PNP), and four were FNPs. One had worked as an RN at an outside hospital in another state and five had been employed at the site hospital as RNs.

### **Problem Statement**

Newly graduated APRNs face many challenges during the first year after graduation as they transition from the role of RN to APRN. Transitioning from expert RN to novice APRN can cause an alteration in professional identity, leading to job dissatisfaction or leaving the profession.

### **Intended Improvement with Purpose**

The intent of an APRN fellowship program is to provide support during the first year of practice, thereby promoting a successful role transition. The primary purpose of the inquiry was to determine if participating in an APRN fellowship program affected job satisfaction and retention after the first year of practice as a provider. The secondary purpose was to develop clinical and leadership skills of the APRN.

### **Facilitators and Barriers**

Nursing Administration supported the APRN fellowship program and included costs for implementation and maintenance in the annual budget. Results will be cited in the Magnet

reapplication document and used to recruit and retain APRNs. Initial possible barriers included not knowing whether the new Chief Executive Officer (CEO) would appreciate the importance of transition-to-practice programs and APRN leaders might not allow novice APRNs to attend classes because of staffing issues. Although salaries were a cost to the institution, the economic component was not a barrier due to the support of the program by hospital administration.

### **Review of the Evidence**

#### **Inquiry**

In newly graduated novice APRNs, how does an APRN fellowship program affect job satisfaction and retention during the first year of employment at a Midwestern children's hospital?

#### **Literature Search Strategies**

An extensive search of several databases through the study site's library services and the University of Missouri-Kansas City Health Sciences library was undertaken to identify evidence that aligned with the inquiry of an APRN fellowship program. Search terms included residency, fellowship, internship, nurse practitioners, graduate nursing, role transition, personnel retention, job satisfaction, and Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS). Databases searched included PubMed, Medline, Cochrane Library, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). Articles from the initial search were filtered to include those in the English language from January 2008 to January 2019, yielding 136 articles. The titles and abstracts were reviewed and examined for relevance to the inquiry (See Appendix B for PRISMA Diagram).

Inclusion criteria were studies involving nurse practitioners or clinical nurse specialists in postgraduate fellowship or residency programs, NP job retention, NP job satisfaction, and novice

NP role transition. Exclusion criteria were physicians, undergraduate nurses, unpublished manuscripts, and those that were not evidence-based or lacked rigor in the instruments. Two articles from 1997 and 2005, as well as an article describing the MNPJSS, were included because of their relevance to the inquiry. Twenty-four articles were found that provided evidence regarding APRN fellowship programs and their effect on role transition, job satisfaction, and retention.

The literature search yielded one case control study (level IV evidence), one cohort study, (level IV), four correlational studies (level IV), five cross-sectional studies (level IV), two systematic reviews of descriptive studies (level V), two integrative reviews (level V), five qualitative studies (level VI), two descriptive studies (level VI), and two mixed methods studies (level VI; See Appendix C for Synthesis of Evidence).

### **Evidence by Themes**

Reviewing the evidence for the inquiry yielded three topics leading to the development of six themes of evidence. The literature related to the topic APRN fellowship program contained three themes (nine studies): (a) fellowship programs bridge the knowledge gap between graduation and professional practice, (b) NPs perceive that a postgraduate education program improves their clinical skills, and (c) postgraduate NP programs have varying curricula providing mentorship and opportunities to sharpen clinical skills. The predominant theme within the topic APRN Role Transition was that novice NPs transition through phases as they acquire skills and confidence (eight studies). The topics of APRN Job Retention and Job Satisfaction were closely related and thus were combined for clarity. Seven studies on the topics of APRN Retention and Job Satisfaction revealed two themes: (a) a high level of job satisfaction is related

to the intent to stay in a current position, and (b) autonomous practice contributes to job satisfaction.

**APRN fellowship program.** The importance of providing post-graduate education for novice NPs to bridge the knowledge gap between school and professional practice was the most frequent finding among NPs surveyed in the literature (Bush, & Lowery, 2016; Hart & Bowen, 2016; MacKay, Glynn, McVey, & Rissmiller, 2018; Zapatka, Conelius, Edwards, Meyer, & Brienza, 2014). Several studies cited the IOM report recommending transition-to-practice programs for new NP graduates (Bush, & Lowery, 2016; Institute of Medicine, 2011; MacKay et al., 2018, Martsolf, Nguyen, Freund, & Poghosyan, 2017; Sciacca, & Reville, 2016; Zapatka et al., 2014).

Providing a formalized transition process from RN to APRN can increase retention, lead to continuity of care, and improve patient outcomes (Cusson & Strange, 2008; Faraz, 2017). Healthcare delivery has become more complex and patient acuity is higher, adding to the stress of the new graduate (Hicks, Rico, & Beauchesne, 2018; Scholtz, King, & Kolb, 2014). NPs report feeling better prepared for clinical practice after completing a post-graduate residency program and are seeking opportunities to enroll in these programs (Bush & Lowery, 2016; Hicks et al., 2018; MacKay et al., 2018; Zapatka et al., 2014).

Nurse Practitioners reported that there was some blurring of the definition of a transition-to-practice program as the terms resident and fellowship were used interchangeably in many studies. Martsolf et al. (2017) found that of 68 existing postgraduate NP programs, 31 (45.6%) identified as residency programs and 37 (54.5%) identified as fellowship programs. Martsolf et al. (2017) and Sciacca and Reville (2016) used the term fellowship to refer to NP postgraduate

education. Residency programs focus on primary care whereas fellowship programs tend to focus on specialty care (Martsolf et al., 2017).

Nurse Practitioners expressed a need for standardization or formalization of residency and fellowship transition-to-practice programs (Brown, Poppe, Kaminetzky, Wipf, & Woods, 2015; Cusson & Strange, 2008; Hart & Bowen, 2016; Sciacca & Reville, 2016; Zapatka et al., 2014). They described a structured orientation period that included supportive colleagues as being essential to successful transition (Barnes, 2015b; Cusson & Strange, 2008; Moran & Nairn, 2018). It was important that evidence-based recommendations for curriculum development and outcome measurement be disseminated to build a framework for standardized programs (Brown et al., 2015; Hart & Bowen, 2016; Sciacca & Reville, 2016; Zapatka et al., 2014).

Providing both nurses and physicians as mentors throughout a fellowship program was identified as being a positive experience and key to successful role transition (Ares, 2018; Cusson & Strange, 2008; Hart & Bowen, 2016; Rugen, Harada, Harrington, Dolansky, & Bowen, 2018; Zapatka et al., 2014). Rugen et al. (2018) found that an additional year of training after graduation gave NP residents opportunities to improve perceived gaps in their clinical skills by providing more time with mentors. The mentorship by both NPs and physicians made the novice NPs feel supported, gave them confidence, and emphasized the importance of working as a team, laying the foundation for working collaboratively to improve patient care (Cusson & Strange, 2008; Zapatka et al., 2014).

**APRN role transition.** Multiple studies cited evidence that novice NPs pass through several phases in the first year of transition from the role of RN to APRN (Ares, 2018; Barnes, 2015a; Barnes, 2015b; Brown & Olshansky, 1997; Faraz, 2016; Flinter, & Hart, 2017; Moran & Nairn, 2018). These studies included NPs from various specialties, demonstrating the

universality of the difficulties that NPs experience during the first year after graduation. Flinter and Hart (2017) studied FNPs, Brown and Olshansky (1997) included family, adult, geriatric, women's health, obstetrics-gynecology, and pediatric subspecialty NPs in their study. Cusson and Strange (2008) studied NNPs, Ares (2018) studied CNSs, and FNPs were 47.9% of Barnes' (2015a) study population. Brown and Olshansky (1997) developed a theory *From Limbo to Legitimacy* that described the process of professional development that occurs during the first year after graduation: laying the foundation, launching, meeting the challenge, and broadening the perspective. Benner (1982) developed the *Novice to Expert* theory to describe the phases of transition for novice APRNs. Several other studies demonstrated that NPs follow a similar pathway during their first year after graduation (Brown & Olshansky, 1997; Cusson & Strange, 2008; Moran & Nairn, 2018).

Moran and Nairn (2018) identified four phases synthesized from examination of 11 qualitative studies. The first phase was feeling like a fish out of water, progressing to beginning to get a grip on the new role, followed by increasing feelings of confidence and awareness of their leadership role, and ending with feeling socialized, well-rounded, and comfortable in their new role. The authors included four studies from England, one from Holland, one from Canada, and five from the United States, demonstrating that NPs from diverse healthcare cultures experience similar phases during role transition (Moran & Nairn, 2018).

Nurse Practitioners from multiple studies described feeling mixed emotions as they progressed through phases during the year of transition (Ares, 2018; Barnes 2015b; Brown & Olshansky, 1997; Cusson & Strange, 2008; Flinter, 2017). They initially felt shocked, overwhelmed, filled with self-doubt, stressed, and anxious, but towards the end of the year, they described feeling more confident and prepared to give competent care (Barnes, 2015b; Brown &

Olshansky, 1997; Cusson & Strange, 2008; Faraz, 2016; Flinter & Hart, 2017). Barnes (2015a), Barnes (2015b), Brown and Olshansky (1997), Faraz (2016), and Flinter and Hart (2017) observed that role ambiguity was a predominant issue during that first year as novice NPs attempt to navigate a new environment with new responsibilities. A review by Barnes (2015b) found that of the 11 emotions described by novice NPs, 10 were negative and only one was positive, the feeling of excitement.

Findings in studies by Brown and Olshansky, (1997), Barnes (2015a), Cusson and Strange (2008), and Dillon, Dolansky, Casey, and Kelley (2016) were mixed on the issue of the way previous experience as an RN affected transition to the role of NP. Although the 35 participants in the study by Brown and Olshansky (1997) averaged 10 years of nursing experience and two years of post-graduate work in primary care, they used the word imposter in describing how they felt in their role as novice NPs. Neonatal Nurse Practitioners who had previously worked as an RN in the same unit where they were now employed as a new NNP described a less difficult transition. But those with less RN experience had more difficulty with collaboration and needed more time to adapt to the NNP role (Cusson & Strange, 2008). By contrast, in Barnes' (2015a) study of 352 NPs, prior RN experience was not significant in relation to role transition as it neither enhanced nor inhibited role transition. Similarly, Dillon et al. (2016) found there was no difference between RNs with zero to four years' experience and those with more than four years of experience.

Ares (2018), Brown and Olshansky (1997), and Faraz (2016) noted that novice NPs experienced a type of role ambiguity called the imposter phenomenon in the early phases of transition. Brown and Olshansky (1997) recruited 35 NPs for their qualitative study and noted that many described living with a constant dread of failure, despite their achievements, as they

transitioned from expert to competent provider. Using the Clance Imposter Phenomenon Scale (CIPS), Ares (2018) found a prevalence of 74.6% in the moderate, frequent, and intense ranges in the study sample of 113 CNSs. The author used simple linear regressions to predict imposter phenomenon based on perceived preparedness for the CNS role and years of leadership experience, and found the results were not significant (Ares, 2018). Mentors can be instrumental in supporting new CNSs through coaching, providing a realistic framework for practice, and sharing stories of their transition and role ambiguity (Ares, 2018).

Nurse Practitioners who reach the final phase and complete a successful role transition experience a sense of well-being, confidence, mastery of skills and behaviors needed to navigate new environments, and good relationships with colleagues (Barnes, 2015b; Cusson & Strange, 2008; Dillon et al., 2016; Moran & Nairn, 2018). Acquisition of autonomy through successful role transition occurs in phases, and by the end of the first year after graduation, NPs reported gaining more self-confidence and competence in their decision making (Brown & Olshansky, 1997; Cusson & Strange, 2008). Unsuccessful role transition can result in goals not being met, increased stress, questioning their career choice, resignations, and leaving the profession (Barnes, 2015b; Cusson & Strange, 2008; Moran & Nairn, 2018).

**APRN job satisfaction and retention.** Several studies found that job satisfaction and intent to stay are closely intertwined, demonstrating that a high level of job satisfaction is related to the NPs' decision to remain in their current position (Brom, Melnyk, Szalacha, & Graham, 2016; De Milt, Fitzpatrick, & McNulty, 2011; Dillon et al., 2016; Faraz, 2017; Hagan & Curtis, 2018; Hill, 2011; Kacel, Miller, & Norris, 2005). The purpose of the studies was to examine factors that influence job satisfaction and retention.

In a study of 34 acute care nurse practitioners, Dillon et al. (2016) found that although NPs identified stressors such as job performance and personal finance that these stressors did not affect successful role transition or job retention. Organizational factors such as support from colleagues and mentors were more important and had a positive effect on NPs choosing to stay in their current position. (Barnes, 2015a; Dillon et al., 2016).

The MNPJSS was utilized in five of the seven studies to determine job satisfaction of NP populations (Brom et al., 2016; De Milt et al., 2011; Faraz, 2017; Hagan & Curtis, 2018; Kacel et al., 2005). The MNPJSS consists of six factors correlating with NP job satisfaction: intrapractice partnerships/collegiality; challenge/autonomy; professional, social, and community interactions; professional growth; time; and benefits (Misener & Cox, 2001). The scale has a Cronbach's alpha of .96 with .79 to .94 subscale reliabilities, making it a reliable and frequently utilized tool when examining factors related to job satisfaction (Misener & Cox, 2001).

Autonomous practice was discovered to be a strong predictor of job satisfaction and retention (Brom et al., 2016; Bush & Lowery, 2016; Demilt, Fitzpatrick, & McNulty, 2011; Faraz, 2017; Hagan & Curtis, 2018; Kacel et al., 2005). The IOM (2011) emphasized autonomous practice, calling for NPs to practice to the full extent of their education and training. Brom et al. (2016) found a majority of NPs were most satisfied with autonomy/challenge. They also discovered that reporting to another NP resulted in more job satisfaction than reporting to a nurse executive or nurse administrator, especially regarding the intrapractice aspects of the job (Brom et al., 2016). A further finding of the study was that those reporting to non-clinical administrators experienced significantly more satisfaction on the professional subscale than those who reported to a nurse executive/administrator (Brom et al., 2016). It was determined that even if the administrator was a nurse and familiar with the NP role, the NP might be asked to

complete tasks that were below the NP scope of practice, whereas an NP supervisor would be more supportive of full scope of practice (Brom et al., 2016).

Although Demilt et al. (2011) found challenge and autonomy ranked second in NP satisfaction, the most common reason for NPs to leave their position was having only slight control over their practice and limited opportunities for advancing their careers. The authors recognized that NPs often chose an advanced practice nursing career because of the ability to be autonomous in their practice, while limited autonomy led to lower job satisfaction (Demilt et al., 2011). Kacel et al. (2005) found highest satisfaction scores to be intrinsic factors including a sense of accomplishment, autonomy, challenge, and ability to provide quality care. They also found job satisfaction increased during the first year of practice but noted a steady decline in job satisfaction in the following years, plateauing between the eighth and eleventh year (Kacel et al., 2005). In a study of 315 NPs who completed the MNPJSS, lower autonomy/challenge and lower salary were the strongest predictors of NP intention to leave their current position within five years (Hagan & Curtis, 2018). In a national study of 177 NPs practicing in a primary care setting for less than one year, professional autonomy and role ambiguity were significant predictors of turnover intention, suggesting that a critical balance is needed between support and autonomy in the population of novice NPs (Faraz, 2017).

An additional year of training after graduation provides the opportunity for clinical supervision, mentorship, and role development that addresses novice NPs' perceived gaps in education (Brown et al., 2015; Hart & Bowen, 2016; Martsolf et al., 2017; Rugen et al., 2018; Zapatka et al., 2014). Support from mentors throughout a fellowship program to teach clinical skills and define NP roles has been identified as a critical factor in successful role transition for novice NPs (Ares, 2018; Cusson & Strange, 2008; Hart & Bowen, 2016; Rugen et al., 2018;

Zapatka et al., 2014). Bush and Lowery (2016) examined the effect of completing a post-graduate NP program on job satisfaction by surveying two groups of NPs, one with formal post-graduate education (n=80) and one without (n=174). They not only found that completing a post-graduate education program positively impacted job satisfaction but that factors influencing autonomous practice contributed to a high level of job satisfaction (Bush & Lowery, 2016).

Although strong NP mentors are an essential aspect of a post-graduate fellowship program, NPs also cited the value of learning from their physician colleagues and other disciplines (Cusson & Strange, 2008; Faraz, 2016; Moran & Nairn, 2018). Collaborative relationships in the practice setting can help to decrease role ambiguity for the novice NP, further defining their roles in relation to other healthcare providers (Faraz, 2016).

### **Theoretical Framework**

Concepts critical to the problem are role transition, stakeholder support, and effective preceptors. Successful role transition enables novice APRNs to become competent and efficient providers as soon as possible (Barnes, 2015b). Stakeholder support is enhanced by using an APRN organizational leadership model that provides support to APRNs. Metzger and Rivers (2014) note that an APRN organizational leadership model creates a sense of community among APRNs and improves networking and communication by providing a direct conduit to upper levels of management, contributing to job satisfaction, retention, and high quality patient care. The role of the preceptor cannot be underestimated. An effective preceptor can influence job satisfaction and retention, while an ineffective preceptor can cause new APRNs to have a negative experience which could lead to losing interest in the profession (Barnes, 2015b; Pitcher, 2016).

Benner's Novice to Expert theory was the theoretical model that provided the framework for the project of developing an APRN fellowship program. The middle range nursing theory is based on the Dreyfus Model of Skill Acquisition which describes five stages of skill acquisition: novice, advanced beginner, competent, proficient, and expert (Benner, 1984). The framework can be used as a guide for the career development of novice APRNs as they transition from the role of expert RN to novice APRN. The Novice to Expert theory is logical in progression and relevant to many aspects of nursing. The theory is used in nursing education for faculty, curriculum development, clinical reasoning, and transitioning masters prepared nurses into their new roles (Carlson, Crawford, & Contrades, 1989; Field, 1987; Hawkins & Fontenot, 2009; Purdue & Roberts, 2014). Hence, it was congruent with the development of an APRN fellowship program and used to guide the program (See Appendix D for Theory to Application Diagram).

## **Methods**

### **Institutional Review Board, Site Approval**

The project proposal was approved for non-human subjects as quality improvement by the institutional review board (IRB) at the study site, and permission to conduct the project at the site was obtained from hospital administration (See Appendix E for IRB Approval Letter). University of Missouri-Kansas City School of Nursing and Health Studies Doctor of Nursing Practice faculty approved the project (See Appendix F for Faculty DNP Project Letter).

### **Ethical Considerations**

The three core principles of research were observed throughout the project: respect of persons, beneficence, and justice (Heale & Shorten, 2016). The study involved minimal risk to the participants and the student investigator had no conflicts of interest. Participants were

instructed that their participation in the survey would not affect their employment or performance reviews. The MNPJSS was formatted into the Research Electronic Data Capture (REDCap) program, and study participants were not identified, fostering confidentiality. The survey was part of the program participation, and no consent was required although fellows could decline to complete the survey. The survey was administered to all participants two to four months after graduation from the 12 month program.

### **Funding**

The costs for the project were minimal as the APRN fellowship program was an initiative fully supported by hospital administration. The full time equivalent (FTE) for the program director was part of the essential functions of the Director of Advanced Practice, also the student investigator. The MNPJSS was administered without charge to the APRN fellows via REDCap through the study site hospital. Small graduation gifts were purchased and awarded to the fellows at graduation (See Appendix G for Cost Table).

### **Setting and Participants**

The study was conducted at the large Midwestern children's hospital main campus. A convenience sample of participants in the first two APRN fellowship program cohorts was utilized in the project. Inclusion criteria were all newly graduated APRNs hired at the study institution who completed the program in 2019. Exclusion criteria were experienced APRNs who had been hired and any novice APRNs that did not complete the program in 2019. The study site is a large Midwestern children's hospital serving western Missouri and eastern Kansas with 500,000 patient visits in 2017 (Children's Mercy Kansas City, 2017). The hospital with clinics employs 356 APRNs in ambulatory and acute care settings (See Appendix H for Logic Model).

### **Evidence Based Practice Intervention**

Making the transition from RN to APRN is a significant career change which can be stressful for many novice APRNs, causing loss of confidence and identity confusion (Barnes, 2015a). Transition-to-practice programs have been shown to support novice NPs during the first year in practice and have a positive effect on job satisfaction and retention. Novice APRNs participated in a fellowship program developed in 2018 at a Midwestern children's hospital. The fellows attended classes taught by hospital leaders for four hours per month for one year. Class content included mindfulness, scope of practice, professional development, critical thinking, and enculturation into the organization. Preceptors and mentors provided clinical support as fellows developed skills in their specialty area. The APRN fellowship program director maintained regular contact with the preceptors to share progress reports, particularly around six months into the program. It is during the middle of the first year that those undergoing role transition often reach a crisis and require extra vigilance and support (Williams, 1999).

The APRNs completed the MNPJSS and demographic questionnaire via REDCap two to six months after graduation from the fellowship program. Retention rates of those completing the program were compared to retention rates of novice APRNs during the three years prior to program implementation (See Appendix I for Intervention Materials; See Appendix J for MNPJSS; See Appendix K for Demographic Questionnaire; See Appendix L for Intervention Flow Diagram; See Appendix M for Project Timeline Flow Graphic).

### **Organizational Change Theory and Evidence-based Practice Model**

Kotter and Cohen's Model of Change was used as the framework for organizational change for the project inquiry, translating evidence to clinical practice. The model focuses on leading change, instead of simply managing it, and appeals to the emotions of the people involved (John, Jacob, Meskill, Moolsankar, & Altman, 2018). There are eight steps in the

model for leading organizational change: increased urgency, guiding the team, creating a vision, getting buy-in from stakeholders, removing barriers, creating short-term wins, being persistent, and anchoring the change (John et al., 2018). A survey of APRNs at the study institution demonstrated that there was a need to improve the onboarding process of new APRNs and that many believed an APRN transition program would be helpful during the first year as a novice APRN. A team was formed and the vision was conveyed to stakeholders for their buy-in. Sustainability was enhanced by administrative support and the direction of resources toward the program.

The Iowa Model was selected for the EBP intervention and is easily understood by nurses in clinical settings (Gawlinski & Rutledge, 2008). There are multiple phases in the model. Triggers, such as a clinical problem or knowledge from outside the organization, can be the impetus for project initiation in the Iowa model (Gawlinski & Rutledge, 2008). The triggers for the project inquiry resulted from APRN dissatisfaction with standard orientation during the first year of practice along with evidence in the literature describing successful APRN transition-to-practice programs. These triggers are congruent with the key decision points of the Iowa Model describing an organizational reason to solve the problem and also evidence to support making the change in practice (Gawlinski & Rutledge, 2008). The model works well for large organizations, particularly in acute care, and addresses translation and implementation of evidence (Schaffer, Sandau, & Diedrick, 2012).

### **Study Design**

The study was a descriptive, pilot study of APRNs participating in an APRN fellowship program implemented at the project site. The MNPJSS with demographic questions was administered to the APRNs to evaluate satisfaction, two to six months after graduation.

## Validity

**Internal and external validity.** The MNPJSS is an instrument with established reliability and validity, optimizing the internal validity of the project. Possible confounding variables such as understaffing and personal stressors might have affected the internal validity. The student investigator, also the APRN Fellowship Program Director, did not supervise any of the participants, thus minimizing investigator bias. Because of the small convenience sample, results may not be generalized to other cohorts of APRN fellows, affecting external validity. Still, the program may be transferable to larger cohorts in the future.

## Outcomes

The primary outcome was to facilitate a successful transition from experienced RN to novice APRN, promoting job satisfaction and retention during the first year of practice as a provider. The secondary outcome was the development of clinical and leadership skills in novice APRNs, fostering professional growth as they progress from novice to expert.

## Measurement Instrument

**Job satisfaction.** The MNPJSS is a 44-item survey with six subscales: (a) intrapractice partnership/collegiality; (b) challenge/autonomy; (c) professional, social, and community interaction; (d) professional growth; (e) time; and (f) benefits. A Likert scale from one to six is used to score responses ranging from *very dissatisfied (1)* to *very satisfied (6)*.

To determine tool validity, Misener and Cox (2001) used an exploratory factor analysis to identify six NP job satisfaction items and six factor loadings or subscales. Reliability of the instrument was determined by a Cronbach's alpha which is .96 for the entire scale. Reliability estimates for each subscale were .94, .89, .84, .86, .83, and .79 for (a) intrapractice partnership/collegiality; (b) challenge/autonomy; (c) professional, social, and community

interaction; (d) professional growth; (e) time; and (f) benefits, respectively (Misener & Cox, 2001). Permission for the use of the instrument was obtained from the only living author, Dr. DeAnna Cox. Two to six months after course completion, participants from the first two cohorts completed the MNPJSS via REDCap, a secure online research study data capture program as part of the course evaluation (See Appendix N for Permission for Tool).

**Retention.** The retention rate at one year after hire of participants in the fellowship program was compared to that of novice APRNs hired in the three years prior to program implementation.

### **Quality of Data**

All nine participants in the first two cohorts of the APRN fellowship program were included in the pilot project; therefore, no a priori power analysis was necessary. Participants were informed that they could not be identified and their responses would not affect their employment or performance evaluation. The MNPJSS was administered two to six months after graduation from the program to measure job satisfaction after at least 14 months as a novice APRN. There is no published benchmark data for comparison.

### **Analysis Plan**

The MNPJSS was sent electronically via REDCap to each of the nine subjects in the two cohorts. Demographic questions included gender, MSN or DNP graduate degree, years as an RN, and age. Ordinal content from the survey was downloaded into the Statistical Package for the Social Sciences (SPSS) and analyzed (See Appendix O for Data Collection Template). Descriptive statistics were utilized to examine the MNPJSS scores. Retention rates of newly hired APRNs at one year post hire from 2015-2018 were obtained from the credentialing office at the study institution.

## **Results**

### **Settings & Participants**

The project was implemented at the study institution's main campus from 2017-2019. A convenience sample of nine participants in the first two APRN fellowship program cohorts was utilized for the project. Participants were included if they were newly graduated APRNs hired at the study institution who had completed the program in 2019. Experienced APRNs were excluded, as were novice APRNs who did not complete the program in 2019.

The first cohort included three female APRNs, consisting of an NNP and two FNPs, all graduates of MSN programs. The second cohort consisted of six APRNs, four females and two males, all graduates of BSN-DNP programs.

### **Intervention Course, Actual**

Permission to conduct the project was obtained from the site IRB for non-human subjects research as quality improvement. Due to the importance of preceptors in the fellowship program, a separate workshop for training preceptors was developed. Two cohorts of nine newly graduated APRNs were enrolled in the fellowship program from 2018 – 2019. Three participated in the cohort beginning April 2018, and six participated in the cohort commencing September 2018. Fellows attended didactic classes taught by hospital leaders for four hours per month over one year. Curriculum included mindfulness, scope of practice, professional development, critical thinking, and enculturation into the organization. The final class was a preceptor workshop so the participants could share the knowledge gained with new novice APRNs.

Fellows received support from assigned mentors and preceptors as they developed skills in their specialty areas. The student investigator, also the APRN Fellowship Program Director,

maintained contact with preceptors to continually assess the fellows' learning needs. Each fellow developed a quality improvement project they shared at graduation. Between two and six months after graduation from the fellowship program, the fellows completed the MNPJSS and demographic questionnaire using REDCap. Retention rates were compared to those of newly graduated APRNs three years prior to program implementation.

### **Outcome Data**

Primary outcomes for the project were job satisfaction and retention. Descriptive statistics were used to analyze the results of the MNPJSS and participant demographics with no missing data (See Appendix P Statistical Analysis Table). The mean scores for each factor in order of satisfaction were benefits 5.25; professional, social, and community interaction 5.18; professional growth 5.07; challenge/autonomy 4.92; time 4.81; and intrapractice partnership/collegiality 4.58. All six factors were scored *very satisfied* (6) by at least one participant, and only the factors of time, challenge/autonomy, and intrapractice partnership/collegiality were scored *very dissatisfied* (1) by at least one participant. The lowest scores for benefits was *minimally satisfied* (4), for professional growth was *minimally dissatisfied* (3), and for professional social and community interaction was *dissatisfied* (2). The mode was five (*satisfied*) for all factors except professional, social, and community interaction, for which the mode was six (*very satisfied*; See Appendix Q for MNPJSS Mean Factor Scores).

The data showed a steady decline in retention rates one year after hire for newly graduated APRNs during the three years prior to implementation of the APRN fellowship program. The retention rate in 2015 was 23/24 (95.84%), in 2016 was 18/19 (94.74%), and in 2017 decreased to 24/27 (88.47%). There continues to be a 100% retention rate for the fellows

in both APRN fellowship program cohorts completing the program in 2019. (See Appendix R for Retention Rates of Newly Graduated APRNs).

The secondary outcome was the development of clinical and leadership skills. One of the fellows in the first cohort presented her fellowship quality improvement project as a podium presentation at a national conference. Two fellows from the second cohort are active members of the APRN fellowship planning committee, contributing ideas to improve the program. A seat on the Advanced Practice Advisory Council was created for novice APRNs in the first year of practice, recognizing their valuable contributions to the organization.

## **Discussion**

### **Successes**

Both primary and secondary outcomes of the project were successfully met. Prior to implementation of the APRN fellowship program, no organized structure existed to support novice APRNs during their first year of practice as providers. Two to six months after graduation from the program, fellows indicated they were *minimally satisfied* to *satisfied*, as evidenced by the mean scores on the MNPJSS, and retention rate was 100%. Retention rates had gradually declined in the three years prior to program implementation. Currently, graduates from the program are demonstrating clinical and leadership skills as they participate in national dissemination of quality improvement projects and assume active roles in leadership positions at the study site hospital.

### **Study Strengths**

Development of the APRN fellowship program was supported by nursing administration and organizational leadership. The Chief Nursing Officer (CNO) is a strong nursing advocate who recognized the potential benefits of a transition-to-practice program. Advanced Practice

Registered Nurse leaders supported the fellows' time away from their clinical areas so they could attend classes once per month. The study site is a Magnet hospital through the American Nurses Credentialing Center, thus promoting nursing excellence and innovation in nursing practice, congruent with the goals of the APRN fellowship program. A prior survey of APRNs indicated a need for a structured transition-to-practice program for novice APRNs to improve the onboarding process. Consequently, program development was integrated as an essential function into the student investigator's job description as Director of Advanced Practice.

### **Results Compared to Evidence in the Literature**

Study results support evidence in the literature demonstrating that a transition-to-practice program for novice APRNs has a positive effect on job satisfaction and retention. Although there were no benchmark studies noted in the literature, some comparisons can be made to published literature. Using the MNPJSS, Bush and Lowery (2016) compared a convenience sample of two groups of NPs across multiple settings. They found that nearly 69% of those who participated in formal post-graduate education rated job satisfaction as *satisfied* or *very satisfied*, while just over 50% of NPs without formal postgraduate education rated job satisfaction as *satisfied* or *very satisfied*. Brom et al. (2016) used the MNPJSS to survey 181 NPs from a Midwestern academic medical center practicing in an advanced practice role for at least six months. They found that participants were most satisfied with their benefits with a mean score of 4.99, and least satisfied with intrapractice partnership/collegiality with a mean score of 3.67. This finding is congruent with the study's highest rating of 5.25 for benefits and lowest rating of 4.58 for intrapractice partnership/collegiality. However, graduates of the two study cohorts had higher mean satisfaction scores.

### **Limitations**

**Internal Validity Effects**

Confounding variables and investigator bias can affect internal validity. The reliability and validity of the MNPJSS have been well established, and the instrument optimized the internal validity of the project. Possible confounding variables for the project were personal stressors participants were experiencing outside the workplace and suboptimal staffing issues necessitating schedule changes and longer work hours. Consequently, the timing of survey administration could have affected internal validity. The MNPJSS was administered to the first cohort six months after graduation from the program, whereas the second cohort received the survey two months after graduation. Bias was minimized as the student investigator, who is also the APRN fellowship program director, did not supervise any of the subjects.

**External Validity Effects**

Setting and study participants can affect the generalizability of the project. The intervention took place at a single study site with a small convenience sample of all newly hired novice APRNs, affecting external validity. However, all newly graduated APRNs hired at the study hospital were included, all graduates completed the MNPJSS, and the exclusion criteria were clearly defined. Classes were held at the same time of the day once per month. Results may not be generalized to other APRN fellow cohorts, but the program may be transferable to larger cohorts in the future, both inside and outside the study institution.

**Sustainability of Effects and Plans to Maintain Effects**

After implementing a new program, there is potential for observed gains to weaken over time; therefore, a plan must be devised to sustain the initiative. At present, three cohorts have graduated from the APRN fellowship program, a fourth cohort is in progress, and the fifth cohort began in March 2020. Organizational and nursing administration recognized the importance of

the APRN fellowship program and their support has contributed to the program's success. A retention rate of 100% and MNPJSS scores of *minimally satisfied* to *satisfied* reinforce the positive economic and professional effects of the program. To sustain the APRN fellowship program, resources will need to be directed towards expanding the program and marketing it to newly graduated APRNs. Responsibilities of the program director will continue to be an essential function in the job description of the Director of Advanced Practice.

### **Efforts to Minimize the Study Limitations**

To minimize study limitations of a small sample size and single study site, the APRN fellowship program was developed using the American Nurses Credentialing Center (ANCC) Practice Transition Accreditation Program as a guide for curriculum development (American Nurses Credentialing Center, 2020). Criteria for program credentialing is based upon this guide and used by institutions seeking the ANCC credential, thus enhancing program transferability among institutions. Study participants were assured they could not be identified from their responses to the MNPJSS and that their responses would not affect their employment.

### **Interpretation**

#### **Expected & Actual Outcomes**

Facilitating a successful transition from experienced RN to novice APRN by promoting job satisfaction and retention during the first year of practice as a provider were the expected and actual outcomes. Retention rate remains at 100% and job satisfaction scores ranged from *minimally satisfied* to *satisfied*. Feedback from participant and preceptor evaluations gave valuable insight into program enhancements that were implemented for successive cohorts. A secondary outcome of developing leadership skills and fostering professional growth in novice

APRNs was realized as one fellow presented her project at a national conference and another was appointed to a seat on the Advanced Practice Advisory Council at the study institution.

### **Intervention Effectiveness**

The APRN fellowship program promoted job satisfaction and retention for newly hired APRNs. Including all newly graduated APRNs in the program enhanced peer support and enculturation into the organization. Support from nursing and hospital administration and an engaged faculty committed to transitioning and retaining novice APRNs was essential to the growth and success of the program. Fellows reported mindfulness/debriefing as one of the most valuable components of the program, citing the benefits of peer support and mindfulness practice to manage stress. Although there were some limitations such as small sample size, the program could be implemented at other hospitals, including children's hospitals. The development of an APRN fellowship program would most likely be effective in a Magnet hospital with strong administrative support and could contribute to recruitment, retention, and job satisfaction.

### **Intervention Revision**

Although the APRN fellowship program was successful in promoting job satisfaction and retention, certain revisions should be considered. A larger sample size consisting of subsequent cohorts would strengthen the validity of the primary and secondary outcomes. Consistent timing when administering the MNPJSS after graduation could limit the effects of internal bias. Including interactive learning sessions or simulations would enhance APRN fellow engagement. Mentors could take a more active role in helping the fellows develop their quality improvement project, likely decreasing an anxiety-producing component of the program.

### **Expected and Actual Impact to Health System, Costs, and Policy**

The expected and actual outcomes of the APRN fellowship program were job satisfaction and retention, reinforcing the need for a transition-to-practice program. Job satisfaction scores ranged from *minimally satisfied* to *satisfied*, and retention for the two cohorts remains at 100%. Cusson and Strange (2008) and Faraz (2017) found that a transition-to-practice program not only leads to retention of APRNs but continuity of care and improved patient outcomes. With an average NP salary of \$105,546 (American Association of Nurse Practitioners, 2018), retention of APRNs is a cost savings to the institution by eliminating the continued costs of onboarding new APRNs. Project costs were minimal as the APRN fellowship program was an initiative fully supported by hospital administration.

A secondary outcome, development of clinical and leadership skills, was realized by the national presentation of a fellow's project, the addition of graduated fellows to the APRN fellowship planning committee, and creation of a seat for novice APRNs on the institution's Advanced Practice Advisory Council.

## **Conclusions**

### **Practical Usefulness of Intervention**

The transition from RN to APRN is a significant career change that can be stressful for many novice APRNs, causing loss of confidence and identity confusion (Barnes, 2015a). To promote a successful role transition, an inquiry was developed to determine the effectiveness of an APRN fellowship program on job satisfaction and retention of novice APRNs. Transition-to-practice programs have been shown to support novice NPs during the first year in practice and have a positive effect on job satisfaction and retention. Nurses considering furthering their education as an APRN may choose employment at an institution offering a transition-to-practice program that provides mentorship and support during the first year as a provider.

Novice APRNs at a Midwestern children's hospital participated in the fellowship program for one year as they progressed through the phases of role transition with the support of NP preceptors and mentors. Evidence demonstrates that providing support is crucial during the first year of transition to the APRN role as the feelings of role confusion and frustration can lead to frequent job turnover or even career derailment (Barnes, 2015a; Cusson & Strange, 2008). The project provided evidence to address and fill the gap regarding the effectiveness of an APRN fellowship program in transitioning pediatric APRNs.

### **Further Study**

Further evidence-based practice studies should focus on job satisfaction and retention of future graduates of the APRN fellowship program utilizing a larger sample size and qualitative data to evaluate the impact of the program. Data from future studies can be used in preparation for submission for Magnet redesignation and program accreditation by the American Nurses Credentialing Center (ANCC).

### **Dissemination**

The project was presented as a poster presentation at the Children's Mercy 25<sup>th</sup> Annual Pediatric Advanced Practice Nursing Conference, October 4, 2019 in Kansas City, Missouri and the Missouri Organization of Nurse Leaders (MONL) Annual Meeting on November 7, 2019 at the Lake of the Ozarks. A manuscript will be submitted to the Journal for Nurse Practitioners for potential publication. Findings from the project will be important to both health care organizations seeking to recruit and retain novice APRNs and to nurses seeking a smooth transition from the role of RN to APRN.

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## Appendix A

### Definition of Terms

Advanced Practice Registered Nurse (APRN): a registered nurse that holds a Master's or Doctor of Nursing Practice (DNP) degree and includes nurse practitioners, clinical nurse specialists, nurse midwives, and nurse anesthetists. They are providers able to diagnose and treat a variety of illnesses and injuries as well as advise the public on health issues (National Council of State Boards of Nursing, 2019).

Clinical Nurse Specialist: a masters-prepared RN with a masters or doctoral degree and training in a specialized area of nursing whose function is to improve patient outcomes (National Association of Clinical Nurse Specialists, 2019).

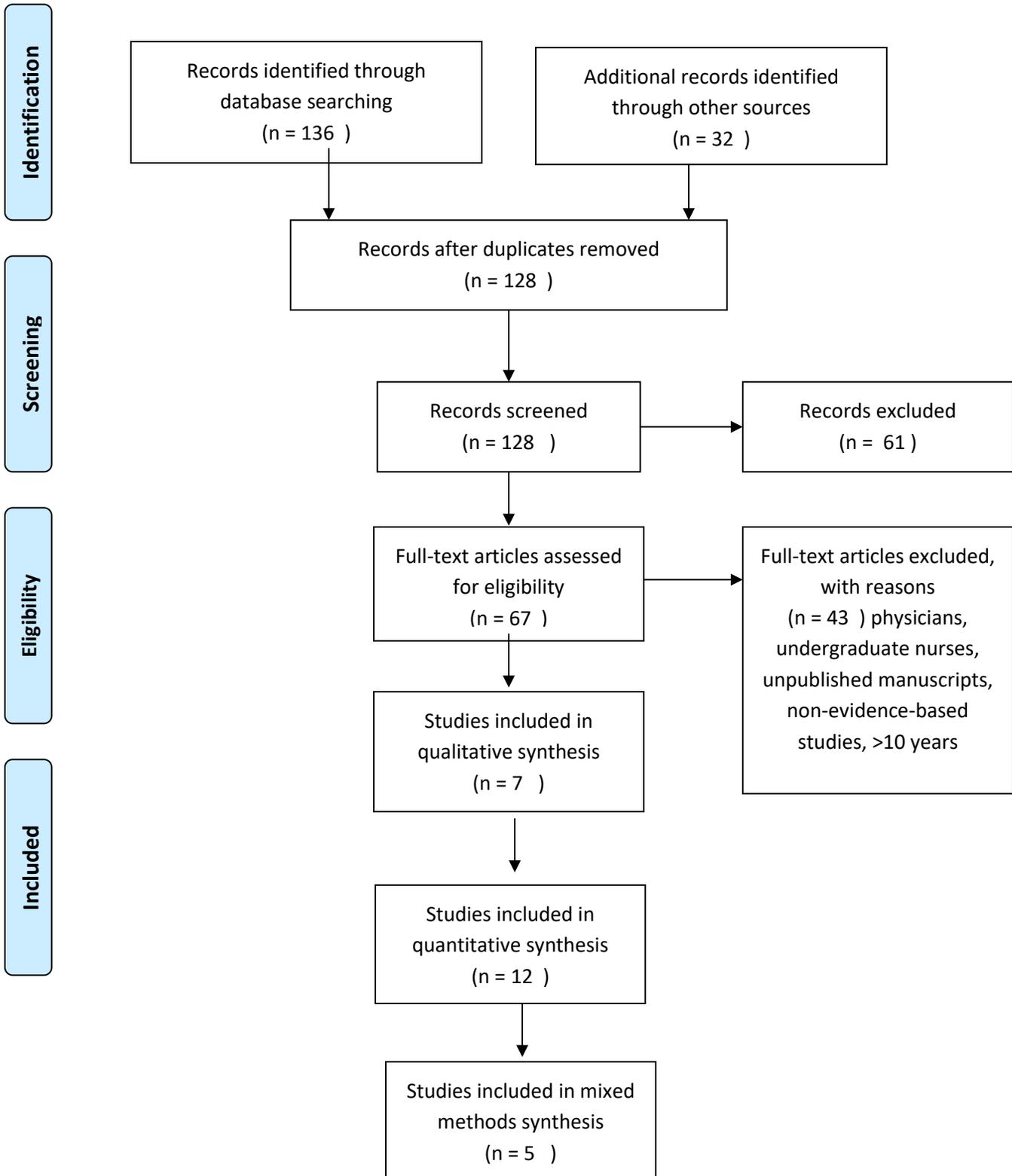
Novice: a newbie or beginner; a person with no previous experience (Meriam-Webster, 2019).

Nurse Practitioner: an RN with a masters or doctoral degree and advanced clinical training with specialized knowledge allowing them to practice autonomously (American Association of Nurse Practitioners, 2019).

Transition-to-practice program: a post-graduate program, usually 12 months in length, providing novice APRNs with extra clinical experience and mentorship to ease the transition from graduate school to practice as a provider (MacKay et al., 2018).

Appendix B

**PRISMA Flow Diagram**



Appendix C

Synthesis of Evidence Table

**Inquiry:** In newly graduated novice APRNs, does completing an APRN fellowship program, compared to standard orientation, increase job satisfaction and retention during the first year of employment at a Midwest children’s hospital?

First author, Year, Title, Journal	Purpose	Research Design, Evidence Level & Variables	Sample & Sampling, Setting	Measures & Reliability	Results & Analysis Used	Limitations & Usefulness
<p><b>Topic:</b> APRN Fellowship Program</p> <p><b>Themes:</b>                      (a)Fellowship programs bridge knowledge gap between graduation and professional practice, (b)NPs perceive fellowship program improves clinical skills, (c)varying curricula provide mentorship and opportunities to sharpen clinical skills</p>						
<p>Hicks (2018). Core curriculum and competencies: A multisite analysis of postgraduate training programs for primary care nurse practitioners. <i>Journal of</i></p>	<p>To identify outcomes in primary care graduate training programs.</p>	<p>Level 6 qualitative, descriptive methodology.</p>	<p>Semi-structured interviews of convenience sample. Nine postgraduate training sites, 11 interviewees, represented 36% of existing 25</p>	<p>After transcription, data was coded, themes identified, and reviewed until consensus was reached, working to obtain</p>	<p>Identified 5 leading domains from health/nursing organizations. Competencies mapped to domains or competencies</p>	<p>Limitations: Small sample size, limited access to curricular data.  Usefulness: NPs are seeking out transition-to-practice programs</p>

<i>Professional Nursing.</i>			programs for primary care NPs in the US.	dependability and reliability.	from QSEN and NONPF.	to gain the skills they need to care for increasingly complex patients.
Rugen (2018). Nurse practitioner residents' perceptions of competency development during a year-long immersion in Veterans Affairs primary care. <i>Nursing Outlook.</i>	To examine NP residents' perceptions of strengths, weaknesses, and goals in primary care NP residency program.	Level 6 qualitative and quantitative mixed method study.	Sample: 38 NP residents enrolled at 5 VA primary care sites between 2012 and 2015 but only 36 completed the one year program.	Competency assessment tool with 69 competencies, using Likert scale and open-ended questions. Administered at one month, 6 months, and at the end of year-long program.  No information on validity and reliability.	Aligns with Brown and Olshansky's (1997) NP transition theory. Interpreted through expectancy-value theory of motivation.	Limitations: self-reported data could be biased, may perceived they were being judged, tool not anonymous, change from paper to online entry during the course can be confusing.  Usefulness: NP perceptions of strengths and areas for improvement support postgraduate fellowship program.
MacKay (2018). Nurse practitioner residency programs and transition-to-practice. <i>Nursing Forum.</i>	Describes need for additional novice NP training and identifies content to promote successful transition from RN to APRN.	Level 4. Exploratory descriptive mixed qualitative and quantitative cross-sectional study.	All practicing members of the Massachusetts Coalition of Nurse Practitioners (MCNP). No mention of membership numbers but 159 NPs responded.	Author created the Qualtrics survey, a 12-question Likert Scale with last three questions being open-ended. No reliability or validity reported.	Supports the need for a transition-to-practice program for novice NPs. Barriers are lack of nursing faculty and federal funding.	Limitations: one professional organization and survey tool created by author needs reliability and validity assessment.  Usefulness: NPs feel better prepared after completing a residency program.
Martsof (2017). What we know about postgraduate nurse practitioner	To provide an environmental scan of NP residency and fellowship	Level 6  Dependent variable: NP residency and	Identified 68 active NP resident and fellowship programs: 31	Reliability not reported.	Slight evidence to show programs prepare NPs to provide better care.	Limitations: Data based solely on

<p>residency and fellowship programs. <i>The Journal for Nurse Practitioners</i></p>	<p>programs in the US: numbers, general characteristics, admission requirements, differences between residency and fellowship programs.</p>	<p>fellowship programs. Independent variable: admission requirements, differences between NP residency and fellowship programs.</p>	<p>(45.6%) residency, 37 (54.5%) fellowship. Environmental scan of publicly available information about NP residency and fellowship programs in the US</p>		<p>Residency programs focused on primary care Fellowship programs focused on specialty care</p>	<p>available program descriptions.  Usefulness: Results give an overview of NP residency and fellowship programs.</p>
<p>Bush (2016). Postgraduate nurse practitioner education: Impact on job satisfaction. <i>The Journal for Nurse Practitioners.</i></p>	<p>To examine the influence of post-graduate transition-to-practice programs on NP job satisfaction.</p>	<p>Level 4 case control group study design comparing two NP groups across multiple clinical settings using the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS). Dependent variable: NP job satisfaction. Independent variable: post-graduate NP education.</p>	<p>Compares job satisfaction of two groups of NPs, one with post-graduate education (n=80) and one without (n=174). Survey sent to 30 program directors to distribute to their students in 30 states.</p>	<p>Power analysis projected 56 as minimum sample size of each group. MNPJSS is a 44-item scale. Reliability of the six sub-scales ranges from .79-.94.</p>	<p>Post-graduate education had significant positive influence (<math>t=3.42</math>, <math>p&lt;.001</math>) on NP job satisfaction.</p>	<p>Limitations: Email invitation might miss participants, not reflect diversity. No differentiation between acute, primary or specialty practice.  Usefulness: MNPJSS measures job satisfaction after fellowship program.  Post-graduate education programs increase job satisfaction.</p>
<p>Sciacca (2016). Evaluation of nurse practitioners enrolled in fellowship and residency programs: Methods and trends. <i>The Journal for Nurse Practitioners.</i></p>	<p>To examine the literature exploring methods to evaluate NPs in postgraduate fellowship programs</p>	<p>Level 5 systematic review</p>	<p>Search limited to 2000 – 2015 using computerized databases: HealthWatch, International Pharmaceutical Abstracts, AgeLine, MEDLINE, SPORTDiscus ScienceDirect,</p>	<p>Identified sub-topics: competent assessment, evaluation of post-graduate program, developing portfolios</p>	<p>Benner’s Novice to Expert theory provided the framework.  Need for evidence-based evaluation process integrating theory with experiences and tested evaluation</p>	<p>Limitations: Did not delineate types of studies reviewed (qualitative or quantitative). Not all NP programs are published in the literature.  Usefulness: identified gap in</p>

			PsycTESTS, CINAHL led to 637 abstracts with 19 relevant articles		tools. Need for programs to disseminate information about program development.	evaluation of NP program design
Hart (2016). New nurse practitioners' perceptions of preparedness for and transition into practice. <i>The Journal for Nurse Practitioners.</i>	To examine how prepared NP's feel as they transition to provider.	Level 6 single quantitative descriptive study.	Survey sent to approximately 51,000 electronic newsletter subscribers through electronic link. Eligible if graduated from initial NP program between 2006-2011, practicing NP in US. N=698.	Updated survey from author's 2004 study and piloted with group of NPs in Wyoming. Approved by U. of Wyoming's Human Subject's Committee. No validity or reliability reported	Main theme was novice NPs need assistance as they transition to role of provider.  Emergent factors (Cronbach alpha): 1.Satisfaction with support (0.91) 2.Feelings of preparedness (0.80) 3.Managing health concerns (0.92) 4.Basics of health assessment and diagnosis (0.97) 5.Diversity and teaching (0.78) 6.Procedures (0.83) 7.Evidence-based practice and collaboration (0.76)	Limitations: Convenience sample on listserv. 90.2% NPs masters-prepared and did not reflect DNP-prepared NPs.  Primary investigator was primary care NP most items developed from that perspective. 2006 graduates completed survey 6 years after graduation – recall bias. Data published 4 years after collected.  Usefulness: new NPs need help transitioning into practice.
Brown et al., (2015). Recommendations for nurse practitioner presidency	Identify critical aspects when designing an NP residency program.	Level 6 quantitative and qualitative descriptive single study.	Questionnaires administered to convenience sample to those at regional NP meeting in Seattle.	Written questionnaires and focus group discussions. Questionnaires developed by one author and reviewed	Results: Need for residency program standardization. Must haves: interprofessional training, leadership/policy,	Limitations: Convenience sample mainly from western US. Small sample size. Limited to primary care.

<p>programs. <i>Nurse Educator</i>.</p>				<p>for content validity by the Competitively selected 5 Centers for Excellence in Primary Care Education (CoEPCEs). Theme: Must identify outcomes and cost measures for sustainability.</p>	<p>QI/scholarship, clinical skills, mentorship, role development, experienced preceptors, valid evaluation measurement.</p>	<p>Usefulness: Consistent with other studies about the importance of mentorship, need for outcome measures.</p>
<p>Zapatka (2014). Pioneering a primary care adult practitioner interprofessional fellowship. <i>The Journal for Nurse Practitioners</i>.</p>	<p>To explore the initial perceptions and experiences of new NP fellows in the VA system.</p>	<p>Level 6 single qualitative designed study.</p>	<p>APN graduates around state of Connecticut were recruited for 1-year fellowship shared with medical colleagues. N=7 NP fellows</p>	<p>Semistructured interviews recorded and transcribed verbatim at 3 different times during academic year.  Guidelines developed by interprofessional team.</p>	<p>Analysis used grounded theory techniques by Charmaz.  Themes:-Important to bridge gap into professional practice. -Appreciation of roles -Commitment to interprofessional teamwork -Benefit of mentorship Results: bridge gap between student and professional, positive experience with mentors</p>	<p>Limitations: n=7, mostly female, geographically limited, graduates of only 3 nursing schools  Usefulness: NPs felt residency program bridged the gap between student and professional.</p>
<p><b>Topic:</b> APRN Role Transition <b>Theme:</b> NPs transition through phases as they acquire skills and confidence</p>						

<p>Moran (2018). How does role transition affect the experience of trained advanced clinical practitioners: Qualitative evidence synthesis. <i>Journal of Advanced Nursing</i>.</p>	<p>Effect of role transition on new Advanced Clinical Practitioners?</p>	<p>Level 5 qualitative systematic review.</p>	<p>Search yielded 63 references but only 11 were useful. Four from England, one from Holland, one from Canada, and five from the US. Participants in each study: 5-352 with total of 733.</p>	<p>Evidence synthesis following principles and three stages of Thomas and Harden, reporting followed ENTREQ guidelines. Walsh and Downe criteria for appraising qualitative research studies.</p>	<p>Articles proposed between 3 and 6 phases of transition. Six themes:  - Change in work environment  - Adaptation to role  - Appropriate mentorship (most influential)  Supported development of clinical skills  - Clinical supervision  - Appropriate education  When the 6 key areas were part of transition process, ACPs had successful transition. When not present, transition prolonged or resigned from role.</p>	<p>Limitations:  Small sample of studies used.  Usefulness:  New ACPs overwhelmed and needed a formal orientation program. Mentors were most influential during transition. Themes during transition similar in different countries and health cultures. Key themes must be included for successful transition.</p>
<p>Ares (2018). Role transition after clinical nurse specialist education. <i>Clinical Nurse Specialist</i>.</p>	<p>To explore the post-graduate transition of clinical nurse specialists into new roles.</p>	<p>Level 4 quantitative cohort study measuring career and imposter phenomenon.  Independent variable is experience during role transition. Dependent variable is role transition.</p>	<p>Initial participants recruited at graduation from 63 CNS programs through listservs, email and conferences with final sample size of 68. Second survey sent 2.5-4 years after graduation and matched (via email)</p>	<p>Three questionnaires: Demographics, Waugaman's Student Nurse Anesthetist Experience Questionnaire, Clance Imposter Phenomenon Scale (CIPS). CIPS is Likert scale with</p>	<p>74.6% experienced imposter phenomenon. 8 imposters in the CNS employed group and 6 in the non-employed group. Cronbach's alpha was .91 in the employed group and .89 in not-employed group.</p>	<p>Limitations:  convenience sample, no randomization, loss of participants to follow-up, small sample size, potential measurement error.  Usefulness:  Imposter phenomenon the</p>

			with data set from initial study.	Cronbach's alpha from .84-.96.		same in both groups of CNSs, congruent with other studies of novice NPs.
Flinter (2017). Thematic elements of the postgraduate NP residency year and transition to the primary care provider role in a Federally Qualified Health Center. <i>Journal of Nursing Education and Practice.</i>	Describes how NP residency program affects transition.	Level 6 qualitative study. Independent variable is residency program and dependent variable is role transition.	Review of journals of 24 NPs participating in the first primary care NP residency in the US. All female, ages 24-51 years, completed master's degree in nursing within 18 months.	Established interrater reliability and identified themes.	Monthly themes and consistency among residents' progression. Findings support Meleis' transition theory, fits well with Dreyfus' and Benner's novice to expert theory. Confirmed IOM recommendations.	Limitations: Residents aware their journals were being read. One of the authors is a leader in the program. Results might not be reflective of other NP programs.  Usefulness: Consistent with Meleis, Benner, and other studies where novice NPs progress through a 12 month transition period and need support during that time to transition successfully.
Faraz (2016). Novice nurse practitioner workforce transition into primary care: A literature review. <i>Western Journal of Nursing Research.</i>	To analyze the current evidence related to novice NP transition into primary care, understand NPs' perception of role transition and identify barriers to role transition	Level 5 integrative review to include diverse methodologies.  Dependent variable: NP role transition.  Independent variable: role ambiguity, professional interpersonal relationships,	Nine articles, six qualitative (n=4-44), two cross-sectional descriptive (n=352-562), one descriptive correlational. Studies conducted in US and Canada	Based on framework for data analysis for integrative reviews by Whittemore and Knafl (2005).	Themes identified: role ambiguity, professional and interpersonal relationships, intrinsic and extrinsic obstacles.	Usefulness: Results could help employers develop recruitment and retention strategies during that first year of role transition from RN to APRN.

		intrinsic and extrinsic obstacles.				
Barnes (2015). Exploring the factors that influence nurse practitioner role transition. <i>The Journal for Nurse Practitioners.</i>	Does prior RN experience or formal orientation affect NP role transition?	Level 4 descriptive, cross-sectional controlled trial without randomization.  Dependent variable: NP role transition.  Independent variable: prior RN experience and receiving formal orientation in first NP position.	Convenience sample of 352 participants at national NP conference using self-reported data.	Power analysis projected 88 as minimum sample size.  Nurse Practitioner Role Transition Scale (NPRTS), a 16-item, 5-point Likert Scale, was used to measure participants' perception of their NP role transition.  Instrument reliability for developing comfort and building competence in the role = .85; .78 for understanding of role by others; .73 for collegial support.	Meleis's Transitions Theory provided the framework. Multiple regression analysis demonstrated prior RN experience did not promote or inhibit NP role transition.	Limitations: One-time measurement of self-reported data.  Participants had wide range of NP years of experience.  Included only NPs at conference motivated to complete questionnaire.  Usefulness: Prior RN experience was not a factor and post-graduate education enhances role transition.
Barnes (2015). Nurse practitioner role transition: A concept analysis. <i>Nursing Forum.</i>	To analyze the concept of NP Role transition	Level 5 integrative review of quantitative and qualitative studies for concept analysis.	Examined nursing literature through CINAHL for 148 articles resulting in 12 articles for NP transition. Psychology and business databases resulted in 3,256 articles with six	Walker and Avant's method for concept analysis.	Definition of NP role transition, consequences of a successful role transition (increased sense of well-being, mastering skills, being confident, competent). Unsuccessful	Limitations: No tools measuring NP role transition have been published.  Usefulness: Identification of factors that contribute to

			selected for analysis.		mastery of the role can result in resignation, turnover, lack of collegiality.	successful and unsuccessful role transition.
Cusson (2008).	To describe the process of role transition for neonatal nurse practitioners (NNPs).	Level 6 descriptive qualitative study.  Dependent variable – role transition. Independent variable – experiences during transition.	A convenience sample of 70 NNPs recruited via listservs and postal mailings.	Survey composed of open-ended questions.	Analysis with procedural steps described by Krippendorff.  Identified 4 themes showing linear progression from school to a more confident practice: initial preparation; transition; making it as a real NNP; facilitators and supporters.	Limitations: Primary author is NNP perhaps contributing to bias, sample is only NNPs and may not be able to generalize to other advanced practice specialties.  Usefulness: Supports transition theories.
Brown (1997). From limbo to legitimacy: A theoretical model of the transition to the primary care nurse practitioner role. <i>Nursing Research.</i>	To describe the experiences of novice NPs during their first year of being a primary care provider..	Level 6 qualitative study.  Dependent variable – role transition.  Independent variable – experiences during role transition.	35 NPs who had just completed an NP program, employed in primary care.	Interviewed at 1 month, 6 months, and 12 months after graduation.	Researchers conducted interviews independently then met to analyze the data. Results: Process of professional development in first year after graduation described in 4 categories (From Limbo to Legitimacy)– Laying the foundation, Launching, Meeting the challenge, and	Limitations: Possible researcher bias, small sample size, no power analysis.  Usefulness: Described the framework for transition during the first year in practice after graduation.

					Broadening the perspective.	
<p><b>Topic:</b> APRN Job Satisfaction and Retention  <b>Themes:</b> (a)High level of job satisfaction related to intent to stay, (b)autonomous practice contributes to job satisfaction</p>						
<p>Hagan (2018). Predictors of nurse practitioner retention. <i>Journal of the American Association of Nurse Practitioners</i>.</p>	<p>To examine relationships of MNPJSS factors and nurse demographics with NP intent to leave within 5 years.</p>	<p>Level 6 single quantitative study.</p>	<p>Survey sent via email to 1,983 NPs licensed in Texas with 315 respondents.</p>	<p>Job satisfaction measured with the Misener NP Job Satisfaction scale (MNPJSS). Reliability of the six sub-scales ranges from .79-.94. Demographics also included.</p>	<p>Low autonomy/challenge and low salary were strong predictors of intention to leave.</p>	<p>Limitations: Low response rate may cause sample bias, may not be generalized to broader population of NPs due to state-specific regulations and regional salaries.  Usefulness: Again, autonomy is strong predictor for retention.</p>
<p>Faraz (2017). Novice Nurse Practitioner workforce transition and turnover intention in primary care. <i>Journal of the American Association of Nurse Practitioners</i>.</p>	<p>Identify factors for successful NP transition and intention to leave in the first year of primary care practice.</p>	<p>Level 4 descriptive, cross-sectional on-line survey.</p>	<p>Convenience sample of primary care novice NPs recruited through all Commission on Collegiate Nursing Education (CCNE) accredited master’s nursing programs, social media. Online survey via Qualtrics sent to 29</p>	<p>Power analysis – n=131 would detect moderate effect size (<math>R^2=.13</math>) with 80% power at 5% significance level.  Job satisfaction measured with MNPJSS. Reliability of the</p>	<p>Variable most predictive of turnover intention using the standard multiple regression model was professional autonomy (p=.001) and role ambiguity (p=.03).</p>	<p>Limitations: Limited to novice NPs in primary care settings so only generalizable to that population. Not all NP programs notified researcher of forwarded letters for recruitment. Variations in NP</p>

			NP educational programs for the US. 207 met inclusion criteria and 177 were completed.	<p>six sub-scales ranges from .79-.94.</p> <p>Turnover Intention Scale (ATS) has .68-.84 reliability.</p> <p>Role Ambiguity Scale (RAS) has .78 and .81 reliability.</p>		<p>autonomy between states.</p> <p>Results: Greater autonomy is important to novice NPs in primary care. Balance between support and autonomy is significant for job satisfaction and retention.</p>
Brom (2016). Nurse practitioners' role perception, stress, satisfaction, and intent to stay at a Midwestern academic medical center. <i>Journal of the American Association of Nurse Practitioners</i>	Examine NPs' role perception, stress, satisfaction, and intent to stay using the Misener Nurse Practitioner Job Satisfaction Scale and the NP Role Perception Scale.	<p>Level 4 cross-sectional study.</p> <p>Dependent variable: Retention of NPs.</p> <p>Independent variable: role perception, stress, satisfaction, and intent to stay.</p>	All NPs at Midwestern academic medical center. 181 of the 290 NPs completed the descriptive survey.	<p>MNPJSS is a 44-item scale. Reliability of the six sub-scales ranges from .79-.94.</p> <p>NP Role Perception Scale developed by investigator is an 11-item scale with Cronbach's alpha=0.80.</p>	<p>Descriptive statistics used to summarize participants demographic characteristics. Correlations and one-way ANOVAs to address research questions. Participants somewhat satisfied, consistent with another sampling of Midwest NPs.</p>	<p>Limitations: Conducted at single site and difficult to generalize because of different state practices. NP pay negatively impacted for some NPs during survey period.</p> <p>Usefulness: MNPJSS tool is useful to measure job satisfaction in fellowship program.</p>
Dillon (2016). Factors related to successful transition-to-practice for acute care nurse practitioners. <i>AACN Advanced Critical Care</i> .	Identify relationships among personal resources and community resources, successful transition, job satisfaction and intent to stay by acute care NPs	Level 4 descriptive, correlational-comparative design.	<p>Convenience sample of 34 ACNP members of ACNP Network social media site.</p> <p>Inclusion criteria: Board-certified ACNP with &gt;6 months and &lt;3 years practice in</p>	<p>Modified Casey-Fink Graduate Nurse Experience Survey for ACNPs. Content validity evaluated by two expert faculty, five ACNPs, and pilot tested on three ACNPs. Based on</p>	<p>Based on Meleis' transition model. Descriptive statistical analysis.</p> <p>Results: No difference in age groups in relation to successful transition and retention.</p>	<p>Limitations: Small sample size, recall bias.</p> <p>Usefulness: Mentors, organizational support, and transition-to-practice program is</p>

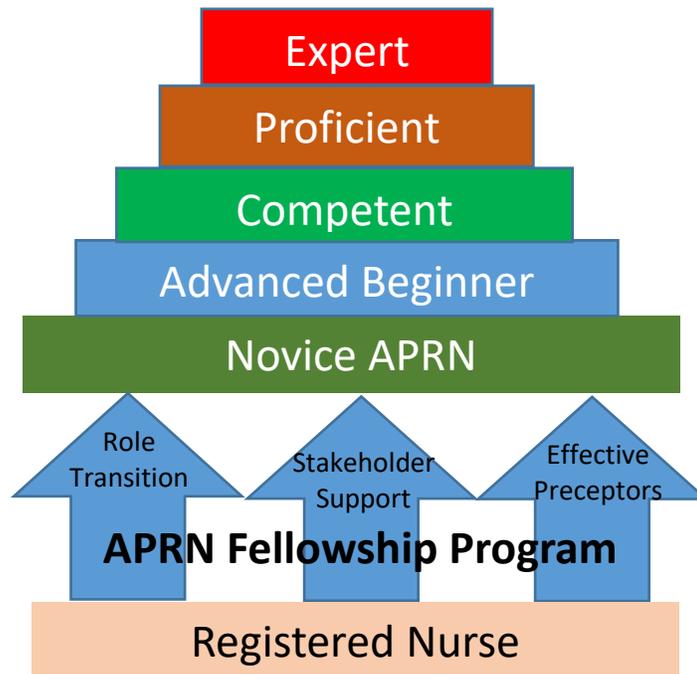
	within their first 6 month of employment. Identify differences in those with 0-4 and >4 years' experience in the ICU/ED.		that role; member of social media ACNP Network. Participants recruited through cover letter on ACNP Network's social media site.	recall of first 6 months as an ACNP.  Reliability and validity: Job retention = 0.89 Cronbach alpha; Job satisfaction = 0.81 Cronbach alpha.	Mentors and organizational support were more important than personal factors (ie stressors). Limited orientation impacts transition process.	important for successful transition.
De Milt (2011). Nurse practitioners' job satisfaction and intent to leave current positions, the nursing profession, and the nurse practitioner role as a direct care provider. <i>Journal of the American Academy of Nurse Practitioners.</i>	To describe NP job satisfaction; to examine job satisfaction based on intent to leave current position, nursing and NP role; and describe relationship between job satisfaction and anticipated turnover.	Level 4 cross-sectional descriptive study.	Convenience sample of 254 NPs attending national NP conference who had been in the role for at least 6 months. Average years as NP=8. Majority from FNPs.	Misener NP Job Satisfaction Scale (MNPJSS) to measure job satisfaction. MNJPSS is a 44-item scale. Reliability of the six sub-scales ranges from .79-.94  Anticipated Turnover Scale (ATS) to assess intent to leave. Likert scale with Cronbach alpha of 0.84.	Participants were minimally satisfied to satisfied in their jobs. Significant negative relationship between intent to stay and job satisfaction (r=-.51, p<.001)	Limitations: Do not represent national NP population, no randomization. Nurses attending national conference more likely to stay in profession. Did not delineate novice NPs or whether they attended a post-graduate educational program.  Usefulness: Job satisfaction tied to intent to leave.
Hill (2011). Work satisfaction, intent to stay, desires of nurses, and financial knowledge among bedside and advanced practice nurses. <i>The Journal of Nursing Administration.</i>	To better understand experienced bedside and advanced practice nurse retention factors (job satisfaction, retention, financial consequences of retirement)	Level 4 cross-sectional, descriptive, comparative design.	Convenience sample of 119 bedside nurses and 57 APNs from 371-bed acute care hospital. Only 31 returned APN surveys were usable. Average APN tenure = 5	Power analysis with power of 0.80 = 51 APNs were needed.  The Satisfaction Working as a Nurse in a Caring Environment Scale was modified based on 24 nurses given	The Satisfaction Working as a Nurse in a Caring Environment scale used in the context of Jean Watson's Transpersonal Caring Model.	Limitations: Small sample size of only 31 APNs may not be representative, possible halo effect.  Usefulness: High level of work satisfaction correlates with high

			years. Pen and paper survey.	scale to test validity and two nurses' expert in Watson's theory working with psychometrician.  Intent to Stay in Nursing scale is 6-point Likert scale with Cronbach alpha = 0.86.	Bedside nurses and APNs scores were similar across variables. Strong significant correlation between intent to stay and work satisfaction	level of intent to stay adds support to importance of job satisfaction and retention of novice APRNs. APRNs desire recognition, respect, input, kindness, honesty, and growth opportunities.
Kacel (2005) Measurement of nurse practitioner job satisfaction in a Midwestern State. <i>Journal of the American Academy of Nurse Practitioners.</i>	To examine NP job satisfaction in one Mid-western state.	Level 4 descriptive, correlational design with cross-sectional survey methodology.	Random sample of 250 NPs from state's licensure board with 157 questionnaires returned but only 147 were usable.	MNJPS is a 44-item scale grouped into six factors. Reliability of the six sub-scales ranges from .77-.94.	Herzberg's Dual Factor Theory of Job Satisfaction was the theoretical foundation for study.  Findings similar to previous studies (minimally satisfied to satisfied). Intrinsic factor scores higher than extrinsic factors. NPs with less than one year experience were most satisfied.	Limitations: Representative of only one state as environments and regulations vary state-to-state, did not state how subjects were randomized, limited statistical analysis.  Usefulness: Job satisfaction findings consistent with other findings using the MNJPSS.

(Melnik & Fineout-Overholt, 2015, adapted)

Appendix D

Diagram of Benner's Novice to Expert theory adapted to include key concepts and inquiry associations.



Appendix E  
IRB Approval Letter

**NOT ENGAGED IN HUMAN SUBJECTS RESEARCH**

May 22, 2019

Cathy Cartwright: [ccartwright@cmh.edu](mailto:ccartwright@cmh.edu)

Dear Ms. Cartwright:

On 5/22/2019, the ORI staff reviewed the following protocol:

Type of Review:	Initial Study
Title:	Effect of an APRN Fellowship Program on Job Satisfaction
Investigator:	<a href="#">Cathy Cartwright</a>
myIRB ID:	STUDY00000776
Documents Reviewed:	<ul style="list-style-type: none"> <li>• APRN Fellowship Job Satisfaction Charter,</li> <li>• MNPJSS,</li> <li>• Demographic questionnaire</li> </ul>

ORI staff determined that the proposed activity does not involve research as defined by DHHS regulations.

This project is an APRN Fellowship program evaluation conducted to examine whether the program had the desired effect and is not considered a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge according to 45 CFR 46.102(d). Hence, it has been determined that it does not meet the definition of research involving human subjects under 45 CFR 46.102(d) (not research).

IRB review and approval by this organization is not required. This determination applies only to the activities described in the myIRB submission listed above and does not apply should any changes be made. If changes are made and there are questions about whether these activities engage CM in human subjects research, please submit a new request in myIRB for a determination. You can create a modification by clicking **Create Modification / CR** within the study.

Sincerely,

**Dane Sommer, DMin**

Co-Chair, CM Institutional Review Board

**Doug Swanson, MD**

Co-Chair, CM Institutional Review Board

**Ryan McDowell**

Director, Office of Research Integrity

Appendix F  
Faculty DNP Project Letter



July 17, 2019

DNP Project Proposal Approval

UMKC DNP Student

This letter serves to provide documentation regarding Cathy Cartwright's Doctor of Nursing Practice (DNP) project proposal. Ms. Cartwright obtained approval for her proposal, *Effect of an APRN Fellowship Program on Job Satisfaction and Retention*, from the School of Nursing and Health Studies DNP faculty on July 17, 2019.

If we can provide further information, please feel free to contact us.

Sincerely,

A handwritten signature in black ink that reads "Cheri Barber". The signature is written in a cursive style.

Cheri Barber, DNP, RN, PPCNP-BC, FAANP

Clinical Assistant Professor

DNP Program Director

UMKC School of Nursing and Health Studies [barberch@umkc.edu](mailto:barberch@umkc.edu)

Lyla Lindholm, DNP, ACNS-BC

UMKC MSN-DNP Program Coordinator

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## Appendix G

## Cost Table

<b>Item</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Anticipated Cost</b>
<b>Materials</b>	MNPJSS	One survey formatted in REDCap	0	0
<b>Miscellaneous</b>	Graduation gifts for fellows	9	9 x \$20	\$180
<b>DNP Student Time</b>	Project implementation and data analysis	600 hours	Student investigator is APRN fellowship program director and time is part of FTE	Costs to hospital are hours built into APRN program director FTE and essential functions of job description
<b>APRN Fellows</b>	Class time away from clinical duties	9 APRNs = 432 hours class time	12 classes @ 4 hrs/class = 48 hrs	Costs to hospital are APRN fellow hours spent in class and away from clinical duties
<b>Total</b>				\$180 + FTE hours

**Appendix H - Logic Model for DNP Project**

Student: Cathy Cartwright					
Inquiry, PICOTS: In newly graduated novice APRNs, how does an APRN fellowship program affect job satisfaction and retention after the first year of employment at a Midwest children's hospital?					
Inputs	Intervention(s) <i>Activities</i>	Outputs <i>Participation</i>	Outcomes -- Impact		
			<i>Short</i>	<i>Medium</i>	<i>Long</i>
<p><b>Evidence, sub-topics</b></p> <ol style="list-style-type: none"> <li>1. APRN fellowship program</li> <li>2. APRN role transition</li> <li>3. APRN job satisfaction</li> <li>4. APRN job retention</li> </ol> <p><b>Major Facilitators or Contributors</b></p> <ol style="list-style-type: none"> <li>1. Director of Nursing</li> <li>2. Direct Supervisor (preceptor for project)</li> <li>3. APRN fellowship committee</li> <li>4. APRN leadership</li> <li>5. APRN preceptors</li> <li>6. Faculty for classes</li> </ol> <p><b>Major Barriers or Challenges</b></p> <ol style="list-style-type: none"> <li>1. APRN leaders may not want APRNs to leave the clinical area to attend class</li> <li>2. Small sample size</li> <li>3. New CEO may not appreciate importance of transition-to-practice programs</li> </ol>	<p><b>EBP intervention which is supported by the evidence in the Input column</b></p> <p>All newly graduated APRNs attend the 12 month APRN fellowship program</p> <p><b>Major steps of the intervention (brief phrases)</b></p> <ol style="list-style-type: none"> <li>1. All newly graduated APRNs will be enrolled in 12 month APRN fellowship program</li> <li>2. Follow up with preceptors regarding fellows' progress</li> <li>3. Administer Misener NP Job Satisfaction Scale (MNPJSS) two to six months after program completion</li> <li>4. Obtain retention APRN rates pre- and post-implementation</li> </ol>	<p><b>The participants</b></p> <p>All newly graduated APRNs hired</p> <p><b>Site</b></p> <p>Large Midwestern children's hospital</p> <p><b>Time Frame</b></p> <p>12 months for program and two to six months post intervention for MNPJSS</p> <p><b>Consent or assent Needed</b></p> <ol style="list-style-type: none"> <li>1. Consent given by APRNs attending as MNPJSS part of program</li> </ol> <p><b>Other person(s) collecting data</b></p> <p>No</p> <p><b>Others directly involved in consent or data collection</b></p> <p>No</p>	<p><b>(Completed during DNP Project)</b></p> <p><b>Outcome(s) to be measured</b></p> <p>Primary: Retention and job satisfaction Secondary: Development of clinical and leadership skills</p> <p><b>Measurement tool</b></p> <ol style="list-style-type: none"> <li>1. MNPJSS</li> <li>2. Demographics</li> </ol> <p><b>Statistical analysis to be used</b></p> <ol style="list-style-type: none"> <li>1. Descriptive statistics to analyze MNPJSS and t-test will analyze the retention rates of the two pre and post fellowship groups</li> </ol>	<p><b>(after student DNP)</b></p> <p><b>Outcomes to be measured:</b></p> <p>Continuation of APRN fellowship program twice per year and continued retention and job satisfaction</p>	<p><b>(after student DNP)</b></p> <p><b>Outcomes that are potentials:</b></p> <p>Continuation and expansion of APRN fellowship program with continued APRN retention and job satisfaction</p> <p>Program Director for the APRN fellowship program is the Director of Advanced Practice Professional Development</p>

Appendix I  
Intervention Materials

<b>APRN Fellowship Program Curriculum</b>			
<b>Classes</b>	<b>Time</b>	<b>What</b>	<b>Who</b>
Class #1	0800	Welcome - Introductions Introduction to the program	
	0830	Icebreaker – Personality Test	
Enculturation into the interprofessional team	9-10:30	Advanced Practice website on Scope Outlook calendar CARTS Resources Educational opportunities APP Staff meetings Nursing Org chart Mission/vision Professional Development	
	10:30-11:30	APRN Panel Discussion	
	11:30 – 12 n	How APRNs fit into CMs strategic plan	
Class #2	0800-1000	Mindfulness - Lisa Barth Chapel	
	9:50 - 10	Break	
	10 - 11	Professional Development	
	11 -12	Credentialing	
Class #3	08-09	Mindfulness and Debriefing	
	09-9:50	Intro to projects	
	9:50 - 10	Break	
	10-12	Accountability	
Class #4	08-09	Mindfulness and Debriefing	
	9-9:50	LEAN	
	10 am – 12 noon	Trauma informed care and resiliency	
Class #5	08-09	Mindfulness and Debriefing	

	9-10	Project Discussion and Community involvement (Operation Breakthrough)	
	10-10:15	Break	
	10:15 – 10:45	Social Media Boundaries	
	10:45-11	Break	
	11-12	Diagnostic Bias	
Class #6	08-09	Mindfulness/Debriefing	
	09-1100	Emotional Intelligence	
	11-12	Safety Leadership	
Class #7	08-09	Mindfulness and Debriefing	
	9 - 10	Opioid Stewardship	
	10 - 11	Projects	
	11 -12	Residents	
Class #8	08-09	Mindfulness and Debriefing	
	9:10 – 11:00	Health Literacy and ethics	
	11:15 - 11:45	The role of the APRN	
Class #9	08-09	Mindfulness and Debriefing	
	09-10	Notable Neurologic Findings	
	10-11	APRN Scope of Practice	
	11 -12	Review Projects	
Class #10	08-09	Mindfulness and Debriefing	
	8:45-9:45	Suicide Prevention – Classroom A	
	10-11:30	Community Assessment	
Class #11	8am – 10 am	Graduation	

Class #12	8-12 & 1-3	Preceptor Class – sign up in Cornerstone	
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Appendix J

**Misener Nurse Practitioner Job Satisfaction Scale ©**

Appendix K

Demographic Questionnaire

**Age:** 25-30 31-35 36-40

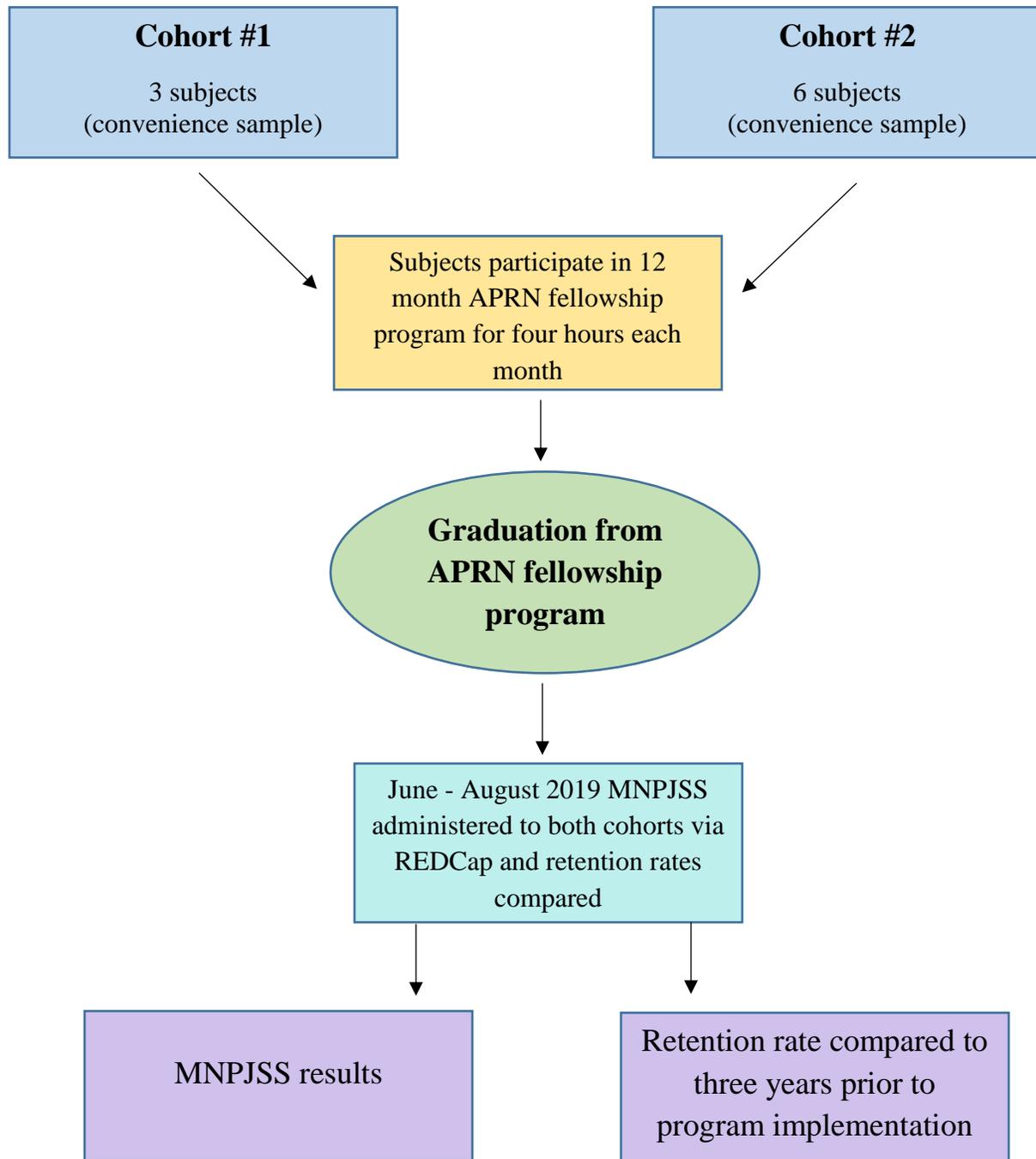
**Gender:** male female other

**Highest degree achieved:** MSN DNP

**Years of experience as RN:** 0-4 5-8 9-12 >12 years

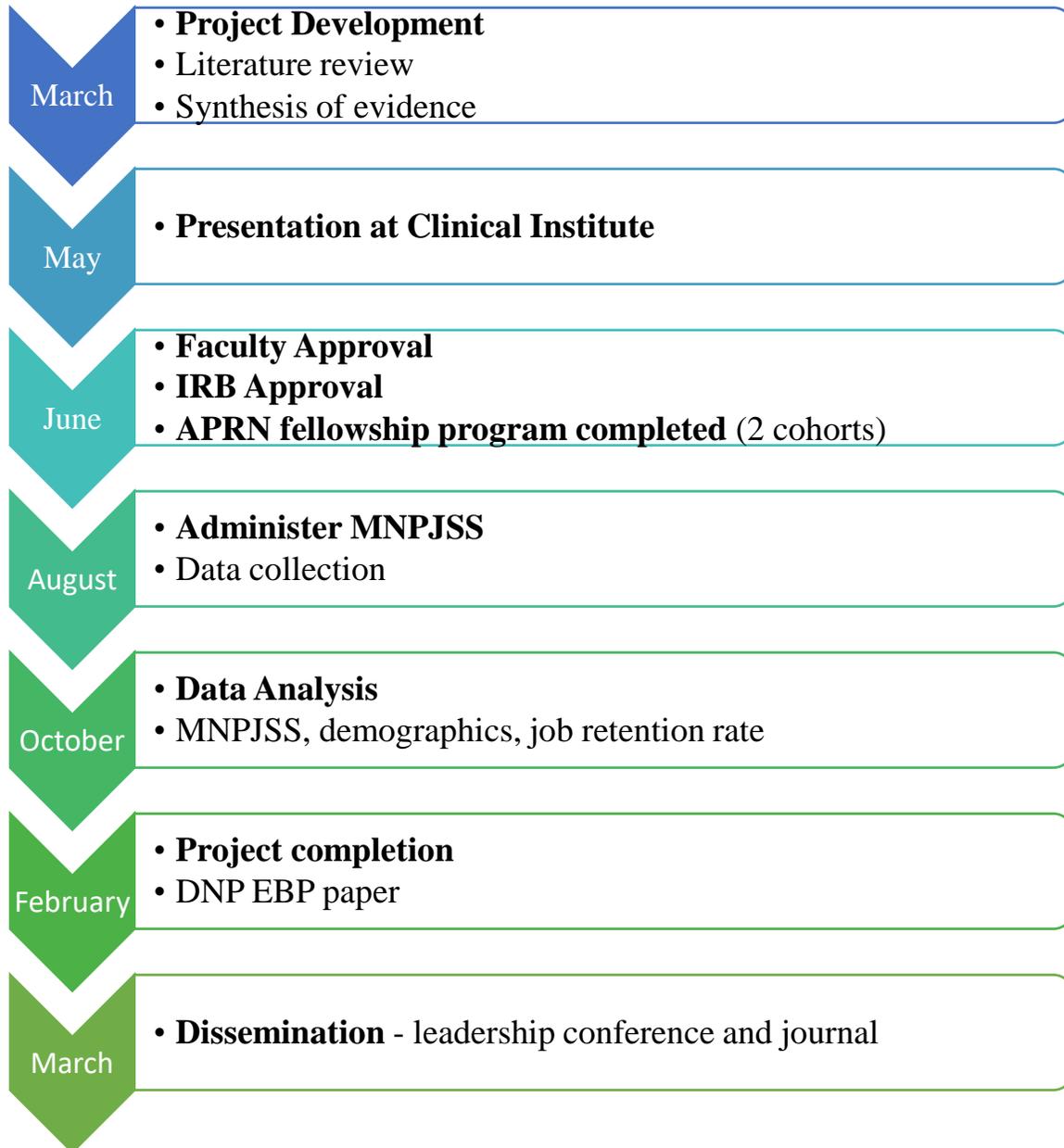
Appendix L

Intervention Flow Diagram



Appendix M

Project Timeline Flow Graphic  
 March 2019 – March 2020



## Appendix N

## Permission for Tool

## RE: Permission to use Misener NP Job Satisfaction Tool

CA



Thu 8/16/2018, 10:30 AM

Cartwright, Cathy, C

Dear Ms. Cartwright,

I would be happy for you to use the Misner Instrument in your study. Good luck with its usage.

De Anna Cox, DNP, APRN, FNP-BC  
Family Nurse Practitioner  
Clinical Associate Professor

---

**From:** Cartwright, Cathy, C  
**Sent:** Thursday, August 16, 2018 11:25 AM  
**To:** COX, DE ANNA  
**Subject:** Permission to use Misener NP Job Satisfaction Tool

Dear Dr. Cox-

I would like to request your permission to use the Misener Nurse Practitioner Satisfaction Scale to measure job satisfaction in two nurse practitioner populations at my hospital. I understand that Dr. Misener has passed so I hope you will be able to grant permission for use.

One group consists of new graduates from our APRN fellowship program and the other group consists of more experienced APRN graduates from our professional development classes. I plan to use the outcomes for quality improvement in both programs and the outcomes from the fellowship program in my DNP project.

Thank you for your consideration in this matter.

Cathy

Cathy Cartwright, MSN, RN-BC, PCNS, FAAN | Director of Advanced Practice Education

Appendix O  
Data Collection Template

	Name
1	record_id
2	redcap_surv...
3	Age
4	Gender
5	Degree
6	Experience
7	misener_np...
8	vacay
9	bennies
10	retire
11	mess
12	results
13	supervisor
14	pt_care
15	seeing_pts
16	admin_sup
17	assist
18	sched
19	mix
20	accomp
21	social
22	status
23	colleagues
24	interact
25	money
26	growth
27	tijme_off
28	research
29	scope
30	faculty

	Name
31	changes
32	input
33	freedom
34	procedures
35	care
36	time
37	recognition
38	peers
39	autonomy
40	policy
41	reward
42	value
43	work
44	ideas
45	conflict
46	needs
47	protocols
48	salary
49	duties
50	opinion
51	attitudes
52	misener_np...

## Appendix P

## Statistical Analysis Results Table

**Misener Nurse Practitioner Job Satisfaction Scale**

<b>Factors</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Mode</b>	<b>Standard Deviation</b>
Intrapractice partnership, collegiality	9	1	6	4.58	5	1.21
Challenge/autonomy	9	1	6	4.92	5	0.72
Professional, social, and community interaction	9	2	6	5.18	6	0.68
Professional growth	9	3	6	5.07	5	0.54
Time	9	1	6	4.81	5	0.88
Benefit	9	4	6	5.25	5	0.52

(1) very dissatisfied, (2) dissatisfied, (3) minimally dissatisfied, (4) minimally satisfied, (5) satisfied, (6) very satisfied

### Demographic Characteristics

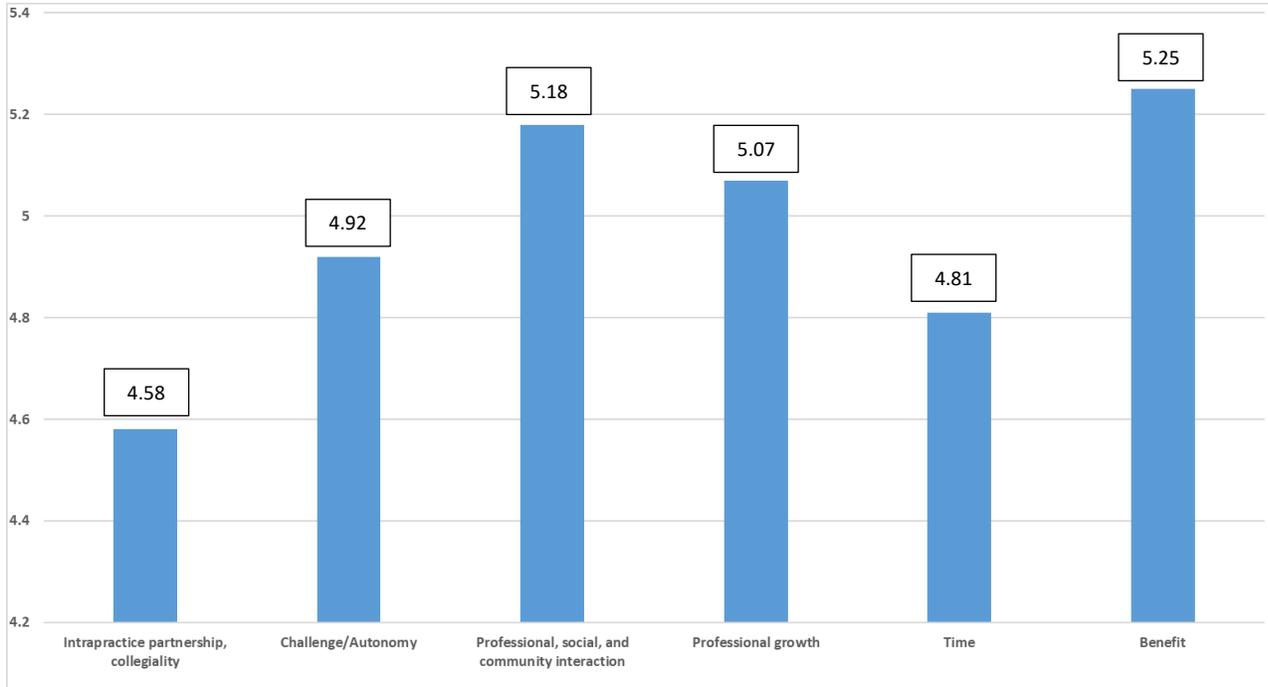
Variable	N
<b>Age</b>	
25-30	4
31-35	3
36-40	2
<b>Years of experience as an RN</b>	
0-4	0
5-8	7
9-12	
>12	2
<b>Highest degree</b>	
MSN	3
DNP	6
<b>Gender</b>	
Male	3
Female	6
Other	0

### Retention Rates of Newly Graduated APRNs One Year After Hire

Group	2015	2016	2017	2018
Novice APRNs completing fellowship program	X	X	X	9/9 100%
Novice APRNs <b>NOT</b> participating in fellowship program	23/24 95.84%	18/19 94.74%	24/27 88.47%	X

Appendix Q

MNPJSS Mean Factor Scores



(1) very dissatisfied, (2) dissatisfied, (3) minimally dissatisfied, (4) minimally satisfied, (5) satisfied, (6) very satisfied

Appendix R

Comparison of Retention Rates of Newly Graduated APRNs

