

Four Key Concepts of Transition to Practice for Nurse Practitioners and Physician Assistants in a Behavioral Health Setting: A Literature Review

Kathleen K Peniston, Lauren Swett* and Anna McKoy

Atrium Health, 1000 Blythe Boulevard, Charlotte, NC 28203, USA

*Corresponding author: Lauren Swett, Email: Lauren.Swett@atriumhealth.org

Received: 11 March 2019; Accepted: 17 June 2019; Published: 21 July 2019

Abstract

Nurse Practitioners (NPs) and Physician Assistants (PAs), or Advanced Providers (APs) collectively, are an integral part of the US healthcare workforce and have become essential in providing quality behavioral healthcare to patients throughout the country. While there are 40,000 psychiatrists currently practicing in the US, an estimated 70,000 psychiatrists are needed to meet a growing demand [1]. APs have an attrition rate twice that of physicians [2] and AP turnover is highest in the first 2 years of practice while new APs struggle with assimilation into their first roles after graduation from their educational programs [3]. There is an opportunity to help bring new AP providers into the healthcare system in a responsible and supportive way so as to enhance the transitional experience for employers, colleagues, and new providers. The goal of this article is to outline a transition to practice model, formulated from a review of relevant literature, to promote job satisfaction, confidence, and efficiency in new graduate APs. This article outlines four integral components felt to facilitate this transition from new graduate AP to efficient and competent provider. The four components referred to as “pillars” include: graduated clinical responsibility professional mentorship, appropriate clinical collaboration, and ongoing educational opportunities. There has yet to be any research conducted on this topic in a behavioral health setting, but the principles outlined here served as a model for the Atrium Health AP Behavioral Health Fellowship. The four pillars can serve as a guide to other behavioral health systems and practices as they grow and develop their workforce with the addition of new graduate behavioral health NPs and PAs.

Keywords: Transition to practice; Nurse Practitioner; Physician Assistant; Psychiatry; Behavioral Health; Fellowship

Abbreviations: NP: Nurse Practitioner; PA: Physician Assistant; AP: Advanced Practitioners

Introduction

In a healthcare market where provider shortages [4] are increasingly becoming a topic of concern due to a growing number of insured patients [5-6] and longer lifespans [7], recruitment and retention must be closely evaluated. An empty healthcare provider position costs the employer not only the loss of provider productivity, but up to as much as 100% of the yearly salary of any provider [8]. As the culture of United States healthcare changes, Advanced Providers (APs) are being increasingly utilized to address healthcare provider shortages [5]. In the Primary care setting, APs have a turnover rate roughly twice that of physicians [2], and turnover rates for APs in the acute care setting are as high as 8-11% [8]. Because turnover rates are particularly high for APs during the first two years of employment [3], employers must pay special attention to the specific set of challenges new APs face as they transition from their educational programs into the clinical setting. Despite the growing need for healthcare providers, employers are

hesitant to hire new graduate APs due to lack of confidence in their readiness to provide safe and effective care [9]. In this article, we will discuss a model employers can adopt to facilitate a smoother transition to practice by providing new APs with graduated clinical responsibility opportunities for professional mentorship, access to clinical education, and clinical guidance from seasoned providers.

According to the American Academy of Physician Assistants, the Physician Assistant (PA) educational program was designed to graduate clinicians who are versatile and collaborative healthcare providers [10]. Therefore, PAs are offered a wide breadth of training and education in several specialty fields. However, a great deal of emphasis is placed on preparing providers for a role in primary care. Because PA programs cover a wide variety of healthcare specialty training over a period of just 2 years, most programs offer only 4-8 weeks of clinical experience in a behavioral health setting [11]. In contrast, Nurse Practitioners (NPs) are trained as specialty providers, and behavioral health Nurse Practitioners are required to complete 500 supervised clinical hours in a behavioral health setting prior to obtaining licensure [12]. Despite receipt of significantly more exposure to the specialty track clinical setting, most NPs report feeling less confident about their readiness to enter the workforce as a full-time clinical provider [13]. There is ample evidence add: to suggest that new APs struggle with assimilation into their first roles after graduation from their educational programs [2]. Many APs feel unprepared for the fast pace of the job and others struggle with role identity and lack of support [14].

As NPs are increasingly granted independent practice, it is essential that new graduate providers are equipped with the clinical and non-clinical skills required to prevent burnout and unnecessary attrition. The Institute of Medicine’s Recommendations report recognizes NP residency programs as an initiative to expand the healthcare workforce into specialized clinical roles, such as behavioral health [15,16]. A review of the literature (Table 1) was conducted on the topic of new graduate healthcare provider transition to practice. Most of the literature reviewed focused on primary care NPs and NPs practicing in subspecialty settings. A major limitation in our literature review is related to the absence of literature on the topic of transition to practice issues in a behavioral health setting specifically. New graduate transition to practice is difficult across healthcare specialties and we have applied the available evidence to support our model in a behavioral health setting. Four recurring patterns were identified in the literature as key elements in successful transition to practice. This article will discuss those key concepts or “pillars,” (Figure 1) identified. The pillars were used to formulate the comprehensive structure for Atrium Health’s AP Behavioral Health Fellowship. A description of this fellowship will be presented considering the evidence gleaned from the literature. This article will discuss transition to practice issues for both NPs and PAs, in part, because both were enrolled in the Atrium Health AP Behavioral Health Fellowship. Of note, the terms “residency” and “fellowship” are often used interchangeably when AP postgraduate education is discussed in the literature. While the literature highlighted the importance of a formal orientation [2], there was limited literature on how to structure a formal orientation for new graduate APs. This article is aimed at furthering the discussion of AP onboarding by highlighting the evidence available to support the essential components of our formal transition to practice model.

Literature Review

Pillar I: Graduated Clinical Responsibility: The literature points to a correlation between new graduate AP burnout and an overly demanding schedule too early in an AP’s career [14]. APs who were allowed to

Table 1: Summary of Literature Review Findings on Transition to Practice Topics.

Authors	Year	Title	Findings
Morgan, H Edmonds, M	2017	An academic based nurse practitioner transition to practice program	Faculty of a DNP program created a voluntary transition to practice program based on new graduate feedback. Some new graduates described leaving positions within the first year due to dissatisfaction related to high patient volume, extended hours, and lack of confidence in their clinical skills
Boyar K	2017	As the country prepares to see the changes in healthcare, there may be a shift in how NPs enter the workforce	Advanced education smooths transition to practice, can increase job satisfaction and enhance professional status Discusses how the creation of residencies and fellowships will change the NP profession 3 to 12 NPs can be educated for the same cost as educating 1 physician
Taylor, D Broyhill, B Burris, A Wilcox, M	2017	A Strategic approach for developing an advanced practice workforce	A formalized curriculum, established mentors and enhanced clinical experience allows APs to feel more comfortable and confident in their clinical practice skills A stronger AP workforce strengthens the entire healthcare system
Harris, C	2014	Bridging the gap between acute care nurse practitioner education and practice: The need for postgraduate residency programs	There is a resident workforce shortage due to mandated maximum hours. This has led to increased reliance on APs who require specialized training AP residency programs provide mentorship, specialty training, professional development and allows for recruitment
Balhouth, M Ackerman, M Et al.	2013	Centralized resources for nurse practitioners: Common early experiences among leaders of six large health systems	Highlights the need for a formal reporting structure and centralized NP leadership model Autonomy without support or feedback led to feelings of isolation Unclear work expectations risked inefficiency and wasted resources Identifies the complexities of managing NPs and PAs as one functional role
Waldrop, J	2016	Clarifying residencies and fellowships in nursing	NP fellowships are voluntary educational opportunities, but not necessary for safe patient care. Therefore, the term residency is discouraged
Barnes, H	2015	Exploring the factors that influence nurse practitioner role transition	Transitioning from an experienced RN to a novice NP can damage confidence and role development. Consequently, there is a risk of turnover and NPs leaving the profession NPs are at an increased risk of turnover when compared to physicians, and the decision to leave is associated with discontentment Formal NP orientation relieves stress and improves confidence, competence, and satisfaction Prior RN experience did not affect NP role transition. However, the literature on this conclusion is mixed, requiring more investigation
Norwick, R	2016	Family nurse practitioner residency for recruiting and retention	Discusses literature on challenges for new graduate NPs including managing a complicated patient caseload and busy physician peers. These challenges led to a lack of support in managing these complex patients Identified the spectrum of support from peer mentoring in a small office to a formal NP fellowship Discusses high turnover of NPs after 1 year due to the challenging environment of federally qualified health centers Residency developed with a “thorough orientation, assigned preceptors, and low but escalating productivity targets” as well as formal lectures on specific topics such as motivational interviewing High job satisfaction of preceptors of NP residents who progressively attain autonomy systematically throughout the year, ultimately leading to lower rates of attrition
Twine, N	2017	The first year as a nurse practitioner: An integrative literature review of the transition experience	Review of 10 articles revealing 3 major topic areas: “role transition, perception of preparedness, and perceived challenges.” Key issues identified were role identity, professional relationships, and adequate mentorship Identified the need for additional support for new-graduate hospital-based NPs developing into practicing clinicians The first year of practice experience is crucial in the decision to remain in a specific job and in the profession at large

Brown, M Olshansky, E	1997	From Limbo to legitimacy: A theoretical model of the transition to the primary care nurse practitioner role	Physicians with mentors were able to make more accurate diagnoses more rapidly than physicians without mentors. NP's are not usually given a similar opportunity NPs experienced about 6 months of "limbo" before feeling more confident and competent as practicing NP's Phases identified: <u>Laying the Foundation</u> : Graduation from educational program and seeking employment <u>Launching</u> : NPs may feel anxiety about performance when starting their first job. Main challenge during this phase is managing anxiety of diagnosing and treating patient. Discusses the "Imposter Phenomenon" which is a sense of being fully trained and qualified for the job while simultaneously experiencing feelings of inadequacy. Found to be the most difficult transition <u>Meeting the Challenge</u> : Developing strategies to become more efficient, increasing patient load and becoming more efficient/independent <u>Broadening Perspective</u> : Increase in confidence and ability to take on more challenges
Flinter, M	2011	From new nurse practitioner to primary care provider: Bridging the transition through FGHC-Based residency training	In reference to new NPs: "Their challenges included caring for a totally new panel of patients representing an enormous range of health condition and needs that often-included problems of behavioral health, substance abuse, low health literacy, and lack of access to specialists." The structure of residency developed included mentorship, intensive orientation, precepted clinics, organized didactics, and graduated clinical responsibilities High retention rates in federally qualified primary care health centers
Sargent, L Olmedo, M	2013	Meeting the needs of new-graduate nurse practitioners: A model to support transition	NP residencies improved retention rates, satisfaction, clinical skills, communication, and ability to organize and prioritize work Only 10% of new-graduate NPs feel "well prepared" immediately following graduation of their programs Length of patient visits are concerning to new-graduates who naturally developed skills and efficiency with repetition
Hart, A Bowen, A	2016	New nurse practitioners' perceptions of preparedness for and transition into practice	Survey of 698 practicing NPs assessing perceptions of preparedness Majority reported feeling generally or somewhat prepared for practice Mentoring and orientation identified as important in transition to practice
Faraz, A	2016	Novice nurse practitioner workforce transition and turnover intention in primary care	NPs requesting standardized educational opportunities RN experience does not correlate to feeling prepared or competent as an NP Discusses the importance of mentorship and a clearly defined role with a sense of meaning NPs require clinical support and additional time to see patients and document as they begin to make independent clinical decisions Feeling rushed can lead to burnout
Will, K Williams, J Hilton, G Wilson, L Geyer, H	2016	Perceived efficacy and utility of postgraduate physician assistant training programs	95% of PAs who completed a postgraduate training program recommended completing a similar program as they felt it increased competitiveness and reimbursement, decreased onboarding time, and generally enhanced their careers Raises concerns that the postgraduate training program promotes specialization, decreases professional flexibility, and limits scope of practice
Schofield, D McComiskey, C	2015	Postgraduate nurse practitioner critical care fellowship: Design, implementation and outcomes at a tertiary medical care center	New graduate NPs who did not feel prepared to practice resulted in resignations and terminations, affecting retention Onboarding and orientation processes decreased turnover 87% of NPs stated that they would have benefited from a postgraduate residency program 51% of NPs reported they were only minimally prepared for transition to practice
Bush, C Lowery, B	2016	Postgraduate nurse practitioner education: Impact on job satisfaction	Postgraduate education has a statistically significant impact on job satisfaction, thus enhancing retention Support from mentors after graduation is fundamental for an effective transition from novice to expert Formal clinical support from an experienced clinician helps new NPs adjust to the role, promotes autonomy and supports productivity Factors influencing autonomy contribute to work satisfaction
Wiltse Nicely, K Fairman, J	2015	Postgraduate nurse practitioner residency programs: Supporting transition to practice	Recognizes need for support in the transition to practice period, but raises concerns that a mandated system may add regulatory hurdles to practice Identifies patient outcomes as a necessary metric by which to measure the success of postgraduate AP programs

Heitz, L Steiner, S Burman, M	2004	RN to FNP: A qualitative study of role transition	Highlights intrinsic and extrinsic factors affecting NP students that continue into the first year of practice Factors include lack of personal time, role confusion, increasing confidence with time in the NP role and feelings of isolation Found increased role confusion for NPs who had worked as an RN and continued to work as a RN during their NP program
Hoff, T Carabetta, S Collinson, G	2017	Satisfaction, burnout, and turnover among nurse practitioners and physician assistants: A review of the empirical literature	The literature is dominated by discussion of satisfaction instead of assessing rates of burnout and stress Literature lacking in rigorous evaluation of psychological states of APs Intrinsic factors such as perception of respect and autonomy generally valued higher than extrinsic factors APs are more likely to report stress than physician counterparts, and experience both positive and negative feelings because of job expansion
Sullivan-Bentz, M Humbert, J Cragg, B	2010	Supporting primary health care nurse practitioners' transition to practice	Familiarity of colleagues and employers with the NP role is an important element in transition to practice A supportive environment and realistic professional expectations can positively influence the transition NPs described greater confidence by the end of their first year of practice. NPs evolve from feeling overwhelmed to confident Mentorship by a colleague during first year of practice had a positive effect on transition to new role
Martsof, G Nguyen, P Freund, D Pohhosyan, L	2017	What we know about postgraduate nurse practitioner residencies and fellowship programs	Fellowships are mostly offered by large healthcare systems and tend to focus on specialty care Studies have cited important characteristics of successful NP residencies and fellowships including communication with preceptors and consistent mentoring



Figure 1: New AP Successful Transition to Practice.

begin practicing with a moderate case load naturally improved in efficiency as their confidence and competency improved with repetition [17]. Without ample time to see patients and document, new graduate APs felt rushed and therefore unable to build their skills and confidence [18]. New graduate NPs remained at work longer to complete tasks such as answering phone calls and completing documentation. This cut into personal time and ability to recover during off work hours [14].

Pillar II: Professional Mentorship: Another area of concern in the transition from student to provider is the “imposter phenomenon,” explored at length by Brown and Olshansky [19]. They identified four categories within the process of new graduate professional development. The first category “laying the foundation” occurs between graduation and beginning the new NP position. The next category “launching” is the process of beginning clinical practice in the new primary care role. Subcategory concepts during this phase include “feeling like an imposter, confronting anxiety, getting through the day and battling time.” Here, new NPs identified feelings of dissonance between expectations of competence tied to their professional credentials and insecurity related to their lack of experience [19]. To adequately support new APs during this time and facilitate a strong sense of role identity, mentorship from a more experienced provider is beneficial [20]. Flinter and Faraz respectively identified the importance of professional mentorship in developing a clearly defined role as an AP with a sense of meaning [5,18].

Pillar III: Guidance and Supervision from Clinical Educators: Beyond the professional mentorship needed to transition from student to provider, there is clinical guidance needed to facilitate the transition from novice to expert [21]. New graduate APs may feel uncomfortable interrupting other providers whom they perceive as busy to ask for clinical guidance in a difficult case [22]. Formal clinical support from an experienced AP helps new NPs adjust to the role, promotes autonomy, and supports productivity [21]. Increased autonomy is an important intrinsic factor associated with job satisfaction [8]. While Flinter’s program was able to provide a designated preceptor for NP residents [5], other practices without this support should ensure new graduate APs have some similar opportunity for clinical guidance [23].

Pillar IV: Enhanced Educational Opportunities: As a category, the literature shows that advanced education improves the transition to practice, increases job satisfaction and enhances professional status [4,24]. A didactic component of new graduate education is a recurring theme in review of AP residencies and fellowships [22,5]. However, the literature is fairly limited in reference to ongoing educational opportunities outside formal postgraduate educational programs. Considering only an estimated 10% of new graduate NPs perceive themselves as “well prepared” for practice [17], this is determined to be the 4th crucial component in successful transition to practice for new graduate APs.

Discussion

Pillar I: Graduated Clinical Responsibility: A typical daily caseloads for behavioral health providers varies depending on several factors such as clinical setting, acuity of the population being served, model for compensation, etc. The Atrium Health AP Behavioral Health Fellowship program implemented a gradual approach that allows time for new providers to fine tune clinical practice within their new work environment, while allotting a comfortable amount of time to spend with each patient. While AP educational programs focus on ensuring students graduate with the clinical knowledge necessary to practice, the application of this knowledge as independent providers in the clinical setting can require a period of adjustment [18].

A common argument against hiring newly graduated APs is the initial decline in revenue as new providers cannot typically enter a clinical practice successfully while carrying a full caseload. Burdening new APs with high patient caseloads can offer short-term financial gain,

especially considering the cost of recruitment. However, an overly demanding schedule is a common contributor to NP burnout [22]. Ultimately, burnout can lead to a small percentage of APs leaving the field entirely [25]. Practices can prioritize AP retention by ensuring newly hired APs feel supported as they grow in skill and efficiency.

Pillar II: Professional Mentorship: With the sense of uncertainty and insecurity experienced by many APs when they finish their graduate program [26], taking on the clinical and professional expectations can certainly be a challenge. The knowledge base and training provided in AP educational programs propels APs into an expanded scope of practice unlike any previous role they had held, even if they were previously employed in a healthcare setting. For instance, NPs with nursing experience do not report an easier transition to the AP role than do NPs who were not previously employed as nurses [2]. The *Imposter Phenomenon* highlights the concept of new NPs feeling unqualified and incompetent to function in their newly assumed role [27]. There are also extrinsic factors such as the culture, familiarity, and acceptance of the AP role that can impact the ability of the new provider to successfully assimilate and become part of the healthcare team [28]. Inevitably, most APs face some barriers in this role transition, whether internal or external. Stress and anxiety levels in the transition phase are highly dependent on how successful the new AP is at coping with these specific challenges [29].

A seasoned AP acting as a mentor can add perspective and provide guidance for the new AP during the transition phase to help alleviate some of these expected anxieties [21,28]. The Atrium Health AP Behavioral Health Fellowship program is structured to pair an experienced AP or “Clinical Director” with a new graduate AP or “Fellow.” The Clinical Director acts as a mentor for the Fellow and the pair meet regularly to discuss any concerns or issues the Fellow may be facing as a new clinical provider. Partnership of new graduate APs and experienced AP mentors may be easier to achieve in larger healthcare systems due to the increased availability of potential mentors, but collaborative relationships with other healthcare practices could be a potential opportunity to help new APs identify mentors.

Pillar III: Guidance and Supervision from Clinical Educators: In the context of this transition to practice model, clinical supervision is broadly defined as the ability for new graduate APs to collaborate with one or more experienced providers regarding patient care. These collaborating providers provide another layer of support that can be utilized with variable frequency as the new AP gains confidence with time and experience. In these relationships, both new graduate APs and the seasoned provider report AP reliance on this assistance decreases significantly over time [28].

The Atrium Health Fellowship program typically pairs one Fellow with one experienced provider for each rotation of the clinical portion of the Fellowship. The relationship serves to provide supervision and collaboration to strengthen the Fellow’s confidence in patient care. The experienced provider is available to the Fellow to answer clinical questions. To offset the time and energy allocated to the Fellow, and to minimize the burden on the experienced provider, the Fellow shares the patient caseload with the experienced provider. Ultimately, this is an investment in new AP transition to practice to maximize the productivity, competence, and satisfaction of APs entering the workforce.

Pillar IV: Enhanced Educational Opportunities: As discussed previously, Behavioral Health NPs and PAs have varying degrees of training in the behavioral health setting. While specialty trained NPs have more behavioral health training than PAs, this training is still significantly less than their physician counterparts [12]. For healthcare providers, regardless of discipline and training, the commitment to learning and enhancing knowledge is essential to maintaining competence. This is even more crucial for APs in the early stages of their careers due to the learning curve encountered when APs enter their role as new healthcare providers [19].

Enhanced educational opportunities, defined as any professional learning activity intended to enhance the knowledge of a provider, can come in a variety of forms depending on resources available. In the Atrium Health AP Behavioral Health Fellowship, weekly didactic experiences are led by a wide range of clinical providers in various subdisciplines. Fellows are provided with diverse and clinically relevant education on advanced topics meant to build upon what was taught in their formal educational programs. In a less structured environment, leveraging both formal and informal opportunities through technology and virtual platforms is often a cost effective and accessible mode of educational delivery to decrease cost and other barriers to access.

Conclusions

There is a shortage of psychiatrists in the workforce [1], and an increase in the demand for behavioral health providers across the lifespan [30]. APs can help bridge the gap between this behavioral health provider supply and treatment demand [29]. The literature presented in this article highlights evidence that points to the need for a responsible transition to practice model. Such a model is necessary to provide new graduate APs with the tools they need to be satisfied and successful behavioral health providers. Successful transition to practice promotes provider recruitment and retention, which is crucial for building and maintaining a strong behavioral health workforce in the face of the growing demand for high quality behavioral healthcare. A direct link between improved transition to practice and patient outcomes has not yet been studied and identified [31], but this does warrant further investigation.

In review of the literature, four essential components were identified in a successful transition to practice for new graduate APs. The first pillar, graduated clinical responsibility, allows new graduate APs to systematically build up a caseload of patients with increasing efficiency and comfort over the first year of practice. This reduces the pressure and expectation on the new AP to see high numbers of complex patients, which can result in burnout and high turnover rates. The second pillar, professional mentorship, emphasizes the need to support a new graduate AP beyond just clinical knowledge during the transition into a new and unfamiliar role. Professional mentorship improves job satisfaction [21]. Improved job satisfaction decreases burnout and promotes provider retention [8]. Guidance and supervision from experienced clinicians, the third pillar, identifies the benefits of collaborative patient care achieved by allowing the AP to draw on the expertise of seasoned providers. Enhanced educational opportunities, the final pillar, highlights the importance of providing the AP with continued exposure to evidence based information as he/she builds upon the knowledge obtained from the graduate program. Overall, the literature indicates the importance of the transition to practice experience, and these four pillars are felt to be critical in promoting the success of new graduate APs as they transition out of their graduate programs into clinical practice.

References

1. Carlat D. 45,000 More psychiatrists, anyone. *Psychiatric Times*. 2010; 27:8.
2. Barnes H. Exploring the factors that influence nurse practitioner role transition. *J Nurse Pract*. 2015; 12:178-183.
3. Anderson C. *Healthcare Finance*. 2012.
4. Boyar K. As the country prepares to see changes in healthcare, there may be a shift in how NPs enter the workforce.
5. Flinter M. From new nurse practitioner to primary care provider: Bridging the transition through FQHC-based residency training. *Online J Issues Nurs* 2011; 17:6.
6. Nurse practitioner fellowship and residency programs. *Residency Programs for Nurse Practitioners*. 2017.
7. Providers in demand: North Carolina's primary care and specialty supply. 2007.
8. Hoff T, Carabetta S, Collinson G. Satisfaction, burnout, and turnover among nurse practitioners and physician assistants: A review of the empirical literature. *Medical Care Research and Review*. 2017; 2:1-29.
9. Taylor D, Broyhill B, Burriss A, Wilcox M. A strategic approach for developing an advanced practice workforce. *Journal of Nurse Educ Pract*. 2017; 8:5.
10. Coplan B, Cawley J, Stoehr J. Physician assistants in primary care: Trends and characteristics. *Ann Fam Med*. 2013; 11:75-79.
11. A psychiatrist's toolkit: Supervising NPs and PAs. North Carolina Psychiatric Association. 2016.
12. Psychiatric mental health nurse practitioner (across the lifespan) certification (PMHNP-BC): American Nurses Credentialing Center.
13. Hart A, Macnee D. How well are nurse practitioners prepared for practice Results of a 2004 questionnaire study. *J Am Acad Nurse Pract*. 2007; 19:35-42.
14. Morgan H, Edmonds M. An academic based nurse practitioner transition to practice program. *J Medic Educ Training*. 2017; 1:028.
15. The future of nursing. Institute of Medicine. 2010.
16. Martsolf G, Nguyen P, Freund D, Poghosyan L. What we know about postgraduate nurse practitioner residency and fellowship programs. *JNP*. 2017; 13:482-487.
17. Sargent L, Olmedo M. Meeting the needs of new-graduate nurse practitioners: A Model to Support Transition. *JONA*. 2013; 43:603-610.
18. Faraz, A. Novice nurse practitioner workforce transition and turnover intention in primary care. *J Am Assoc Nurse Pract*. 2017; 29:26-34.
19. Brown M, Olshansky E. From limbo to legitimacy: A theoretical model of the transition to the primary care nurse practitioner role. *Nurs Res*. 1997; 46:46-51.
20. Twine N. The first year as a nurse practitioner: An integrative literature review of the transition experience. *J Nurs Educ Pract*. 2018; 8:54-62.
21. Bush C, Lowery B. Postgraduate nurse practitioner education: Impact on job satisfaction. *J Nurse Pract*. 2016; 12:226-234.
22. Norwick R. Family nurse practitioner residency for recruiting and retention. *J Nurse Pract*. 2016; 12:e231-233.
23. Hart A, Bowen A. New nurse practitioners' perceptions of preparedness for and transition into practice. *J Nure Pract*. 2016; 12:545-552.
24. Will K, Williams J, Hilton G, Wilson L, Geyer H. Perceived efficacy and utility of postgraduate physician assistant training programs. *J Am Acad Physician Assist*. 2016; 29:46-48.
25. Demit D, Fitzpatrick J, McNulty R. Nurse practitioners' job satisfaction and intent to leave current positions, the nursing profession, and the nurse practitioner role as Geospatial Study of Psychiatric Mental Health-Advanced Practice Registered Nurses (PMH-APRNs) in the United States a direct care provider. *J Am Acad Nurse Pract*. 2010; 76:3-31.
26. Heitz L, Steiner S, Burman M. RN to FNP: A qualitative study of role transition. *J Nurs Educ*. 2004; 43:416-420.
27. Burke M. RN to NP role transition. *Advance Healthcare for Nurses*. Online, Published Nov 17, 2015. 2017; 65:607-614.
28. Sullivan-Bentz M, Humbert J, Cragg B, Legault F, Laflamme C, Bailey P, et al. Supporting primary health care nurse practitioners' transition to practice. *Canadian Family Physician*. 2010; 56:1176-82.
29. Schofield D, McComiskey C. Postgraduate nurse practitioner critical care fellowship: Design, implementation, and outcomes at a tertiary medical center. *JNP*. 2015; 11: 19-26.
30. Ghosh D, Sterns A, Drew B, Hamera E. Geospatial study of psychiatric mental health-advanced practice registered nurses (PMH-APRNs) in the United States. *Psychiatr Serv*. 2011; 62:1506-1509.
31. Wiltse Nicely K, Fairman J. Postgraduate nurse practitioner residency programs: Supporting transition to practice. *Acad Med*. 2015; 90:707-709.

-
32. Harris C. Bridging the gap between acute care nurse practitioner education and practice: The need for postgraduate residency programs. *J Nurse Pract.* 2014; 10:331–336.
 33. Bahouth M, Ackerman M, Ellis E, Fuchs J, McComiskey, Stewart E, et al. Centralized resources for nurse practitioners: Common early experiences among leaders of six large health systems. *J Am Assoc Nurse Pract.* 2013; 25:203-212.
 34. Waldrop J. Clarifying residencies and fellowships in nursing. *J Nurse Pract.* 2016; 12:A14.