DESIGN OF A PRIMARY CARE ADVANCED PRACTICE NURSING FELLOWSHIP

by

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DEDICATION

I would like to dedicate this paper to the current and future nurse practitioners. Your demanding work and dedication to this profession deserve all the support possible. I would also like to dedicate this paper to my husband, Peter Weber, for his support during my education. Lastly, I will dedicate this paper to my parents for their never-ending motivation and encouragement through every step of my life, especially graduate school.

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ABSTRACT

New graduate nurse practitioners (NPs) can find the transition between student and independent practitioner to be difficult. Residency and fellowship programs are becoming a popular option to help support NPs with this transition. The Institute of Medicine has called for support through residency and fellowship programs. These programs have shown positive outcomes including increased job satisfaction, retention, positive patient outcomes, and increased interprofessional collaboration. A hospital located in the northwestern United States is struggling with NP satisfaction and retention. Purpose: A graduate scholarly project was initiated to design a fellowship for NPs in the primary care setting in response to this problem. Methods: The American Nurses Credentialing Center Standards, National Nurse Practitioner Residency and Fellowship Training Consortium Standards, a current program at the Carolinas HealthCare System, and the National Organization of Nurse Practitioner Faculties Competency areas was used as a foundation to the design. Guidance used was Benner's Novice to Expert Theory. Results: A twelve-month program was designed that includes didactic learning sessions, primary care clinical experience, specialty area clinical experience, interprofessional teamwork, and structured evaluation. Intended outcomes of the project for the sponsoring organization are 1) retention of NPs for twelve months after completion of the program and 2) increased employee satisfaction. The graduate nursing student concluded that more input from current programs and increased participation from the sponsoring organization would have made this project more successful. Further research into the best practice for evaluation tools for personnel and participants in these types of programs would also strengthen the design. Foundation based on current accreditation standards helps to strengthen this design.

CHAPTER ONE – INTRODUCTION

Background

Disciplines including medical doctors, physical therapists, pharmacists, and baccalaureate prepared nurses all have the opportunity or are required to participate in residency programs prior to entering the workforce. Residency programs have been shown to bolster self-esteem, job satisfaction, and increase employee retention (Sargent & Olmedo, 2013). New graduate NPs have reported feelings of inadequacy when assuming clinical responsibilities, including role isolation, role ambiguity, and unclear expectations during the orientation period, which makes the transition to practice more difficult (Faraz, 2017; Sargent & Olmedo, 2013). Although studies have shown that NPs provide safe, quality care without postgraduate training, the additional support provided by residency or fellowship programs can help to ensure a timely, successful transition out of the novice role and enable NPs to better handle the demands of complex patient care (Bush, 2014).

NP educational programs are directed by competencies set forth by the National Task Force on Quality Nurse Practitioner Education as well as competencies developed by the National Organization of Nurse Practitioner Faculties (NONPF). Research has found that these competencies are generally too broad and difficult to measure which has led to a lack of standardization in NP programs (Hart & Macnee, 2007).

Substantial research has been conducted in the area of transition to practice for NPs and the potential negative consequences, including increased turnover and decreased

satisfaction, of organizations who fail to support this transition (Barnes, 2015; Faraz, 2017; Flinter, 2005; Harrington, 2011; Harris, 2014; Hart & Macnee, 2007; Hill & Sawatzky, 2011; Sargent & Olmedo, 2013; Sullivan-Bentz et al., 2010). This research has culminated in the development and introduction of formal postgraduate training for NPs across the United States.

The Institute of Medicine (IOM) released the Future of Nursing Report (2010), which called for state boards of nursing, accrediting bodies, the federal government, and health care organizations to support nurses' in their transition to practice after completion of an educational degree. This report also proposed these programs be funded through the Health Resources and Services Administration (HRSA) and the Center for Medicare and Medicaid Services in a similar fashion to physician residency programs. The report stated that residencies would increase competencies of all levels of nursing and improve patient outcomes (Institute of Medicine, 2010). More opportunities for new graduate NPs to participate in formal postgraduate training would help improve the transition into practice for new practitioners. The purpose of this project is to 1) outline the need and best practice for a transition program utilizing current best evidence in combination with accrediting organization's standards and 2) propose a design for a primary care APRN fellowship program.

Significance

The U.S. Department of Health and Human Services Health Resources and Service Administration (2016) predicts the primary care physician shortage to reach

20,400 by the year 2020. The HRSA also indicates the supply of primary care NPs is set to increase by 30% from 2010 to 2020 and that this increased supply could partially dull the effects of the physician shortage (2010).

As of February 2017, there were 102 transition-to-practice programs for advanced practice providers in 31 states (graduatenursingEDU.org, 2017). These programs are referred to by many different titles, including transition-to-practice, residency, and fellowship programs. Montana is one of the states that has no postgraduate programs available for NPs.

A large level II trauma center located in south-central Montana serves a vast region covering much of Montana, northern Wyoming, and the western Dakotas. Personal discussions with the current advanced practice registered nurses (APRN) Council revealed that NP recruitment and retention within the primary care department is a challenge. Concerns have also been brought up surrounding the orientation process at this center for NPs. Currently, there is no general orientation program for NPs and each department handles new employee orientation differently. Currently, orientation has no specific program to follow and includes no dedicated mentor. A lack of structured orientation could have an impact on the high turnover rates for NPs and a high number of vacancies in NP positions, especially in primary care.

Purpose Statement

This author approached the APRN Council about the potential design and use of an APRN fellowship program after discussion about difficulty recruiting and retaining

APRNs within a hospital located in the rural northern United States. The APRN Council approved this author to work on the design of a fellowship program to be utilized in the primary care setting at this center.

Based on discussions with the APRN Council and review of literature, two main outcomes are desired from the initiation of a primary care fellowship program: 1) retention of NPs for at least 12 months after completion of the fellowship and 2) increased employee satisfaction.

The purpose of this project is to research current postgraduate training programs, review the literature of best practices for postgraduate training, and propose a design for a fellowship program to be used in the primary care setting for new graduate NPs in this hospital.

CHAPTER TWO – REVIEW OF LITERATURE

Introduction

Included in this section is a review of the current best evidence surrounding the need for advanced practice nurse fellowship programs, barriers to implementation, along with desired outcomes.

Search Methods

Databases

A literature search was conducted through several databases including CINAHL Complete, PUBMED, Google Scholar and Web of Science. Limitations were set on the years of publication from 2000–2018. A total of 84 articles were read with 33 included. Inclusion criteria were based on whether the article discussed the NP transition versus registered nurse (RN), discussed the practice of primary care and role transition from RN to NP. Articles were excluded that discussed specialty residency programs or focused specifically on the transition on new graduate RNs.

MESH Terms

MESH terms used in the literature search included: nurse practitioner residency; nurse practitioner fellowship; advanced practice nurse residency; advance practice nurse fellowship; postgraduate education; postgraduate training; nurse practitioner orientation; nurse practitioner mentoring; nurse practitioner turnover intention, and nurse practitioner transition.

Evidence Reviewed

Nurse Practitioner Preparedness

Surveys from practicing NPs have supported a lack of reported preparedness from new graduates. A hallmark study done by Hart and Macnee (2007) analyzed a survey completed by 562 NPs about perceived level of preparation for practice. Results from the survey showed that 51% of the sample reported that they only felt somewhat or minimally prepared for practice following completion of their basic NP education. Results further showed that 38% reported feeling generally well prepared and 10% reported feeling very well prepared. Those that reported feeling very well prepared had more overall years of practice as an RN prior to NP education, were educated in a specialty program, such as acute care or pediatrics, and did not receive distance or internet courses. Hart and Macnee (2007) also surveyed the NPs about the time from graduation to perceived feeling of competence. The survey demonstrated that those who felt well prepared immediately following education reported a shorter duration of time to feel competent in their care provided (Hart & Macnee, 2007).

A survey of 159 practicing NPs evaluated their experience of their first year of practice and attitudes toward residency programs (MacKay, Glynn, McVey, & Rissmiller, 2017). Results from this study revealed that 50% of the survey respondents reported that their first year of practice was difficult and they felt unprepared. A majority (85%) of survey respondents also reported that residency programs would be beneficial for future practitioners. NPs who responded reported gaps in both clinical skills and knowledge following graduation. Eighty percent of the respondents reported they would

have been interested in a residency program (MacKay et al., 2017). Another study completed by Jones, Kotthoff-Burrell, Kass-Wolff, and Brownrigg (2015) revealed that new graduate NPs did not feel prepared to care for older adults and suggested that a postgraduate training program or residency program would have been beneficial to gain more experience with this complex population.

Another survey of primary care NPs found that NPs stated they would benefit from more clinical experience prior to starting a job post-graduation (Jones, Kotthoff-Burrell, Kass-Wolff & Brownrigg, 2015). Hart and Macnee (2007) also found that 87% of respondents from the survey said they would have been interested in a clinical residency program had one been available to them upon graduation.

Margaret Flinter was one of the first authors to publish about the need for residency programs for nurse practitioners. Flinter (2005) discusses that in her two decades in the clinical and executive roles, including recruiting and mentoring both physicians and NPs, she has concluded that NPs are at a severe disadvantage when entering practice. She states observations that NPs require at least one year of mentorship along with decreased panels of patients to feel confident to practice independently. NPs should enter practice as competent, equal members of the multidisciplinary care team. To achieve this, NPs "need practice-based training of a scope, duration, and focus that is better obtained in institutions in which care is delivered than in the educational institution in which the academic degree is earned" (Flinter, 2005, para 10).

The desire for further training is illuminated when you compare the number of clinical training hours prior to independent practice that medical doctors receive

compared to NPs. On average, physicians (MD and DO) complete 15,000–16,000 total clinical hours prior to independent practice between their education and residency. RNs receive an average of 450 clinical training hours in their undergraduate degree (associates and bachelors) and an average of 1,000 clinical training hours in their graduate education prior to independent practice (MidlevelU, 2017, National Council of State Boards of Nursing, n.d.). Currently, not all NP education programs require experience as an RN, so these hours are not accounted for in the comparison but should not be discounted. The addition of a year-long, full-time, formal postgraduate training program would help NPs gain additional clinical oversight before starting independent practice. Table 1 below compares the total number of clinical hours prior to independent practice between medical doctors and NPs from the data reviewed above.

Table 1. Physician versus NP Training Hours

NP	
Clinical hours-undergraduate education (associates and bachelors)	160–750
Clinical hours- graduate education (masters and doctorate)	500–1,500
Total	660–2,250
Medical Doctor	
Clinical hours- medical school	6,000
Clinical hours- required residency	9,000–10,000
Total	15,000–16,000

(MidLevelU, 2017, NCSBN, n.d.)

Postgraduate Training Outcomes

Literature reviewed surrounding outcomes of postgraduate training supported positive findings including increased clinical proficiency and job satisfaction. Journal entries from graduates of primary care NP residency programs were studied by Hart and

Flinter (2015) and found that graduates reported high levels of clinical proficiency, more interprofessional teamwork, increased understanding of community health and more confidence in their abilities to provide safe, quality care when compared to NPs who received no postgraduate education (Twine, 2017). Bush and Lowery (2016) conducted a study comparing job satisfaction between NPs who completed formal postgraduate education and those who did not. Results from the survey administered supported that postgraduate education had a positive impact on job satisfaction, even when years of experience and regulatory environment factors were accounted for (Bush & Lowery, 2016).

A fellowship for nurse practitioners in critical care reinforced the positive findings and showed that participants reported improved perception about readiness to practice, improved performance, improved decision making, decreased role confusion, and improved transition to independence after completion (Schofield & McComiskey, 2015). Evaluation of fellowship programs for NPs shows that benefits of the programs include quality patient outcomes, contributions to research, participation in quality improvement initiatives, professional growth opportunity for clinical staff, standardized training, decreased practice variation, contributions to evidence-based practice, positive financial impact to the practice, highly competent workforce and decreased orientation time (Cieslak, Calley & Clemens, 2016).

Retention of Nurse Practitioners

Transitioning to a new role can be a challenging time for the new. Experiences during this time can impact the decision to continue in that position. Faraz (2017)

reported results on a survey of 177 NPs that have been practicing for 3–12 months after graduating about intent to leave. Job satisfaction, individual characteristics, and role acquisition were found to be three major categories reported by respondents. When the results from each category were analyzed, role ambiguity and professional autonomy were the two factors found to be most predictive of turnover. Role ambiguity in the survey was described as a lack of clarity of the NP role as they are not a physician and no longer practicing in a familiar role as an RN. Professional autonomy in the survey is the adaption to an expanded scope of practice, which can be confusing and stressful to the novice NP (Faraz, 2017). Role confusion is further intensified due to the fact that new graduate nurse practitioners are commonly moving from the role of expert nurse to novice nurse practitioner. This dual identity can often lead to further role confusion and be a hurdle to the development of a professional identity (Duchscher, 2009). Norwick (2016) found that residency and fellowship programs help to increase recruitment and retention of NPs. A fellowship program for primary care NPs pioneered by Zapatka, Conelius, Edwards, Meyer & Brienza (2014) also supported increased retention of NPs.

Changes in the practice environment could have effects on the ability of organizations to retain NPs not fully prepared for independent practice. Trends in regulations coupled with increasing numbers of NPs entering the workforce suggest that the clinical responsibilities of NPs will broaden, practice autonomy will increase, and the primary responsibilities will increase in complexity (Martsolf, Nguyen, Freund, & Poghosyan, 2017). Several factors are responsible for the increasing complexity of the patient population of today including an astounding growth in the aging population, more

patients in sub-acute care treated in the outpatient settings and technological advances. Brown, Poppe, Kaminetzky, Wipf, and Fugate-Woods (2015) proposed that the current NP education is not adequately preparing the graduate for the increasing complexity of the primary care population.

Mentorship of the new NP plays an important role in proper training and retention of the NP. Flinter (2005) discusses how the mentorship of the new NP is often based on the skills and scope of a colleague who is not primarily responsible for the mentorship and may or may not have the proper training or even interest in mentoring. This is vastly different from the physician education and residency experience. Flinter (2005) goes on to argue that the basis of the NP role expands beyond the medical model to include holistic care of patients and the communities they serve. She concludes that to utilize NPs in the primary care setting to the full extent of their training and purpose, intensified education and training in the complexities of primary care patients needs to be a focus for NPs in a formal setting after graduation (Flinter, 2005).

Nurse Practitioner Training Program Consensus

In 2015, the National Nurse Practitioner Residency and Fellowship Training Consortium ([NNPRFTC], 2015) published Postgraduate Nurse Practitioner Training Program Accreditation Standards. These standards define the residency program as:

> A postgraduate training program for licensed advanced practice registered nurses (APRNs) that provides a minimum of one year of structured, intensive education and training in the service delivery setting that support the transition from the academic program and novice practitioner to clinical practice at the advanced level as a nurse practitioner in primary care or specialty areas. (p. 25).

Harper, McGuinness, and Johnson (2017) described NP residencies as "curriculum-based, educational experiences which should be accredited and tied to the achievement of defined competencies grounded in evidence-based practice" (p. 52). The Commission on Collegiate Nursing Education has established an APRN residency/fellowship task force to study residency/fellowship programs in the US and determine the necessity for the accreditation of transition to practice programs (American Association of Colleges of Nursing, n.d.).

NP residency/fellowship programs are a relatively new phenomenon with the first formal documented program for family nurse practitioners starting in 2007 at the Weitzman Center in Connecticut's Community Health Center, Inc. (Flinter, 2012). A consensus around regulation for design, length, desired outcomes, number of residents/fellows, and funding of these programs has not fully been achieved.

Program Curriculum

Brown et al. (2015) conducted a study to identify critical aspects that are needed in the design and execution of NP residency programs. The survey concluded with 152 recommendations after two round-table discussions with 52 NPs. Ultimately, the recommendations were narrowed down to five "must-haves" that include: 1) interprofessional training, 2) leadership/policy component, 3) quality improvement and scholarship dimension, 4) diagnostic skill honing and special skill readiness, and 5) dedicated mentorship and role development. All participants unanimously agreed that residency programs could not be implemented without motivated, trained, and compensated preceptors (Brown, Poppe, Kaminetzky, Wipf, & Fugate Woods, 2015).

Surveys of current NPs by MacKay et al. (2017) have also shed light on the desired components of postgraduate training programs. When asked which areas the respondents felt least prepared for practice, independent decision making, time management, complex care, prescribing, interdisciplinary communication, minor office procedures, and billing/coding were identified. An important finding from this portion of the survey was that respondents felt that although their programs were rigorous in the didactic portion of this, it was not adequate to prepare them for the clinical practice of these skills (MacKay et al., 2017).

Flinter and Hart (2016) conducted a qualitative analysis of residents' experiences during the residency. Common findings of weakness in primary care included managing the challenges of behavioral health, addiction, and trauma, managing acute and chronic pain, and assessing and responding to the impact of the social determinants of health. Factors including clinical and systemic complexity; poverty and low literacy; behavioral health and substance abuse issues; and the challenge of managing chronic pain, opioid use, and requests for controlled substances were also identified as challenges even from experienced practitioners in this program (Flinter & Hart, 2016).

Length of residency programs has more consensus at one year, although this length is still not uniformly adopted in all residency programs (graduatenursingEDU.org, 2017). Accreditation standards also dictate that a minimum of one year, full-time in the program is required (American Nurses Credentialing Center [ANCC], 2016, NNPRFTC, 2015).

Evaluation of Programs

While NP residency/fellowship programs have gained momentum, evaluation of such programs has been difficult. Competency measurements alone have been debated for their usefulness in evaluating these programs. Sciacca and Reville (2016) completed a systematic review of current evidence pertaining to evaluation of postgraduate training programs. The results showed that current evaluation methods use self-assessment, competency measures, mentoring, portfolio, simulation-based learning, and written evaluation. The authors recommend that the overall goal of such programs should be to educate capable practitioners. Concluding their research, the recommendation for evaluation of residency programs should be a portfolio including a capability tool, self-reflection, mentorship, and learning goals. The portfolio allows for real-time documentation of reflection and feedback, which permits the participants to personalize learning goals. Personalization of learning goals can lead to elevated levels of self-efficiency, which is a central characteristic of the capable practitioner (Sciacca & Reville, 2016). Evaluation standards are also put forth by accrediting agencies (ANCC, 2016, NNPRFTC, 2015).

Mentorship

Mentorship is often a large part of postgraduate training programs and has been shown to foster development of the NP role, promote autonomy, and enable the novice practitioner to provide quality care needed for clinical productivity (Hill & Sawatzky, 2011). In career development, mentorship plays a role in sponsorship for promotions, coaching, protecting from adverse situations, providing challenging assignments to foster

growth, increasing visibility and exposure, and promoting professional ethics (Harrington, 2011). A literature review done by Harrington (2011) concludes that the new graduate NPs will benefit from a mentoring relationship with an experienced NP and that this relationship can affect the four key domains of primary care practice: quality of care, productivity, job satisfaction, and longevity.

Accreditation Standards

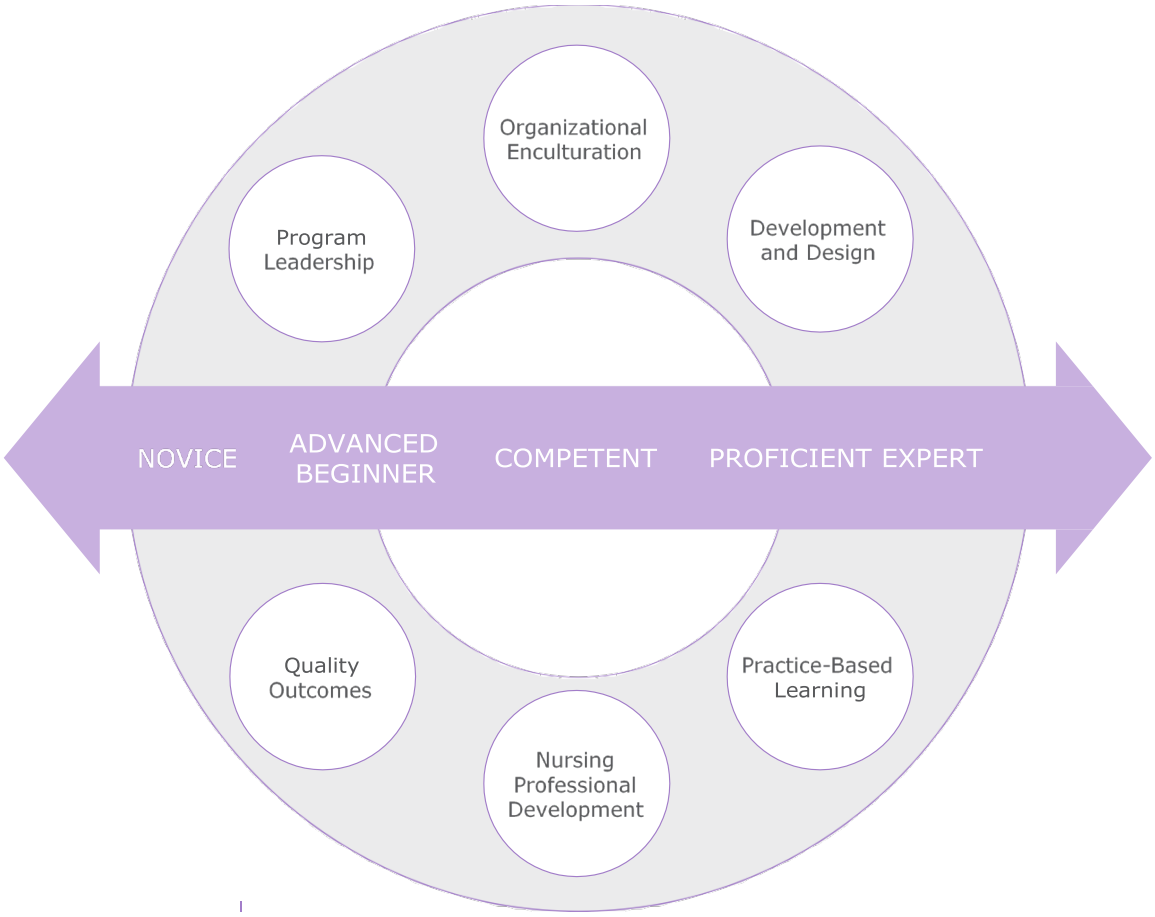
American Nurses Credentialing Center Standards

The Practice Transition Accreditation Program (PTAP) from the American Nurses Credential Center (ANCC) (2016) outlines a practice transition program based on Benner's Novice to Expert framework. A practice transition program is designed to support the transition from an educational environment to the practice setting. ANCC differentiates between three different PTAPs including a nurse residency, nurse fellowship and APRN fellowship. According to the ANCC (2016), an APRN fellowship is a "planned, comprehensive program through which currently licensed and certified APRNs can acquire the knowledge, skills, and professional behaviors necessary to deliver quality care that meets standards of practice defined by a professional society or association or the applicant organization" (p.5). The APRN fellowship must include practice-based experience and supplemental activities to promote nursing professional development.

The ANCC program criteria reflect six domains of practice and are outlined in the conceptual model in Figure 1. The first domain, program leadership, is defined by the

ANCC (2015) as the "provision of direction and guidance to the individuals involved in the process of assessing, planning, implementing, and evaluating activities in adherence to the ANCC PTAP criteria" (p. 4). The second domain, organizational enculturation, is the "process by which participants are assimilated into the culture, practices, and values of an organization or practice setting" (ANCC, 2015, p. 4). Development and design, the third domain, is the "process of determining infrastructure, process, and competency requirements to meet a program's defined objectives, requirements, and goals" (ANCC, 2015, p. 4). Practice-based learning is the fourth domain and is defined by the ANCC (2015) as "learning that takes place in the practice setting under the guidance of preceptors, mentors, or other experienced healthcare professionals, or a combination thereof, and promotes the process of investigating and evaluating healthcare practices in the context of best available evidence to continuously improve patient care delivery and patient health outcomes" (p.4). Nursing professional development, the fifth domain, is "the lifelong process of active participation by nurses in learning activities that assist in developing and maintaining their continuing competence and role performance, the ultimate outcomes of which are protection of the public and the provision of safe, quality care" (ANCC, 2015, p. 4). The last domain, quality outcomes, is defined by the ANCC (2015) as "measures of the overall impact of the program on the value/benefit to patients, clients, residents/fellows, and the organization or practice setting" (p. 4).

Figure 1. ANCC Conceptual Model. © American Nurses Credentialing Center. All rights reserved. Reproduced with permission by the American Nurses Credentialing Center.



The application manual for the PTAP from the ANCC (2016) outlines specific criteria that an APRN fellowship must meet to be eligible for accreditation including a self-study document addressing the program overview (PO) and program criteria (PC). The PO provides context for understanding the program and the organization and setting where the program takes place and is an essential component of the application process (ANCC, 2016). Specific components of the PO can be found in Appendix A. The PC focuses on the criteria of the PTAP and includes a narrative written by the applicant that

addresses each specific program criterion (ANCC, 2016). Specific components of the PC can be found in Appendix B.

National Nurse Practitioner Residency and Fellowship Training Consortium Standards

The National Nurse Practitioner Residency and Fellowship Training Consortium (NNPRFTC) (2015) is an accrediting agency that grew out of an informal network of new and maturing postgraduate NP training programs. The principal purpose of the agency is to accredit postgraduate NP training programs to help improve the healthcare system through the development and refinement of these programs. The NNPRFTC standards provide aspiring NP postgraduate training programs with the structure and content of the program as well as a method for the program and external stakeholders to validate the quality and rigor of the program. The standards set forth by the NNPRFTC will be used to help guide the design of the primary care APRN Fellowship program.

The NNPRFTC (2015) functions based on two assumptions. The first is that the preparation that NPs receive may be insufficient for the new NP to transition with confidence and competence into independent roles. The second is that NP preparation may also be insufficient for the NP to develop mastery of practice, which then lays the groundwork for sustained professional satisfaction. Based on these assumptions, the NNPRFTC developed eight core standards, displayed in Figure 2, each of which is comprised of elements that are to be used when developing and evaluating the structure of a program. The specific NNPRFTC curriculum requirements are displayed in Appendix C. These standards also serve to validate the quality and rigor of a program

once accreditation has been reached. These standards are maintained through a formal review process due to evolving NP practice and training.

Figure 2. Eight Core Standards of NNPRFTC. © National Nurse Practitioner Residency & Fellowship Training Consortium.

Eight Core Standards
Standard 1- Mission, Goals and Objectives
Standard 2- Curriculum
Standard 3- Evaluation
Standard 4- Program Eligibility
Standard 5- Administration
Standard 6- Operations
Standard 7- Staff
Standard 8- Postgraduate Trainee Services

The NNPRFTC (2015) further discusses the definition of each standard. The first standard pertaining to the mission, goals, and objectives states that the mission of the NP training program must be clear, concise, and communicate the essential components of the mission to the program staff, postgraduate trainees, and stakeholders. The mission should describe the purpose of the program, the reason to invest resources and energy, and the focus of the program which should remain over time even as individual components of the program change. The mission statement gives rise to goals which should also be clearly defined. The goals provide the NP program with direction and endpoints and may be broader. The NNPRFTC (2015) advises that the objectives and goals should change over time and serve as the cornerstone of the operation while providing context for the program evaluation.

Standard 2 discusses the program curriculum and is broken down to the elements, competency domains, and sub-competency domains. The NNPRFTC (2015) states that the curriculum of the program should build upon the comprehensive knowledge and skills gained through prior education. The curriculum expands on this knowledge through intensive and progressive clinical practice. It promotes a patient-centered, team-based approach to patient care and supports evidence-based practices, information, technology, and data. The curriculum should promote trainees as active learners who grow through experience and self-reflection on the process (NNPRFTC, 2015).

In Standard 3, the NNPRFTC (2015) outlines specific criteria for evaluation of the program, trainees, preceptors, and program staff. Evaluation is a critical part of delivering a high-quality program, and programs must be able to demonstrate established processes of the above-mentioned components. A strong evaluation not only allows for ongoing redesign of the program to maintain effectiveness but allows programs to compare outcomes with other organizations to help advance the field of postgraduate training (NNPRFTC, 2015).

The evaluation process must be clearly detailed and communicated with all relevant parties in advance of the program according to the NNPRFTC (2015) standards. Evaluation is to start at the beginning of the program year and should include a competency self-assessment by the trainees that continues through the on-boarding and initial training. Evaluations should include both formative and summative evaluations that may occur weekly, monthly, quarterly, semi-annually, and/or annually and should be completed using pre-determined tools. A bi-directional process of evaluation should be

used to evaluate all core components to identify strengths, weaknesses, and opportunities for improvement. From the evaluation, the NNPRFTC (2015) states that plans for improvement should be implemented with corrective intention and subsequent evaluation of those interventions.

Trainee evaluation must use an objective, systematic, cumulative process that is designed based on core elements, competency, and curriculum components (NNPRFTC, 2015). If any postgraduate trainee performance concerns arise, the NNPRFTC (2015) states that there must be a process to promptly identify and develop an improvement plan with measurable goals. Specific evaluations needed include postgraduate trainee competency self-assessment, postgraduate trainee evaluation of all core components (preceptors, didactic leaders), preceptor evaluation of postgraduate trainee, reflective self-assessment by the trainee of their experience, and a final program evaluation (NNPRFTC, 2015).

The NNPRFTC (2015) also states that evaluations should be done to assess the operational and financial impact of the program. Evaluation of the organization should be completed by a recommended residency advisory committee put together by the organization. This committee should advise and assist the program director with 1) developing a written mission statement that describes goals and objectives; 2) developing educational experiences; 3) providing new or emerging knowledge and skills to direct content; 4) reviewing sponsoring institution's internal review of the program; 5) reviewing confidential evaluations from the postgraduate trainees; 6) reviewing the director's evaluations of the trainees; and 7) reviewing faculty evaluations of the director

and program. The committee would ideally consist of external members, supervisors, at least one postgraduate trainee representative, and should include the program director as an ex-officio member (NNPRFTC, 2015).

Standard 4 from the NNPRTFC (2015) outlines program eligibility. To be eligible for accreditation, the program must be a minimum of twelve months and full-time within an appropriate health care delivery setting. Appropriate health care delivery settings include but are not limited to federally qualified health centers, nurse-managed health centers, other safety net settings such as Indian Health Service, Veterans Health Administration system, Integrated Health Systems, private clinic systems, and practices and academic health centers/medical centers, both public and private. The NNPRFTC (2015) indicates that the sponsoring organization must hold and maintain a current accreditation and/or certification by an entity that recognizes quality of care. Lastly, the program applicants must be graduates of an accredited NP program who have earned either a Master of Science in Nursing or Doctor of Nursing Practice, certified by either the American Nurses Credentialing Center or American Association of Nurse Practitioners, and be license eligible as an APRN in the state in which the program operates (NNPRFTC, 2015).

The NNPRFTC (2015) outlines administrative responsibilities of the program in Standard 5. Success of the program is linked to the support of a clearly identified single sponsoring organization. The program must have a defined mission and goals that are in alignment with the sponsoring organization. The sponsoring organization should be able to demonstrate availability of adequate resources and is of a size, scope, and depth to

either directly, or through formal affiliation, provide each of the core elements. The sponsoring organization should be able to assure the depth, breadth, and volume of training to meet the educational and training goals or program and trainees (NNPRFTC, 2015).

Standard 5 also outlines organizational responsibilities. The NNPRFTC (2015) states that the sponsoring organization is responsible for 1) ensuring the curriculum is planned, developed, and finalized prior to entry of first class and is subsequently evaluated and revised as needed; 2) coordination and documentation of all clinical experiences, including precepted clinics, didactic and learning experiences; 3) sufficient time and resources for administrative staff; 4) conducting program recruitment; 5) establishing a timeline for recruitment; 6) providing a formal written agreement of participation in the program with the fellow; 7)assuring trainees are provided with adequate salary and benefits defined by the organization and that is competitive with similar programs; and 8) assuring the environment of learning meets safety standards.

Barriers to Implementation

One of the main barriers organizations face when deciding to implement residency programs for advanced practice nurses is funding. Hospitals that train residents of any specialty incur costs that are above and beyond typical patient care. Funding for physician's graduate medical education during their residency training is partly offset through Medicare. Medicare helps pay teaching hospitals direct costs of physician residents, such as resident salary/stipend, supervising physician salary along with other

direct costs including educational space, administrative staff, and accreditation fees. Medicare also pays teaching hospitals an indirect medical education adjustment for each Medicare patient based on the hospital's ratio of residents-to-beds (Association of American Medical Colleges, 2013). There is no equivalent form of funding for advanced practice nurse residency programs so hospitals are left to pay for all the direct and indirect costs. The nations' current prioritization of graduate medical education funding makes increasing funding for nursing education difficult (Fitzgerald, Kantrowitz-Gordon, Katz, & Hirsch, 2012).

Limited availability of capable and willing preceptors for APRNs is another barrier to implementing residency programs for NPs. As discussed above, there is no available external funding for APRN postgraduate education. Capable preceptors must be willing to accept residents with no incentives other than serving the profession. Lack of incentive coupled with competition of preceptors for NP graduate students makes finding available supervising NPs, especially in underserved or rural areas, very difficult (Fitzgerald et al., 2012).

Discussion of barriers to implementation exists in the literature which supports the above findings and additional considerations (MacKay et al., 2017). Additional barriers from the literature included expansion of the NP expectations, increasing NP autonomy, lack of current NP input, variation in practice settings, and labeling of such programs. The authors also found that discussion of mandating residency programs sparked controversy as it might communicate that NPs are not prepared for practice and

undermine the rigorous educational programs and accreditation after graduation (MacKay et al., 2017).

Labeling of these programs has made data collection and regulation difficult. Wiltse Nicely and Fairman (2015) discuss the implications of naming and state that the term residency can cause confusion about readiness to practice after graduation. Residency traditionally defines a period of time required prior to practice, as with medical doctors, many nurses favor the term fellowship to help denote the optional nature after licensure (Wiltse, Nicely, & Fairman, 2015).

Desired Outcomes

The outcomes of postgraduate training programs have not been thoroughly discussed in the literature although, through evaluation of NNPRFTC accredited programs, three main outcomes have been identified by the NNPRFTC (2017): 1) predictable, progressive movement toward mastery, confidence, competence, and a sense of wellbeing, 2) statistically significant increase in NP residents self-assessment of competency, and 3) post-residency choice of, and retention in, careers as primary care providers.

The Veterans Health Administration piloted an NP residency program in Oregon with one NP in primary care. After completion of one year in the residency program, the resident continues to be employed with the organization and reports satisfaction with her job and the experience in the program (Goudreau et al., 2011). Successful implementation of NP residency programs has been demonstrated in retail clinics

partnered with major universities with feedback that these programs decreased turnover and increased retention (Thabault, Mylott, & Patterson, 2015).

CHAPTER THREE – THEORETICAL UNDERPINNING

Introduction

Patricia Benner's (1982) Novice to Expert theory is used to guide design of this program. This section contains a description of the theory, stages of theory, and rationale for its use in the project.

Theory

Patricia Benner's theory, Novice to Expert, is based on the Dreyfus model of skill acquisition and focuses on how nurses acquire nursing knowledge. The Dreyfus model states that during development of a new skill, one will pass through five distinct phases: novice, advanced-beginner, competent, proficient, and expert (Benner, 1982). Benner applied this model to nursing and proposes that nurses acquire the knowledge of nursing over time with an appropriate educational background and experience. Benner (1982) states that moving between levels reflects changes in two general aspects of performance. One aspect is the movement from reliance on abstract principles to the use of past, concrete experience. The second is a shift in viewing situations as a compilation of equally relevant bits to viewing situations as a complete whole, where only certain parts are relevant (Benner, 1982).

Benner (1982) describes novice nurses as those who have no experience with the situations they are expected to perform tasks in and often rely on context-free rules to guide practice. Since the novice nurse has no experience they cannot use discretionary

judgement to help them make decisions. Following rules leaves novices dependent on a task-driven practice that does not take into consideration priority of tasks (Benner, 1982).

Benner's (1982) model describes advanced-beginner's as those who practice to a marginally accepted level and can start to see recurring aspects of care from experience or direction from a mentor. Aspects refer to common, global attributes that require prior experience to discern. Although aspects are more advanced than the context-free rules of the novice stage, they still do not take into consideration priority of the aspects and still need clinical supervision in setting goals for patient care (Benner, 1982).

The competent nurse is described by Benner (1982) as one who typically has two to three years of experience and can start to see the long-term outcomes of the care they provide. Competent nurses lack the skill and flexibility of proficient nurses but start to feel mastery of subject and can cope with the contingencies of clinical nursing. Nurses at the competent level benefit from teaching that strengthens decision-making ability to plan and manage care for multiple, complex patients (Benner, 1982).

Proficient nurses begin to see the situation as a whole and are guided by maxims rather than aspects according to Benner (1982). Maxims arise from experience that teaches the proficient nurse what to expect in given situation and how to modify actions according to those situations. Proficient nurses can recognize when the normal presentation of a situation is absent and uses that holistic understanding to guide decision making. The proficient nurse is also able to distinguish which aspects are important to the situation and which ones are not. Proficient nurses are best taught through case studies where their ability to grasp the situation is tested (Benner, 1982).

Lastly, Benner (1982) describes the expert nurse as one who no longer relies on rules, aspect or maxims to guide care but rather bases actions on the large background of experience. Expert nurses can identify the critical region of the problem without wasting time working through all the possibilities of the situation. It is difficult to describe the actions of expert nurses as their decision are based on a deep understanding of the subject (Benner, 1982).

Rationale

Benner's theory describes concepts that are easy to understand and are readily generalized across differing practice settings and demographics (Masters, 2015). Benner's theory was based off another theory that described skill acquisition in multiple different professions and is thus demonstrated to maintain relevance in different professions (Benner, 1982). This project aims to design a fellowship program that will support the new NP transition from student to practitioner following the stages of Benner's model.

The concept of Benner's novice nurse can be applied to the new nurse practitioner. Guidance for the development of the curricula of the fellowship program will be drawn from Benner's (1982) description of the novice nurse and how they progress from novice to advanced-beginner. Opponents of residency/fellowship programs have argued that residency programs may give the perception that NPs are not ready for practice post-graduation (MacKay et al., 2017). Benner (1982) states that novice nurses have no experience with situations outside of academic context and require mentorship to

navigate through these experiences but does not imply that this makes them unprepared to practice.

Barnes (2015) analyzed factors that contribute to successful role transition from nurse to NP and found that a formal orientation was more predictive of a successful transition than years of experience as a nurse. In Benner's (1982) theory, novice nurses are reliant on experience from mentors or preceptors to navigate the situations presented to them in practice and effectively care for patients. This successful transition through mentorship from a more experienced practitioner in a postgraduate program can be applied to NPs.

Evaluation of the residents throughout the residency/fellowship is an aspect mandated for accreditation (ANCC, 2016, NNPRFTC, 2015). Standardized methods for evaluation has yet to be established but literature supports the use of self-evaluation, mentorship evaluation, portfolios, and capability rating (Sciacca & Reville, 2016). Benner's (1982) description of how each level of nurse perceives and responds to tasks and situations amends well to the evaluation process. NPs along with their preceptors can evaluate skills and preparedness on a common scale using the levels of novice to expert. Tools have been developed using Benner's theory to have residents self-evaluate skills to help guide learning experiences in a residency program with success (Sargent & Olmedo, 2013).

CHAPTER FOUR – FOUNDATION FOR DESIGN

Introduction

In addition to recommendations from the literature and guidance from theory and accreditation standards, design of the program will use current programs and NP core competencies to direct components of the design. This section will outline an example of a current residency program and NP core competencies that were used to guide the design of the APRN fellowship.

Current Program

Carolinas HealthCare Advanced Practice Fellowship

As of February 2017, there were 102 NP fellowship and residency programs. The largest program to date is at the Center for Advanced Practice at Carolinas HealthCare System in North Carolina (Nurse practitioner fellowship and residency programs, 2017). The Carolinas HealthCare System has fellowships in many specialties including primary care as a fellowship in family medicine. The Advanced Clinical Practitioner Family Medicine Fellowship at Carolinas HealthCare is designed to include both NPs and physician assistants (PAs) and prepare the advanced practitioner in comprehensive care for patients of all ages. The family medicine fellowship is a 12-month program developed by a team of healthcare professionals that addresses issues related to advanced practitioners' transition to practice.

The curriculum includes education on behavioral health and provides advanced didactic education with an introductory 3-week core curriculum, followed by an 11-month course of clinical experience, simulation training, case presentations, specialty rotations, and team learning discussions. The program structure is displayed in Table 2 below. The objective of the program is to have graduates perform with increased proficiency in the areas of preventive, emergent, acute, chronic, rehabilitative, palliative, and end-of-life patient care with developed expertise in behavioral health diagnoses that are commonly encountered in outpatient clinics (Carolinas HealthCare Systems, n.d.).

Table 2. Current Program Structure

Carolinas HealthCare System Advanced Practice Family Medicine Fellowship Structure
• 3-week core curriculum • 4.5 days per week in family practice clinical setting • 1 full week in medical specialty rotations every 6-8 weeks • ½ to 1 day in team learning discussions specifically focused on family practice topics

Fellows are required to rotate through behavioral health, occupational medicine, and radiology and can choose 4–5 other departments to experience (Cragin Greene, personal communication, December 4, 2017). The available medical specialty rotations are listed in Table 3. The program also includes team learning discussions designed to focus on topics frequently encountered in family medicine and are listed in Table 4 (Carolinas HealthCare Systems, n.d).

Table 3. Medical Specialty Rotations

Medical Specialty Rotation	
• Behavioral Health • Occupational Medicine • Radiology • Orthopedics • Ophthalmology • ENT • Urology • Gynecology	• Dermatology • Cardiology • Neurology • Mental Health and Substance Abuse • Pain Management

Table 4. Team Learning Discussion Topics

Team Learning Discussion Topics
• Behavioral Health • Diabetes • Hypertension • Sick Child • Nutrition • Allergy • Adolescent • Orthopedics/Sports

Cragin Greene, the PA director for the Carolinas Healthcare System Fellowship program, was interviewed by this author about the family medicine fellowship. Fellows at this organization are accepted for one start date per year. A number of fellows accepted are based on employment needs and this number is evaluated every six months for the following start date. NP and PA directors of each specialty track and overall program directors are paid above and beyond their salary, as are the preceptors in the program. To

offset this cost, the fellows are paid 70% of the current starting salary with a retention bonus after two years (Cragin Greene, personal communication, December 4, 2017).

Although employment after the fellowship ends is not required, the goal of the health care system is to retain the fellows as employees. Academic merit is the overall concern of the program, not to fill vacancies in positions. The program has seen a 76% retention rate in family medicine for the four years that it has been active. As academic merit is the basis of the program, evaluations are done comparing competencies of the fellows to national competencies for each specialty to evaluate overall success of the program. Fellows are evaluated at a minimum of once monthly, sometimes more depending on specialty rotations. Fellows also evaluate the program and preceptors at least once per month (Cragin Greene, personal communication, December 4, 2017).

Competencies

The National Organization of Nurse Practitioner Faculties (NONPF) Nurse Practitioner Core Competencies Content is the basis for competency development in the fellowship program. Although the competencies from the NONPF have received criticism for being too broad, the foundation of the NP education is built on these competencies, and as such, they lend themselves well to post-graduation continued learning (Hart & Macnee, 2007). The NONPF (2017) put forth nine core competency areas presented in Table 5 below. Specific competencies in each area are outlined in Appendix D.

Table 5. NONPF Competency Areas

National Organization of Nurse Practitioner Faculties Competency Areas
1. Scientific Foundation 2. Leadership 3. Quality 4. Practice Inquiry 5. Technology and Information Literacy 6. Policy 7. Health Delivery System 8. Ethics 9. Independent Practice

The NONPF (2017) curriculum content suggestions are not required in their entirety, nor is the list meant to be comprehensive. Continuing postgraduate development based on the competencies initiated in the higher education degree will help to strengthen NPs skills and knowledge to support transition into independent practice.

CHAPTER FIVE – FELLOWSHIP DESIGN

Introduction

This chapter outlines specific program components based on best evidence reviewed in previous chapters, national accreditation guidelines, nursing theory, and a current primary care fellowship.

Design

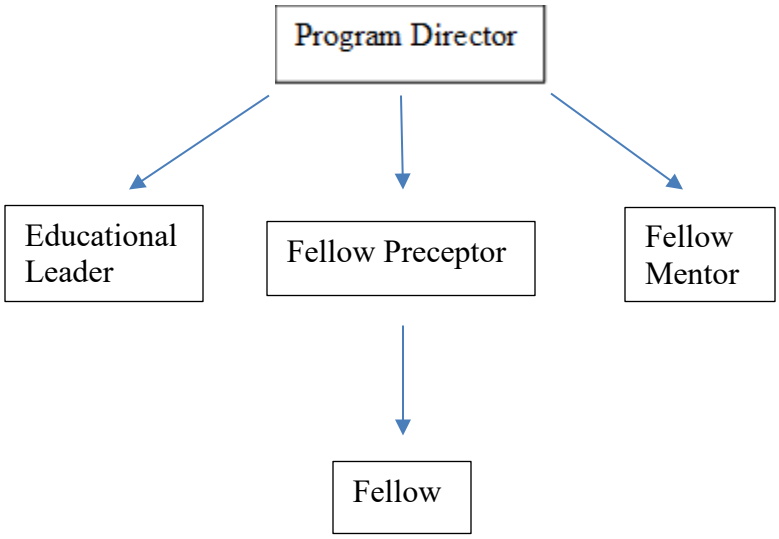
Executive Summary

The Primary Care Advanced Practice Nurse Fellowship is a 12-month long program that takes place at a rural hospital in the northern United States. This program is intended to build upon the foundation of a family nurse practitioner education. The program focuses on care across the lifespan and includes supervised clinical time in a primary care setting, diverse educational didactic sessions lead by experts, interdisciplinary team-building exercises, specialty clinic experiences, leadership development, and a fellow-led quality improvement project. Fellows will be granted placement based on employment needs and employed at the organization upon completion of the program. To be eligible for the program applicants must be graduates from an accredited advanced practice nurse practitioner program, hold a current unencumbered license in the program state, and FNP certification through ANCC or American Association of Nurse Practitioners.

The main program goal will be to show improvement in capability from the fellow throughout the program. Capability will be evaluated through formal evaluations from preceptors and the program director, self-directed goal development, specific clinical competency measures, and a portfolio that will be discussed in later sections. A secondary goal of the program is to provide support during the transition to independent practice evidenced by retention and employee satisfaction. The program will attain this goal using mentorship, preceptorship, and improved clinical competence.

Key personnel in the program will include the program director, fellow preceptors, fellow mentors, educational content leaders, and fellows. The organizational chart depicted in Figure 3 shows the chain of command for key personnel. Key stakeholders in the program include primary care department management and organizational medical leadership in addition to program personnel.

Figure 3. Organizational Chart for Key Personnel



Position Descriptions

The program director is an RN or APRN with a current unencumbered license who holds a graduate degree with either the baccalaureate or graduate degree in nursing and education or experience in adult learning based on the ANCC (2016) standards. The program director ensures that fellow's learning needs are met through monitoring fellow's evaluation results, key stakeholder feedback, and quality outcomes of the program. The program director is also responsible for ensuring that each individual participating in the program is appropriately oriented and trained to perform required tasks and evaluated regularly. The program director will advocate for necessary resources required to operationalize the program such as human, material, and financial resources. Any committee in the organization that intends to evaluate, monitor, or alter the program shall have representation from the program director or a designee determined by the program director.

Personnel who serve as preceptors for the fellows must be current, experienced employees of the organization with unencumbered licenses to practice in the organization's state. The preceptor must be able to practice at the level of the APRN or higher, such as an APRN, MD, or DO. The preceptor will serve as a professional role model for standard practice guidelines, assimilate the fellow to organizational culture, and advocate for fellow education. Preceptors will receive education from the program director on tools used for evaluation of the fellows and are responsible for evaluation of the fellow's progress. Preceptors are not required to have experience or education with

adult learning. Preceptors will be financially compensated above and beyond current salary.

The fellow is a graduate of an accredited nursing school with either a master's or doctoral degree as a family NP who holds an unencumbered license, APRN certification, and is participating in the fellowship program. Fellows will be responsible for evaluating preceptors, the program director, and the overall program. The fellows will assume responsibility for the implementation of a quality improvement project within the organization and creation of a portfolio with assistance from the program director upon completion of the program.

A mentor is an experienced APRN, preferably FNP, who has developed expertise in the nursing profession and can help to guide professional development and shape the identity of the fellow. The mentor is a voluntary position not compensated above and beyond salary in the organization. The mentor will not be responsible for formal evaluation of the fellow but can provide letters of reference that can be included in the portfolio. The mentor differs from the role of preceptor as the mentor will work with the fellow through the entire fellowship, where the role of preceptor will change when rotating through each specialty. The mentor serves as support for social integration into the organization and guidance for professional development where the preceptor serves mainly to develop clinical competence.

Educational leaders are individuals responsible for developing or delivering education to the fellows and will have at least one year of documented education or experience in adult education or have content expertise in the subject matter

demonstrated by at least five consecutive years of practice in the area of the subject. Individuals involved in delivering educational content will be evaluated by the program director and fellows on ability to present content effectively. Educational leaders will be current employees of the organization and will be compensated above and beyond salary if activities fall outside of current organizational responsibilities.

Organizational and Program Orientation

Orientation will start with an eight-day general organizational orientation that is currently in place at the intended hospital. This orientation consists of general introduction to the organizational culture, a tour of the facility, computer training, badge assignment, retirement savings information, and employee resources. After completion of the organizational orientation, fellows will participate in program orientation.

Program orientation will be one, eight-hour day. The session will include introductions to program staff, preceptors, and other fellows; an overview of the schedule for the program; the requirements for the portfolio; and expectations of each person's role during the program. Scope of practice-based on the APRN Consensus Workgroup put forth by the National Council of State Boards of Nursing (2008) will be reviewed during this orientation. The program orientation session will wrap up with making sure the fellow has access to their office and voicemail and has lab coats and business cards ordered through the organization.

Program Content

The program content was developed based on review of literature presented above and guided by Benner's (1982) From Novice to Expert theory and current programs. Fundamental components of the program curriculum include didactic educational sessions, precepted clinical experiences in specialty settings and the primary care setting, incorporation of mentorship, and an emphasis on quality improvement and interdisciplinary teamwork. Literature identified gaps in educational preparation that could be addressed during a post-graduation period: a desire for increased clinical time, advanced diagnostic skill honing, mentorship during transition to practice, interprofessional training, leadership, and quality improvement (Brown et al., 2015; Bush & Lowery, 2016; Faraz, 2017; Harper, McGuinness, & Johnson, 2017; Hart & Macnee, 2007).

The first fundamental component of the program content, didactic education, will help to address gaps in advanced diagnostic skills. Didactic sessions will cover specific content, skills, and procedures found in primary care and are guided specifically by Flinter's (2012) first NP residency program. Session topics included are presented in Table 6 below. Didactic education will be covered in a continuous session in a similar fashion to the three-week core curriculum that is completed at the Carolinas HealthCare System Advanced Practice Family Medicine Fellowship. Fellows will benefit from having the didactic experience before being introduced to the topic in practice. Having the didactic education prior to the start of clinical experience helps to ensure that fellows

are starting with the same information and helps to account for differences in prior education (Cragin Greene, personal communication, December 4, 2017).

Didactic session resources including presentation material and any equipment or supplies needed will be provided by the organization. Didactic sessions will be a mix of live presentations from educational leaders, computer-based training from the organization's educational library, and current hands-on simulation offered from the organization. Didactic sessions will be eligible for continuing education credits.

Table 6. Didactic Sessions

Didactic Sessions for the Primary Care Fellowship
1. Head-to-toe assessment
2. Contraception- Intrauterine devices; selection, insertion, and counseling
3. Contraception- methods and options
4. Pap smears: conduction and managing abnormal results
5. Sexually transmitted diseases: screening, assessment, treatment, and reporting
6. Managing neonatal jaundice and elevated bilirubin
7. Pediatric growth and development: screening, assessment, identification, and referral
8. Pediatric asthma assessment, diagnosis, management and patient education
9. Immunizations of children and adults
10. ADHD: screening, detection, assessment, treatment, patient education
11. Adult asthma assessment, diagnosis, management, and patient education
12. Pre-op physicals

Table 6 Continued

13. Orthopedics: upper and lower extremities and back
14. EKG Interpretation
15. Selecting, ordering, and interpreting laboratory tests
16. Suturing: simple closures
17. Initiating insulin in the diabetic patient
18. Initiating and managing anticoagulation therapy
19. Managing pain: pharmacologic and nonpharmacologic
20. Chronic heart failure assessment, diagnosis, management, and patient education
21. Chronic kidney failure assessment, diagnosis, management, and patient education
22. Chronic liver failure assessment, diagnosis, management, and patient education
23. Hepatitis C screening, assessment, management, and patient education
24. Geriatrics: assessment and management of common geriatric concerns
25. Managing menopause
26. Tobacco cessation; evidence-based interventions
27. Anxiety and depression screening, assessment, diagnosis, management, and patient education
28. Caring for patient with a history of trauma
29. Difficult conversations
30. Cultural sensitivity in health care

Adapted from Flinter (2012)

Precepted clinical time in the primary care setting and in specialty clinics is another fundamental piece of the program. This component will help to address the desire for increased clinical time. In addition to time spent in the primary care setting, fellows will complete one full-time week in eight specialty settings (320 hours) in the organization. Rotations are chosen by the fellow and options are presented in Table 7 below. This component of the program will also serve to help the fellow network within the organization and develop relationships for continued support after completion of the program and strengthen interdisciplinary teamwork.

Table 7. Specialty Setting Rotations

Specialty Setting Rotations
1. Behavioral Health 2. Radiology 3. Orthopedics 4. Ear, Nose, and Throat 5. Cardiology 6. Dermatology 7. Gynecology 8. Neurology 9. Gastroenterology 10. Palliative and Supportive Care 11. Urology 12. Geriatrics 13. Oncology 14. Pediatrics 15. Nephrology 16. Pulmonary

Clinical time not spent in the specialty clinics will be with the primary preceptor in the primary care setting. To help ensure adequate time for teaching and facilitate learning, the preceptor will have a decreased patient load when with the fellow. The

fellow will start with a patient panel 50% of the expected independent load and gradually increase patient volume during the program.

The next fundamental component of the program is mentorship. Each fellow will be paired with an experienced NP within the organization who will serve as their mentor. Dedicated time will be allotted in the mentor's and fellow's schedule for meetings throughout the program. Meetings should take place at least monthly for a minimum of one hour. There is no required structure for the mentorship meetings. Examples of topics that can be discussed include identity formation, stress-management, time-management skills, goal setting, case reviews, and professional development.

Quality improvement and interdisciplinary teamwork are the last fundamental pieces of the program. Fellows will be required to lead a quality improvement project to meet these objectives. Fellows will be required to include at least one other interdisciplinary professional in their project. The quality improvement project will be a project selected by the fellow and approved by the program director aimed at improvement within the organization. Examples of possible quality improvement projects include leading a grand rounds presentation, conducting a policy review and updating with best available evidence, or providing education to the multidisciplinary team. Each fellow will choose a project to be completed individually and will be presented at the completion of the program. The project can be presented in any format that the fellow and director decide upon, and there is no set minimum length. The presentation will be attended by the other fellows and the program director and will be open to other employees of the organization.

This project will serve the fellow in helping to achieve capability measures outlined in the portfolio in the following section. Quality improvement projects will help strengthen the fellow's ability to critically analyze data, take on a leadership role, foster a spirit of inquiry, and assimilate into organizational culture by forging relationships with other employees. Quality improvement projects will be included in the fellow's portfolio for final evaluation.

Interdisciplinary teamwork will be supported by the program in multiple ways in addition to the quality improvement project. Fellows will be required to attend at least four grand round presentations at the organization where educational topics are presented by different specialties. Fellows will also participate in a journal club that is already in place with the organization's physician residency program. Simulation experiences during the didactic sessions also include employees from diverse specialties. An example of a fellow schedule is displayed in Appendix E.

Evaluation

Evaluation of the overall program, the personnel, and fellows are a vital piece of the design. Evaluations help to contribute to research about best practice for these programs as well as guide standardization (Sciacca & Reville, 2016).

Preceptor Evaluation

The ANCC (2016) guidelines require that materials used for evaluation of the program personnel be provided but do not stipulate the frequency of these evaluations. Literature regarding recommendations of frequency and methods used to evaluate

program personnel is also lacking. The Carolinas HealthCare System Advanced Practice Family Medicine Fellowship has the fellows evaluate preceptors once monthly using a tool of their own design (Cragin Greene, personal communication, December 4, 2017). Evaluation of preceptors by the fellows will occur once monthly using a tool based on the role description of the preceptor. The evaluation tool used for fellow evaluation of the preceptor is displayed in Figure 4. This tool is designed based on evaluation criteria presented by the NONPF for preceptors during NP education (Dumas, 2015). The evaluation for the preceptor will be reviewed by the program director monthly with a plan made for corrective action if needed.

Figure 4. Preceptor Evaluation Tool

1= strongly disagree 2= disagree 3= neither disagree or agree, or not applicable 4= agree 5= strongly agree					
The clinical preceptor was sensitive to my need for guidance.	1	2	3	4	5
The clinical preceptor was able to allow for latitude for my developing autonomy.	1	2	3	4	5
I was stimulated by the clinical preceptor to confront new problems and situations to prepare me for advanced practice.	1	2	3	4	5

Figure 4 Continued

The preceptor assisted me to fulfill the objectives of the course of study for which this clinical practicum was organized.	1	2	3	4	5
I was evaluated fairly and objectively by my clinical preceptor.	1	2	3	4	5
I would recommend this preceptor to my peers for practicum experience.	1	2	3	4	5
The preceptor model's patient care according to organizational standards.	1	2	3	4	5
The preceptor model's effective interdisciplinary teamwork.	1	2	3	4	5
The preceptor provides real-time critique of the fellows' assessment, plan of care and documentation.	1	2	3	4	5
Comments:					

Educational Leader Evaluation

Educational leaders will be evaluated at the end of each session utilizing the evaluation form required for continuing education credits provided by the organization. If no continuing education credit is offered for the learning activity, the educational leader will be evaluated using the form displayed in Figure 5. The educational leader evaluation will be reviewed by the program director with a corrective action plan if warranted.

Figure 5. Educational Leader Evaluation Form

Presenter name: _____ Date: _____ Educational topic: _____					
1= strongly disagree 2= disagree 3= neither disagree or agree, or not applicable 4= agree 5= strongly agree					
The presenter met stated educational objectives.	1	2	3	4	5
Information was presented in a clear manner without bias.	1	2	3	4	5
The presentation utilized the appropriate medium.	1	2	3	4	5
The information was presented with confidence.	1	2	3	4	5

Figure 5 Continued

The presenter answered questions effectively.	1	2	3	4	5
The information as appropriate for the learner's educational background.	1	2	3	4	5
Comments:					

Fellow Evaluation

The overall goal of the program is to produce capable providers. Capability measures the NPs ability to perform effectively in an unfamiliar situation (Sciacca & Reville, 2016). Portfolios are an effective strategy to assess capability as they can combine assessment methods according to a review of literature done by Sciacca and Reville (2016). The authors state that a comprehensive portfolio should include a capability tool linked to competencies from an NP accrediting body evaluated at the beginning, half-way and end of the program, self-reflection, mentorship, and learning goals.

Capability Tool

The capability tool will be completed at the beginning of the program, at six months, and at completion by fellow and preceptor and reviewed by the program director. The capability tool is based on core competency measures from the NONPF (2017). The

tool measures capability in terms of Benner's (1982) From Novice to Expert model with areas for comments from the fellow and program director. A corrective action plan should be developed and documented on by the program director if warranted.

Figure 6. Example of the Capability Tool

	Novice	Advance Beginner	Competent	Proficient	Expert	Comments
Scientific Foundation						
1. Critically analyzes data and evidence for improving advance nursing practice						
2. Translates research and other forms of knowledge to Improve practice process and outcomes						
Leadership						
1. Provides leadership to foster collaboration with multiple stakeholders to improve health care						
2. Communicates practice knowledge effectively, both orally and in writing						
Quality						
1. Uses best available evidence to continuously improve quality of clinical practice						
2. Anticipates variations in practice and is proactive in implementing interventions to ensure quality						
Practice Inquiry						
1. Analyzes clinical guidelines for individualized application into practice						
2. Disseminates evidence from inquiry to diverse audiences using multiple modalities						
Technology and Information Literacy						
1. Translates technical and scientific health information appropriate for various users' needs						
2. Uses technology systems that capture data on variables for the evaluation of nursing care						
Policy						

Figure 6 Continued

1. Demonstrates the understanding of the interdependence of policy and practice						
Health Delivery Systems						
1. Analyzes organizational structure, functions, and resources to improve the delivery of care						
2. Collaborates in planning for transitions across the continuum of care						
Ethics						
1. Integrates ethical principles in decision making						
2. Applies ethically sound solutions to complex issues related to individuals, populations and systems of care						
Independent Practice						
1. Practices independently managing previously diagnosed and undiagnosed patients						
2. Provides patient-centered care recognizing cultural diversity and the patient or designee as a full partner in decision making						
3. Collaborates with both professional and other caregivers to achieve optimal care outcomes						

Key:
Novice- no experience, requires full supervision.
Advance Beginner- some experience, recognizes important aspects of the situation but is unable to distinguish priorities, requires moderate supervision (>50%)
Competent- Experienced in the situation, able to recognize important aspects and can prioritize actions in terms of long-range goals or plans, requires minimal guidance (<10%)
Proficient- Experienced in most situations, understands the typical course of events to expect and modifies actions appropriately when the need arises without supervision.
Expert- Experienced, able to appropriately and efficiently identify the typical and atypical presentation and plan course of action with no supervision or guidance from preceptor.

Adapted from the Benner (1982) From Novice to Expert model.

Self-Reflection Essays:

Self-reflection essays will be completed by the fellow at the end of every specialty rotation. Essays will be sent to preceptors for comments and feedback and placed in the portfolio. The preceptor can communicate concerns in the comments section of the essay. A plan for remediation documented and signed by the fellow and program director will be included in the portfolio with appropriate follow up. Self-reflection essays should be approximately 500–1000 words.

Figure 7. Example of Self-Reflection Essay

Fellow: _____ Specialty Area: _____ Date: _____

Chose a level that best reflects your self-assessment of skills in the specialty rotation upon completion:

Novice Advance Beginner Competent Proficient Expert

Explain your choice with rationale (i.e. a case study, most important takeaway).

Include 2-3 measurable goals for continuing learning and a plan for how you will reach those goals.

Comments from preceptor

Preceptor signature: _____ Date: _____

Figure 7 Continued

Key:
Novice- no experience, requires full supervision.
Advance Beginner- some experience, recognizes important aspects of the situation but is unable to distinguish priorities, requires moderate supervision (>50%)
Competent- Experienced in the situation, able to recognize important aspects and can prioritize actions in terms of long-range goals or plans, requires minimal guidance (<10%)
Proficient- Experienced in most situations, understands the typical course of events to expect and modifies actions appropriately when the need arises without supervision.
Expert- Experienced, able to appropriately and efficiently identify the typical and atypical presentation and plan course of action with no supervision or guidance from preceptor.

Adapted from the Benner (1982) From Novice to Expert model.

Mentorship and Learning Goals

At least one mentorship and learning goal will be identified by the fellow monthly and after each specialty rotation according to the self-reflection essay. The goals should be specific and measurable. The mentor and preceptor should help the fellow to identify or amend goals to facilitate professional growth. Goals will be evaluated monthly and reviewed by the program director. Documentation of goals with actions taken to achieve those goals will be included in the portfolio in a narrative format.

Program Evaluation

The two main desired outcomes from the intended organization are improved employee retention and increased employee satisfaction. Fellowship programs can help to support these goals as discussed in the review of literature previously. The program director will be responsible for monitoring retention rates. Retention rates will be evaluated at completion of the program, at six months post-completion, one year post-

completion, and annually thereafter. The organization will monitor employee satisfaction of current NPs and those that complete the fellowship program so that outcomes can be compared. Job satisfaction should be measured using a valid and reliable tool such as the Misener Nurse Practitioner Job Satisfaction Scale (Misener & Cox, 2001).

Program Cost

Funding for post-graduation training of NPs falls onto the sponsoring organization as no government assistance exists for this type of program (Flinter, 2005). Direct costs of the APRN residency program would include salary and benefits of the residents, salary and benefits of the director, and the above salary pay for the preceptors along with decreased productivity of preceptors during initial months. Other direct costs would include supplies for training residents and additional salary for educational leaders if needed.

The average salary for an NP in the northwestern United States is $91,344–$106,944 not including benefits and bonus (Salary.com, 2018). Existing programs pay resident NPs slightly less than average to help make up for paying preceptors above and beyond their salary (Cragin Greene personal communication, December 4, 2017). An NP resident could be paid $85,000 with the remaining salary cost, roughly $6,000–$10,000, going to cover the preceptor additional salary for the same price as hiring NP into the position. The company would be paying the salary of an NP hired for this position regardless of participation in a residency program, so this cost would be incurred either way. The salary and benefits of a program director would be directly related to the program. The average resident director salary is $72,934 annually (Glassdoor, 2017).

Costs of supplies for training residents would vary greatly depending on how many residents were hired. NPs hired into the organization, regardless of participation with the residency program, would require supplies for training. Only supplies above and beyond what the current training entails would be directly related to the program and should be minimal. Cost of educational material and paid educators would not be directly billable to the program as these elements would be integrated into existing modules in the organization, i.e., journal club could be integrated with the physician residency, skills labs would be integrated into present continuing education classes in the current skills lab, and participation in current offered grand rounds and committees.

NP preceptors would also see a smaller patient panel to help increase amount of time spent with the NP resident. If an NP preceptor saw 24 fewer patients per week, the organization would lose $1,490 of billable income assuming each patient was coded for a simple office visit billed to Medicare (MidlevelU, 2018).

One of the main benefits of the program is the addition of billable hours from NP residents. Unlike physician residents who cannot directly bill for hours that are not done with direct participation of the overseeing physician, NP residents can see and bill for patient care hours without direct oversight from the preceptor (Centers for Medicare and Medicaid Services, 2018). A simplified scenario would be an NP resident working eight hours per day seeing three patients per hour. If each patient was coded for a basic office visit and the cost was billed to Medicare, an NP would bring in $1,490 of revenue per day. A resident would likely see less than this number of patients in the beginning, although is still bringing in revenue compared to a vacant position. Using the simplified

scenario above, a vacant position for three months would amount to $89,352 in lost revenue (MidlevelU, 2018).

As described above, residency programs have led to increased retention in employees (Bush & Lowery, 2016). At the intended organization, the average cost to orient a new NP above salary is approximately $44,000 (Human Resources, personal communication, April 3, 2018). This would be a cost savings to the organization every year that the resident is retained.

Using the monetary values discussed above for a 12-month program with three residents, three preceptors and one director costs for a break-even analysis would be:

- Resident salaries- $255,000
- Director Salary- $72,934
- Preceptor additional pay ($10,000)- $30,000
- Additional supplies (approximate)- $3,000
- Lost preceptor productivity- $214,560

Total- $575,494 ($47,957.83/month)

Total benefits would include:

- Billable hours revenue for three full-time residents- $1,072,224
- Retention of residents for one year- $132,000

Total- $1,085,424 ($90, 452/month)

Within the first month of operation the organization could profit $42,494.17 assuming residents are filling vacant positions and retained within the organization.

CHAPTER SIX – DISCUSSION

Future Implications

Need for Postgraduation Training

The landmark report from the Institute of Medicine (IOM) (2010) *Future of Nursing* calls for support for nurses in the form of residency programs post-baccalaureate and for APRNs. Literature surrounding the topic of post-graduation training is supportive of recommending the initiation of these programs; however, there has been debate as to whether these programs should be required for NPs similar to residencies for medical doctors (Harper et al., 2017). Critics of the residency and fellowship programs state that supporting or requiring further training postgraduation will undermine the rigorous curriculum of entry-level NP programs and suggest that NPs are not prepared for practice after completion of a graduate program (Bush, 2014, Bush & Lowery, 2016).

Graduate education for doctoral-prepared NPs is guided by the DNP essentials published by the AACN (2006). Essential VIII states that DNP graduates prepared for an APRN role develop proficiency in clinical excellence and base their practice on the application of evidence-based approaches from a range of theories and nursing science (AACN, 2006). Despite the foundation of clinical excellence built by the essentials, current programs vary in how they interpret Essential VIII. The DNP essentials aim to create the highest level of clinical expertise. Variation in interpretation of the essentials strengthens the IOM's call for support through residencies to expand competence among all levels of nursing (Harper et al., 2017, IOM, 2010). Lack of standardization of program

content, learning objectives, and clinical expectations for postgraduation programs are obscuring the recommendations for these programs (Bush, 2014). Further research surrounding outcomes of these programs and their standardization is recommended.

Funding for Programs

One of the main barriers to implementation of residency and fellowship programs is funding. Supplemental training for NPs can be expensive and no government assistance for these types of programs for NPs currently exist (Flinter, 2005). The Centers for Medicare and Medicaid Services currently provide funding for graduate medical education (GME) that supports hospitals who conduct residency programs for medical students. Debate surrounding the use of GME funds to support nursing residency programs has offered no conclusions (Hart et al., 2017).

Flinter (2005) suggests that an in-depth legal analysis of the current regulatory barriers preventing GME funds from being used for non-physician providers would be a logical first step in remedying the lack of government support. A seminal report from the IOM *Graduate Medical Education That Meets the Nation's Health Needs* has re-envisioned the use of GME funds to develop new programs that support teams of health professionals that rely on non-physician providers and integrative health models, but the authors debated whether GME funds should be used for the training of non-physician providers (Hart et al., 2017). Currently, the entire financial burden of post-graduation training programs for APRNs rests on the sponsoring organization. Further research of available options and strategies to fund these programs should be prioritized.

Strengths and Limitations of the Design

Strengths of this design include a foundation in current literature surrounding recommendations for curriculum and evaluation. Surveys of newly graduated NPs helped to narrow down specific learning opportunities as well as support for this type of program (Faraz, 2017, Hart & Macnee, 2006). Two main accrediting bodies the ACNN(2016) and the NNPRTC (2015) have published guidelines for post-graduation training programs. The design of the program to closely match the requirements of these accrediting bodies is beneficial for the institution. While accreditation is currently optional, reports have speculated that funding assistance will be tied to accreditation status (Goode, Glassman, Ponte, Krugman, & Peterman, 2018). The design is also closely based off a current program that has had successful outcomes in employee retention—a key goal of this fellowship design.

Closely following accreditation standards can also be viewed as a limitation. Accreditation standards from the ANCC (2016) and the NNPRTC (2015) both require that evaluation methods be tied to national competencies from professional organizations. Arguments have been made that these competencies are generally too broad and difficult to measure leading to the lack of standardization in NP programs that contributes to the need for further training (Hart & Macnee, 2017).

Lack of literature surrounding standardized evaluation tools for both the personnel of the program and the fellow is another limitation. While the accrediting bodies mandate evaluation be linked to the national competencies as mentioned above, they do not specify the frequency of evaluation nor do they recommend tools or mediums for those

evaluations. A review of literature completed by Sciacca and Reville (2016) supports the use of the portfolio design used in this program; however, the authors state that there is a need for current programs to develop and disseminate information on the development and evaluation of the programs to strengthen the evidence.

Another main limitation of the design was lack of input from the desired sponsoring institution. Input from the institution was generated from interaction with the APRN committee. This committee had sparse representation from the primary care specialty, which is the intended specialty of the fellowship. The committee also had varying attendance from meeting to meeting, which made discussing needs for the program difficult. Organizational practice culture at the time of purposing this program was also a limiting factor. The APRN committee had multiple other agendas they were trying to accomplish that pushed a project with this magnitude down the list of priorities.

Finding contact information for program directors of current residency and fellowship programs was also a limiting factor in design. While a director from a large, successful program was able to be interviewed, more data from other programs were unable to be obtained due to difficulty in communicating with directors.

DNP Essentials

The AACN published *The Essentials of Doctoral Education for Advanced Nursing Practice*, which articulates the competencies that every nurse prepared for practice at this level shall achieve (AACN, 2006). Work on this scholarly project and paper helped to meet essentials I, scientific underpinnings for practice, II, organizational

and systems leadership for quality improvement and systems thinking, III, clinical scholarship and analytical methods for evidence-based practice, and VI, interprofessional collaboration for improving patient and population health outcomes (AACN, 2006).

Essentials I and III were met through work on this paper, along with education from classwork, by integrating evidence-based literature with strength for translation into practice into the design of the program. The education received in class was applied to finding evidence-based literature, analyzing strength of literature for translation into practice, and presenting the information in a professional written manner.

This project involved designing a program meant for quality improvement aimed at the population of new graduate NPs, which helps to achieve essential II. Working on this project allowed for application the education received in class about identifying best methods for quality improvement, identifying stakeholders, mitigating potential weaknesses, and presenting potential strengths of the quality improvement project. Understanding of how larger and smaller systems work together with effective leadership to achieve quality improvement was applied in the beginning stages of this project to help garner support for the sponsoring organization.

Lastly, this project helps to meet essential VI by highlighting the efforts of many services to achieve outcomes. Interprofessional collaboration is a common theme in the literature reviewed and accreditation standards for fellowship programs. Networking throughout the organization to identify stakeholders from diverse specialties that collaborate with new NPs in practice supported a greater understanding of interprofessional teamwork required to achieve desired outcomes.

Conclusion

Effective support through transition from student to independent practitioner can be achieved with a fellowship program. Integration of didactic education, clinical experience, mentorship, and meaningful evaluation lays the foundation for that support. Identifying an evidence-based structure to guide this transition helps to support the outcomes of increasing job satisfaction and ultimately retention within the profession and organization. Future work with healthcare policy reform will assist with making the implementation of these programs more financially feasible for sponsoring organizations. Continued research into the best structure, evaluation, and outcomes of these programs will also aid in supporting their implementation. To achieve desired health outcomes for the United States, competent practitioners are required. Continued support after education for NPs will provide the competence needed to reach those goals.

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APPENDICES

APPENDIX A

ANCC PROGRAM OVERVIEW

Program Overview
Contextual Information **PO1.** An executive summary of the program, including description of the organization or practice setting(s), program length, scope of the program, and number of residents/fellows accepted annually. **PO 2.** The organizational chart for nursing and/or medical services, including the program and other areas as applicable to reflect lines of authority. **PO 3**. Eligibility criteria for program applicants, which must include graduation from an accredited nursing program, current unencumbered licensure (or international equivalent) as an RN/APRN, and certification as applicable to the program **PO 4.** A list of program goals **PO 5.** A list of program stakeholders, including roles in the organization
Program Leadership **PO 6.** A list of personnel for the program, including program director, CNO/Executive Leader, and other key stakeholders involved in the program planning, evaluation, or both as applicable. **PO 7.** Position description(s) for the program director and other key stakeholders as applicable, such as individuals who develop or deliver program content, and individuals who validate competencies. **PO 8.** A list of organizational or practice setting(s) committees on which the program director or a designee representing the program participates.
Organizational Enculturation **PO 9.** Mission, vision and/or values of the organization or practice setting(s) in which the program is provided. **PO 10.** Outline of organizational or practice setting orientation curriculum for new residents/fellows. **PO 11.** Outline of program orientation for new residents/fellows.
Development and Design **PO 12.** List all individuals involved in developing and delivering content for the program, its competencies, and it curriculum. **PO 12a.** Tools used to evaluate the performance of individuals developing and delivering content.

PO 13. List all individuals involved in evaluating resident/fellow performance in the practice-based learning environment (e.g., preceptors) in the 12 months immediately preceding the application date.

PO 14. Program materials used to prepare individuals evaluating resident/fellow performance in the practice setting(s). (Submit curriculum if available.)

Program Content

PO 15. Tool(s) used to develop and evaluate program content (e.g., needs assessment).

PO 16. Crosswalk of program competencies against nationally recognized competencies, which must reflect: Quality and Safety Education for Nurses (QSEN), Institute of Medicine (IOM) interprofessional competencies, The National Organization of Nurse Practitioner Faculties (NONPTF) or other organizations competencies for the APRN, or a combination thereof, as applicable to the program.

PO 17. Program curriculum outline

Practice-Based Learning

PO 18. Evaluation tool(s) used to evaluate residents'/fellows' competency (competency assessment tool).

PO 18a. Representative example of a resident's or fellow's evaluation demonstrating the use of incremental goals.

Nursing Professional Development

PO 19. A list of the nursing professional development opportunities that the program supports, including but not limited to any combination of the following opportunities: Academic progression of new residents/fellows (e.g., AD to BSN; BSN to MSN; BSN to DNP; MSN to DNP); Career development (e.g., charge nurse role, preceptor role, mentor role, clinical ladder, etc.); Certification; Committee participation in the unit, department, or organization; Liefling learning- annual continuing education (e.g., conference support, pain education days), evidence-based practice, quality improvement, research; Participation in professional organizations

Quality Outcomes

PO 20. A list and brief description of quality outcome measures used to evaluate the program including target benchmarks. Submit one or more quality outcomes measures from at least two of the following categories: Nursing Professional Development, Clinical Skills, Self-Reported, Financial, Patient Outcomes

PO 21. Submit aggregated quality outcome data reflecting the measure identified in PO 20 that have been collected and evaluated over the past 18 months, or from the initiation of the program to present if less than 18 months.

PO 20 Activity Examples
Nursing Professional Development • Academic progression of new residents/fellows (e.g., AD to BSN; BSN to MSN; BSN to DNP; MSN to DNP) • Academic progression of preceptors or other key stakeholders • Leadership ability (resident/fellow) • Organizational advancements in areas such as presentations, publications, evidence-based projects implemented, and research studies
Clinical Skills • Clinical decision-making ability of the resident/fellow • Clinical proficiency
Self-Reported • CNO/Executive Leader satisfaction • Nurse Manager satisfaction • Organizational commitment • Participant/nurse (RN) satisfaction • Participant successful completion rate • Preceptor satisfaction
Financial • Return on investment • Turnover rate • Vacancy rate
Patient Outcomes • Clinical outcomes: error rates, patient safety issues, efficiency, accuracy • Nurse-sensitive clinical indicators

APPENDIX B

ANCC PROGRAM CRITERIA

Program Criteria
Program Leadership **PL 1.** The program director ensures that residents'/fellows' learning needs are met through actions such as evaluating aggregate residents'/fellows' evaluation results, stakeholder feedback, and quality outcomes. **PL 2.** The program director is accountable for ensuring that all individuals supporting the program are appropriately oriented and trained to operationalize each component of the program as required for adherence to the ANCC criteria. **PL 3.** The program director demonstrates leadership through direction and guidance given to all key stakeholders involved in the program. **PL 4.** The program director demonstrates continual engagement in improving quality outcomes for the program (refer to outcomes stated in PO 20). **PL 5.** The program director advocates for human, material, and financial resources to ensure that the program achieves its goals related to quality outcome measures (refer to goals stated in PO 4). **PL 6.** Executive leaders of the organization or practice setting(s) where the program is provided are committed to the goals of the program
Organizational Enculturation **OE 1.** The goals of the program are aligned with the mission, vision and/or values of the organization or practice setting(s). **OE 2.** Residents/fellows are appropriately oriented to the program, including the applicable professional and clinical scope and standards of practice within the organization or practice setting(s) e.g., ANA Nursing Scope and Standards of Practice, specialty standards of practice, or consensus-based competencies **OE 3.** Residents/fellows are appropriately assimilated into the culture, practices, and values of the organization or practice setting(s).
Development and Design **Program Faculty** **DD 1.** Individuals who are selected to develop, implement, and maintain the program have documented expertise in adult education, program development, or content expertise in subject matter, or a combination thereof. **DD 2.** Individuals delivering course content in the program have documented content expertise and the ability to present content effectively.

DD 3. Individuals validating competencies of residents/fellows have been appropriately trained and evaluated.

Program Content

DD 4. The program incorporates a process to develop or revise the program content based on data gathered through needs assessments.

DD 5. Curriculum chosen for the program is evidence-based, current, and appropriate for the scope and standards of practice in the clinical/specialty area.

DD 6. The curriculum includes content that supports the ability of a resident/fellow to: provide patient-centered care; apply quality improvement principles; function effectively with nursing and interprofessional teams (teamwork and collaboration); incorporate evidence-based practice; use informatics in practice; and apply basic safety design principles

DD 7. Competencies developed for and evaluated in the program are appropriate for the scope and standards of practice or consensus-based competencies in the applicable clinical/specialty area(s). Scope and standards of practice or consensus-based competencies must be referenced.

DD 8. Standard processes are used to evaluate whether residents/fellows can demonstrate required competencies.

Practice-Based Learning

PBL 1. Individual incremental goals reflect the psychosocial/developmental needs of the resident or fellow.

PBL 2. Individual incremental goals are appropriate for the clinical practice setting(s) and scope and standards of practice or consensus-based competencies within the organization or practice setting(s).

PBL 3. The program incorporates methods to support residents/fellows in identifying and addressing a learning need when a gap in knowledge, skill, or attitude is identified at the point of care.

PBL 4. The program includes a remediation process for residents/fellows who are not successful in meeting incremental goals.

PBL 5. The program incorporates a process, and provides adequate time, for residents/fellows to reflect and incorporate feedback.

PBL 6. Mentorship outside of clinical practice is integrated into the program to facilitate lifelong learning.

PBL 7. Peer support is integrated into the program.

PBL 8. The program incorporates multimodal teaching-learning strategies that are appropriate for the individual learners or specific content, or both. **PBL 9.** The program teaches residents/fellows how to manage stress. **PBL 10.** The program teaches residents/fellows how to manage role transition. **PBL 11.** The program teaches residents/fellows time management. **PBL 12.** The program teaches residents/fellows how to improve communication skills. **PBL 13.** The program teaches residents/fellows critical thinking and clinical reasoning skills. **PBL 14.** The program teaches residents/fellows how to apply ethical decision making in the practice setting. **PBL 15.** The program teaches residents/fellows how to work as members of an interprofessional team.
Nursing Professional Development **NOD 1.** The program supports nursing professional development (refer to opportunities in PO 19)
Quality Outcomes **QO 1.** The program incorporates a process for identifying quality outcome measures that are appropriate for the program (e.g., as noted in PO 20). **QO 2.** The program uses a variety of stakeholders in the evaluation process as identified by the program director (refer to stakeholders identified in PO 5). **QO 3.** The program is revised as needed to ensure quality outcome measures are achieved. **QO 4.** Quality outcome data are shared with stakeholders, as appropriate.

Table 3. ANCC Program Criteria.

APPENDIX C

NATIONAL NURSE PRACTITIONER RESIDENCY AND FELLOWSHIP TRAINING CONSORTIUM

Program Curriculum and Structure

The Program curriculum must include the following core elements:

1. Clinical-based practice and patient care experience (examples- precepted sessions, mentored clinics, specialty clinical rotations)
    a. Clinical experiences must be sufficient in-depth, breadth, variety, and volume including medical conditions/diagnoses and patient demographics, to prepare the postgraduate trainee for clinical practice in the specialty of the Program
    b. Program must provide structured experience in progressive responsibilities for patient management
    c. For each clinical experience and/or rotation the Program will provide learning objectives to guide the postgraduate trainee achievement of competencies
    d. The Program shall establish objectives for the numbers of patients by relevant factors (age, gender, major health challenges) and procedures deemed necessary to achieve the overall goals of the postgraduate NP Training Program on the practice setting
2. Regularly scheduled didactic sessions
    a. For each didactic session the Program will provide leaning objectives to guide the postgraduate trainee in the mastery of didactic knowledge and its subsequent application to practice
3. System-based learning and quality improvement tools that underlie effective front-line improvement in care
4. Population-based health focus- assessment of community, environmental, and socioeconomic influences on health of patient and data-driven assessment of the population of focus
5. Leadership and professional development, particularly in interprofessional practice

Postgraduate NP Training Program Competency Domains

The Program must integrate the following NP competency domains.
At the completion of the NP Training Program, the trainee must be able to:

1. Provide patient-centered care that is compassionate, valued, appropriate and effective the treatment of both common and uncommon health conditions and the promotion of health

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

Sub-competency by Domain

1. **Patient Care- Provide patient-centered care that is compassionate, valued, appropriate and effective the treatment of both common and uncommon health conditions and the promotion of health**

<u>Postgraduate trainees must demonstrate competence to independently:</u>

1.1 Perform all screening, diagnostic assessments, and procedures that are essential for area of practice and patient population

1.2 Gather essential and accurate information about patient and their condition through review of records, history-taking, physical examination, and assessment, and review of data derived from laboratory and imaging testing

1.3 Organize and prioritize responsibilities to provide care that is safe, effective and efficient

1.4 Interpret laboratory data, imaging studies, other tests required for the area of practice

1.5 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, evidence-based information and clinical judgement

1.6 Develop and carry out patient management plans

1.7 Counsel and educate patients and their families to empower them to participate in their care and enable share decision making

1.8 Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings, and following up on patient progress and outcomes

1.9 Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health

1.10 Provide appropriate role modeling for the interprofessional team

2. Knowledge for Practice- Demonstrate knowledge of established and evolving bio-psycho-social, clinical, epidemiological and nursing sciences, for the provision of evidence-based patient care

Postgraduate trainees must:

2.1 Demonstrate an investigatory and analytic approach to clinical situations

2.2 Apply established and emerging bio-psycho-social scientific principles fundamental to health care for patients and populations

2.3 Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision making, clinical problem-solving and evidence-based care

2.4 Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patient and populations

2.5 Apply principles of social-behavioral sciences to provision of patient-centered care, including assessment of the impact of psychosocial and cultural influences on health, disease, care seeking, patient engagement, and barriers to and attitudes toward cared

2.6 Contribute to the creation, dissemination, application, and translation of new health care knowledge and practices

3. Practice-Based Learning and Improvement- Demonstrate the ability to evaluate one's own practice and improve outcomes of patient care based on best available evidence, constant self-evaluation and lifelong learning

Postgraduate trainees must develop skills and habits to be able to meet the following goals:

3.1 Identify strengths, deficiencies, and limits in one's knowledge and expertise

3.2 Set learning and improvement goals

3.3 Identify and perform learning activities that address one's gaps in knowledge, skills, and/or attitudes

3.4 Systematically analyze practice using quality improvement methods, measures, and processes, and implement and assess impact of changes with the foal of practice improvement

3.5 Incorporate feedback into daily practice

3.6 Locate, appraise, and assimilate evidence from scientific studies related to patients' health problems

3.7 Use information technology to optimize learning

3.8 Participate in the education of patients, families, students, trainees, peers, and other health professionals

3.9 Obtain and utilize information about individual patients, populations of patients (panel management), or communities from which patients are drawn to improve care

3.10 Continually identify, analyze, and implement new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes

4. Interpersonal and Communication Skills- Demonstrate effective communication and collaboration with patients, their families, and interprofessional colleagues

Postgraduate trainees must demonstrate competence to:

4.1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds

4.2 Communicate effectively with colleagues within one's profession or specialty, other health professional, and health related agencies

4.3 Work effectively with other as a member or leader of a health care team or other professional group

4.4 Act in a consultative role to other health professionals

4.5 Maintain comprehensive, timely, and legible medical records

4.6 Demonstrate sensitivity, honesty, and compassion in difficult conversations, including those about death, end-of-life, adverse events, bad news, disclosure of errors, and other sensitive topics

4.7 Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions

5. Professionalism- Demonstrate a commitment to carrying out professional roles and responsibilities and adherence to ethical principles

Postgraduate trainees must demonstrate:

5.1 Compassion, integrity, and respect for others

5.2 Responsiveness to patient needs that supersedes self-interest

5.3 Respect for patient dignity, privacy, confidentiality, and autonomy

5.4 Accountability to patients, society, and the profession

5.5 Sensitivity and responsiveness to a diverse patient population, including but limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

5.6 A moral commitment to the ethical principles pertaining to the provision or with hole of care, confidentiality, informed consent and business practices, including compliance with relevant laws, policies, and regulations

6. Systems-Based Practice- Demonstrate an awareness of and responsiveness to the larger context and system of health care as well as the ability to call effectively on other resources in the system to provide optimal health care

Postgraduate trainees must demonstrate that they are able to:

6.1 Work effectively in various health care delivery settings and systems relevant to one's clinical specialty

6.2 Coordinate patient care within the health care system relevant to one's clinical specialty

6.3 Incorporate consideration of cost awareness and risk-benefit analysis in patient and/or population-based care

6.4 Advocate for quality patient care and optimal patient care systems

6.5 Participate in identifying system errors and implementing potential systems solutions

6.6 Perform administrative and practice management responsibilities commensurate with one's role, abilities, and qualifications

7. Interprofessional Collaboration- Demonstrate the ability to practice within an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care

Postgraduate trainees must demonstrate that they are able to:

7.1 Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust

7.2 Use the knowledge of one's own role and the role of other health professionals to appropriately assess and address the health care needs of the patients and populations served

7.3 Communicate with other health professionals in a responsive and responsible manner that supports the maintenance of health and the treatment of disease in individual patients and populations

7.4 Understand the types of different roles and their associated responsibilities that are needed to establish, develop, and continuously enhance interprofessional teams to provide patient- and population-centered care that safe, timely, efficient, effective and equitable

8. Personal and Professional Development- Demonstrate qualities required to sustain lifelong growth as healthcare professional and leader

Postgraduate trainee must demonstrate that they are able to:

8.1 Use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors

8.2 Demonstrate healthy coping mechanisms to respond to stress

8.3 Manage conflict between personal and professional responsibilities

8.4 Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior

8.5 Demonstrate trustworthiness that makes colleagues feel secure when one is responsible for the care of patients

8.6 Provide leadership skill that enhance team functioning; the learning environment, and/or the health care delivery system

8.7 Demonstrate self-confidence that puts patients, families, and members of the healthcare team at ease

8.8 Recognize that ambiguity is part of clinical health care and respond by utilizing appropriate resources in dealing with uncertainty
8.9 Obtain feedback and/or peer review on an aspect of their learning and develop this into a product that can be shared in the residency community or submitted as a scholarly project

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APPENDIX D

THE NATIONAL ORGANIZATION OF NURSE PRACTITIONER FACULTIES

NURSE PRACTITIONER CORE COMPETENCIES CONTENT

Scientific Foundation Competencies

1. Critically analyzes data and evidence for improving advanced nursing practice.
2. Integrates knowledge form the humanities and sciences within the context of nursing science.
3. Translates research and other forms of knowledge to improve practice processes and outcomes.
4. Develops new practice approaches based on the integration of research, theory, and practice knowledge.

Leadership Competencies

1. Assumes complex and advanced leadership roles to initiate and guide change.
2. Provides leadership to foster collaboration with multiple stakeholders (e.g. patients, community, integrated health care teams, and policy makers) to improve health care.
3. Demonstrates leadership that uses critical and reflective thinking.
4. Advocates for improves access, quality and cost-effective health care.
5. Advances practice through the development and implementation of innovations incorporating principles of change.
6. Communicates practice knowledge effectively, both orally and in writing.
7. Participates in professional organizations and activities that influence advanced practice nursing and/or health outcomes of a population focus.

Quality Competencies

1. Uses best available evidence to continuously improve quality of clinical practice.

2. Evaluates the relationships among access, cost, quality, and safety and their influence on health care.
3. Evaluates how organizational structure, care processes, financing, marketing, and policy decisions impact the quality of health care.
4. Applies skills in peer review to promote a culture of excellence.
5. Anticipates variations in practice and is proactive in implementing interventions to ensure quality.

Practice Inquiry Competencies

1. Provides leadership in the translation of new knowledge into practice.
2. Generates knowledge from clinical practice to improve patient outcomes.
3. Applies clinical investigative skills to improve health outcomes.
4. Leads practice inquiry, individually or in partnership with others.
5. Disseminates evidence from inquiry to diverse audiences using multiple modalities.
6. Analyzes clinical guidelines for individualized application into practice.

Technology and Information Literacy Competencies

1. Integrates appropriate technologies for knowledge management to improve health care.
2. Translates technical and scientific health information appropriate for various users' needs.
    2a. Assesses the patient's and caregiver's educational needs to provide effective, personalized health care.
    2b. Coaches the patient and caregiver for positive behavioral change.

3. Demonstrates information literacy skills in complex decision making. 4. Contributes to the design of clinical information systems that promote safe, quality and cost-effective care. 5. Uses technology systems that capture data on variables for the evaluation of nursing care.
Policy Competencies 1. Demonstrates an understanding of the interdepended of policy and practice. 2. Advocates for ethical policies that promote access, equity, quality, and cost. 3. Analyzes ethical, legal, and social factors influencing policy development. 4. Contributes in the development of health policy. 5. Analyzes the implication of health policy across disciplines. 6. Evaluates the impact of globalization on health care policy development. 7. Advocates for policies for safe and healthy practice environments.
Health Delivery System Competencies 1. Applies knowledge of organizational practices and complex systems to improve health care delivery. 2. Effects health care change using broad based skills including negotiating, consensus-building, and partnering. 3. Minimizes risk to patients and providers at the individual and systems level. 4. Facilitates the development of health care systems that address the needs of culturally diverse populations, providers, and other stakeholders.

5. Evaluates the impact of health care delivery on patients, providers, other stakeholders, and the environment.
6. Analyzes organizational structure, functions and resources to improve the delivery of care.
7. Collaborates in planning for transitions across the continuum of care.

Ethics Competencies

1. Integrates ethical principles in decision making.
2. Evaluates the ethical consequences of decisions.
3. Applies ethically sound solutions to complex issues related to individuals, populations and systems of care.

Independent Practice Competencies

1. Functions as a licensed practitioner.
2. Demonstrates the highest level of accountability for professional practice.
3. Practices independently managing previously diagnosed and undiagnosed patients.
   - 3a. Provides the full spectrum of health care services to include health promotion, disease prevention, health protection, anticipatory guidance, counseling, disease management, palliative, and end-of-life care.
   - 3b. Uses advanced health assessment skills to differentiate between normal, variations of normal and abnormal findings.
   - 3c. Employs screening and diagnostic strategies in the development of diagnoses.
   - 3d. Prescribes medications with scope of practice.
   - 3e. Manages the health/illness status of patients and families over time.

4. Provides patient-centered care recognizing cultural diversity and the patient or designee as a full partner in decision making.

4a. Works to establish a relationship with the patient characterized by mutual respect, empathy, and collaboration.

4b. Creates a climate of patient-centered care to include confidentiality, privacy, comfort, emotional support, mutual trust, and respect.

4c. Incorporates the patient's cultural and spiritual preferences, values, and beliefs into health care.

4d. Preserves the patient's control over decision making by negotiating a mutually acceptable plan of care.

4e. Develops strategies to prevent one's own personal biases from interfering with delivery of quality care.

4f. Addresses cultural, spiritual, and ethnic influences that potentially create conflict among individuals, families, staff and caregivers.

5. Educates professional and lay caregivers to provide culturally and spiritually sensitive, appropriate care.

6. Collaborates with both professional and other caregivers to achieve optimal care outcomes.

7. Coordinates transitional care services in and across care settings.

8. Participates in the development, use, and evaluation of professional standards and evidence-based care.

APPENDIX E

EXAMPLE FELLOW SCHEDULE

Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	New Employee Orientation	New Employee Orientation	New Employee Orientation	New Employee Orientation	New Employee Orientation	
	New Employee Orientation	New Employee Orientation	New Employee Orientation	Program Orientation 8-12 Didactic Education 1-5	Didactic Education	
	Didactic Education	Didactic Education	Didactic Education	Didactic Education	Didactic Education	
	Didactic Education	Didactic Education	Didactic Education	Didactic Education	Didactic Education	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Grand Rounds #1	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor Meeting 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Specialty Rotation #1	Specialty Rotation #1	Specialty Rotation #1	Specialty Rotation #1	Specialty Rotation #1	

	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-2 Mentor 2-3 QI Project 3-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Specialty Rotation #2	Specialty Rotation #2	Specialty Rotation #2	Specialty Rotation #2	Specialty Rotation #2	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-2 Mentor 2-3 QI Project 3-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Specialty Rotation #3	Specialty Rotation #3	Specialty Rotation #3	Specialty Rotation #3	Specialty Rotation #3	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	

	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-2 Mentor 2-3 QI Project 3-5	
	Specialty Rotation #4	Specialty Rotation #4	Specialty Rotation #4	Specialty Rotation #4	Specialty Rotation #4 Evaluation 5-6	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Grand Rounds #2	Primary Care Clinic 8-5	Primary Care Clinic 8-3 QI Project 3-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Specialty Rotation #5	Specialty Rotation #5	Specialty Rotation #5	Specialty Rotation #5	Specialty Rotation #5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Vacation	Vacation	Vacation	Vacation	Vacation	

	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-3 QI Project 3-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 6-month Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Grand Rounds #3	Primary Care Clinic 8-5	Primary Care Clinic 8-2 QI Project 2-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Specialty Rotation #6	Specialty Rotation #6	Specialty Rotation #6	Specialty Rotation #6	Specialty Rotation #6	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**

	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-3 QI Project 3-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Specialty Rotation #7	Specialty Rotation #7	Specialty Rotation #7	Specialty Rotation #7	Specialty Rotation #7	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-2 QI Project 2-4 Evaluation 4-5	

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Grand Rounds #4	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Specialty Rotation #8	Specialty Rotation #8	Specialty Rotation #8	Specialty Rotation #8	Specialty Rotation #8 Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Grand Rounds #3	Primary Care Clinic 8-5	Primary Care Clinic 8-2 QI Project 2-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	

	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Evaluation 4-5	
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	Primary Care Clinic 8-5	Primary Care Clinic 8-5	Primary Care Clinic 8-5 Journal Club	Primary Care Clinic 8-5	Primary Care Clinic 8-5	
	QI Project Presentation 8-10 Primary Care Clinic 10-5	Primary Care Clinic 8-5	Primary Care Clinic 8-4 Mentor 4-5	Primary Care Clinic 8-3 Final Evaluation 3-5	Graduation	