

Seton Hall University

eRepository @ Seton Hall

---

Seton Hall University Dissertations and Theses  
(ETDs)

Seton Hall University Dissertations and Theses

---

Spring 3-15-2023

## Onboarding Advanced Practice Nurses to Pre-Anesthesia Care

Megan P. Abate

abate.megan@student.shu.edu

Follow this and additional works at: <https://scholarship.shu.edu/dissertations>



Part of the [Perioperative, Operating Room and Surgical Nursing Commons](#)

---

### Recommended Citation

Abate, Megan P., "Onboarding Advanced Practice Nurses to Pre-Anesthesia Care" (2023). *Seton Hall University Dissertations and Theses (ETDs)*. 3083.

<https://scholarship.shu.edu/dissertations/3083>

**Onboarding Advanced Practice Nurses to Pre-Anesthesia Care**

by

Megan P. Abate

DNP Scholarly Project Committee

Dr. Maryellen E. Roberts

Dr. Kristi Stinson

Dr. Stacey Cuomo

Submitted in partial fulfillment of the requirements for the degree of

Doctor of Nursing Practice

Seton Hall University

2023

Copyright © 2023

Megan P. Abate

All Rights Reserved



College of Nursing  
Graduate Department

APPROVAL FOR SUCCESSFUL DEFENSE

Megan P. Abate has successfully defended and made the required modifications to the text of the DNP Final Scholarly Project for the Doctor of Nursing Practice during this Fall, 2022

Final Scholarly Project COMMITTEE

---

Dr. Maryellen E. Roberts	Date
Dr. Kristi Stinson	. Date
Dr. Stacey Cuomo	Date

## **Dedication**

Thank you to Michael Behringer, the love of my life, and my most ardent supporter.

And to my children Nolan and Chloe Behringer, the finest adults ever, my love and pride is eternal, thank you for the sacrifices, and encouragement.

Love and gratitude for my wonderful mother Jean Abate, she set the bar high and has always modeled lifelong learning.

“Children, obey your parents in everything, for this pleases the Lord.” —Colossians 3:20

Love makes a family. —Florence Nightingale

## **Acknowledgements**

A special note of thanks and gratitude to Dr. Maryellen E. Roberts, the lodestar of the Seton Hall University Doctor of Nursing Program; Dr. Roberts' wisdom and guidance throughout the Doctor of Nursing program were motivating and inspirational. Thank you, Dr. Kristi Stinson, for reading my paper and being present at the project presentation. Your feedback and critique were provocative and essential to strengthen the writing and optimize the work to the highest degree. I am indebted to Dr. Stacey Cuomo, my mentor, for her insight and guidance on the project. The support and encouragement offered by Dr. Cuomo were essential for the project's development and made the onboarding project possible.

## Table of Contents

ABSTRACT .....	vii
I. BACKGROUND.....	1
Definition of Terms .....	3
Description of the Project .....	3
Purpose of the Project .....	3
Goals and Objectives .....	4
Significance of the Project.....	7
II. REVIEW OF THE LITERATURE .....	8
III. PROJECT METHODOLOGY .....	10
Methodology .....	10
Theoretical Framework .....	14
Risk Analysis .....	15
Implementation Timeline .....	16
Budget .....	17
Marketing Plan .....	18
IV. PROJECT OUTCOMES .....	20
V. SUMMARY.....	22
Sustainability, Conclusions, and Recommendations.....	22
VI. REFERENCES.....	25
VII. APPENDICES.....	28

## **ABSTRACT**

Onboarding advanced practice nurses to the pre-anesthesia clinic (OBPAC) is a complex process that involves the integration and familiarization of new employees with the workplace. It is considered essential for safe and efficient clinical practice and the achievement of organizational goals. Fostering independence and competency are the overall aims of the onboarding process. The preceptor ensures that new advanced practice nurses (APNs) receive the support and guidance needed when learning new skills (Simone et al., 2016). There is evidence to show that dedicating time to a well-organized onboarding plan, laying clear job expectations with precepting, and continuous mentoring increases precepting, job satisfaction, and staff retention (Bowe, 2018). Providing clear objectives, regular and timely feedback, a blueprint for onboarding, and frequent communication such as post-onboarding check-ins are some of the educational resources that were developed with strategies recommended by Benner (1984) as a guide. The pre-anesthesia clinic guidelines learning checklist has offered up-to-date clinical knowledge to ensure that time is assigned to learn and demonstrate skills attained through the OBPAC. As APNs gain competence and become advanced beginners in the clinical aspect, they will routinely be required to call on their abilities of problem-solving and anticipation of challenges. Evaluations post-OBPAC have been favorable, garnered positive feedback from preceptors, new APNs, and the administration, and improved post-testing in new APNs.

*Keywords* Onboarding, Advanced Practice Nurse Onboarding, Pre-Anesthesia Clinic



## **I. BACKGROUND**

The onboarding process has been used to integrate and familiarize new employees with the workplace. It comprises the formal introduction of an organization, the general realm of knowledge concerning the institution such as the mission, human resource policies, table of organization, and leadership related to the new role. The onboarding process of constructing relationships and building engagement begins on the first day of employment and lasts until the employee is fully integrated into the system (Thompson, 2019). Compared with orientation, the onboarding process is more specific to the employee's work responsibilities, role expectations, and policies. It lays the foundations for trust and confidence among teammates and aids socialization and introduction to the employer and work culture. Onboarding sets boundaries for new employees and fosters an understanding and expectations of a role and the power hierarchy within the table of organization. The onboarding objective is attained at completion, with the new employee becoming competent at the job and recognizing and knowing how to access available resources. The cost of onboarding new employees accounts for a sizable portion of the organizational budget. The workforce is considered the most valuable resource within an organization. The development and training of staff is essential for retaining them and capitalizing on the investment in training within the organization. Organizations must therefore recognize the above and facilitate the provision of safe, cost-effective, and efficient care. In the pre-anesthesia clinic (PAC) clinical setting, advanced practice nurses (APN) are hired as staff with varied experience levels. Most new APN hires have no experience in pre-anesthesia care and many new APNs (nAPN) would not have fulfilled advanced practice roles. After onboarding, a trained nAPN is expected to fulfill job expectations and function as a well-integrated team member. Experience and successes after completing onboarding builds

confidence that will motivate nAPNs to precept in the future. There has been evidence to show that using a well-organized onboarding plan with clear job expectations, precepting, and continuous mentoring increases job satisfaction and the staff retention of APNs (Bowe, 2018).

## **Definition of Terms**

Debriefing: a process involving the active participation of learners, guided by a facilitator whose primary goal is to help learners identify and close gaps in knowledge and skills after experiencing an event (Fanning & Gaba, 2007).

Guidelines: the principles that dictate actions and pre-suppose experience to provide rules to follow (Benner, 1984).

Mentoring: a nurturing process that aims to promote professional and personal development, in which a skilled and experienced person, acting as a role model, teaches, encourages, counsels, and befriends a novice (Anderson & Shannon, 1988).

Onboarding: the process of constructing relationships and building engagement, beginning on the first day of employment and lasting until the employee is fully integrated into the system (Thompson, 2019).

Preceptor: an experienced practitioner who teaches, instructs, supervises, and serves as a role model for a student or graduate nurse, for a fixed period, in a formalized program (Usher et al., 1999).

## **Description of the Project**

The scholarly project was the development of onboarding guidelines for APNs to the PAC. This blueprint fulfilled an imperative within the Advanced Practice Division to standardize and make the onboarding documentation electronic and paperless, and transparent within the Advanced Practice Division.

## **Purpose of the Project**

The project's purpose was to create a blueprint for onboarding new APNs hired to work in the PAC. The primary aim was to construct a guideline for APN learning in the PAC and frame the expectations and goals of the onboarding process while providing a clinical preceptor for supportive clinical learning. The onboarding was structured and comprised standard educational resources available through the health system to incorporate the clinical guidelines. The project's expected results were the cultivation of competent and clinically knowledgeable PAC APNs who would remain in the employ of the PAC for several years. The clinical success of a healthcare system is inextricably linked to the quality of care rendered by the nursing staff and their training at all levels. Onboarding is the bedrock of learning and the foundation of employment; the PAC onboarding blueprint is an effort to acknowledge the significance of clear roles and job expectations to APN work satisfaction.

### **Goals and Objectives**

Training and retaining APNs are top priorities in healthcare. The loss to a healthcare system is significant if a trained APN leaves during training. This loss encapsulates the duration of training, preceptor time, and decreased productivity during new APN training. The loss of a new employee can reduce team morale and staff cohesion. In addition, the department may need to spend additional funds on recruitment and marketing to replace APN staff (Mollohan & Morales, 2016). The economic losses incurred through individual perioperative registered nurse positions can range from \$49,000 to as much as \$94,000, with a turnover rate of 13%–14% per year (Mollohan & Morales, 2016). There has been limited data specifically on APN turnover, but a recent advanced practice providers (APPs) survey conducted in 2019 that included APNs, physician assistants, and Certified Registered Nurse Anesthetists documented a 10% turnover rate; this was lower than the 2017 reported rate of 12%. The survey also reported higher turnover costs

of \$85,000–\$114,000 per position (Hartsell, 2020). Although APP staff turnover has transitioned over the years, the APN and APP turnover rates have not been thoroughly analyzed (Hartsell, 2020). The turnover of nurse practitioners is twice as high as of staff, especially of primary care physicians (Anderson, 2012). The Department of Veterans Affairs (VA) recently published a report after restructuring the department, which showed that 40% of APNs left the department in 1 year (Hughes et al, 2021). In the 8 years before the restructuring, the turnover rate at the VA was approximately 28%; this was significantly higher than the reported national average of 12%–14%. The increase in turnover at the VA indicated a problem within the organization that needed to be addressed and remedied (Hughes et al., 2021; Hartsell, 2020). Although staff turnover is expected in every organization, the impact of APN staff turnover may negatively affect patient care and provider satisfaction, decrease staff productivity, and increase overtime pay, sick time, and paid time off expenses. There are also hidden and unexpected costs associated with staff vacancies, such as losing senior trainers and diminished staff knowledge (Hartsell, 2020). Thus, controlling and eliminating high rates of APN attrition may improve patient care and staff job satisfaction while reducing the costs associated with marketing and recruiting new APN staff.

One of the essential components of onboarding is the preceptor. As defined by Usher et al., (1999 p. 507), a preceptor is an “experienced practitioner who teaches, instructs, supervises, and serves as a role model for a student or graduate nurse, for a set period, in a formalized program.” The preceptor’s role has been noted as requiring organizational support and having informal leadership status. However, there is generally no financial reward. In surveying nurse preceptors, it has been found that the preceptor position entails complex work and often, a significantly large patient load. Internal drivers such as altruism and paying back for past experiences with good precepting have often been cited as reasons for precepting (Wiseman,

2013). Those who precept usually wish to promote professionalism and view precepting as a method for maintaining current knowledge while engaging with and welcoming new personnel. APNs who precept have been frequently viewed as clinical experts by their leadership and considered leaders among their peers and nAPNs (Wiseman, 2013). The overall aims of the OBPAC are to ensure that novices receive the support and guidance needed when learning new skills and to foster independence and autonomy as competency is achieved (Simone et al., 2016). The preceptors challenge themselves to share their clinical expertise with APNs. Overtime and personal changes can prompt turnover in staff, necessitating more onboarding preceptors. Burnout among preceptors occurs when the preceptor role needs to be shared among several proficient APNs. Not all staff are equally effective at onboarding, reinforcing the need for seasoned preceptor APNs. Developing several staff preceptors would therefore benefit any unit or clinical team.

The critical components of successful onboarding are administrative support, voluntary precepting by APN peers, guidance on giving feedback, and clear communication of expectations to the onboarding staff and understanding of the same by the precepting staff. One challenge is cultivating a cadre of preceptors. Developing a precepting “team” can ensure that the onboarding process is shared and that interested APNs are properly trained to precept. The onboarding team, preceptors, and PAC manager focus on the progress of nAPNs. Onboarding challenges are addressed in the blueprint as the progress of the nAPN is communicated to the preceptor on a daily basis. Strengths and weaknesses are explored and clinical experiences are sought to meet the needs identified. Each phase of onboarding increases the independence and patient load of the nAPNs, who are expected to be responsible and act as fully integrated team members. The structured phases of onboarding and educational resources developed in the

project can enhance and optimize the processes of improving the experience and learning for new APNs, reducing preceptor education responsibilities with online documentation, and standardizing onboarding for the unit.

### **Significance of the Project**

Staff onboarding is expensive as significant organizational resources are allocated to training and orienting unfamiliar staff to healthcare systems. Some sources have estimated that onboarding new staff in the healthcare environment constitutes 5% of an organizational budget (Barrett & Wright, 2019). In healthcare, the expectation is that onboarding will prepare the graduates of nursing programs to become fully independent practitioners. A wide learning gap between APN education and clinical independence in practice has been noted (Martin 2021). Elements of successful onboarding have been widely written about, as have the experiences of APNs actively learning and developing a sense of confidence, acclimatizing to their roles, and forming new self-identities (Jain et al., 2020; Moran & Nairn, 2018; Weston et al., 2021). There has been much literature on novice APNs and their transitional training to full competence and independence in clinical practice with the guidance of preceptors. A preceptor has been frequently used during onboarding to teach, instruct, supervise, and serve as a role model for a student or graduate nurse, for a fixed period, in a formalized program (Usher et al., 1999). The preceptor ensures that nAPNs receive the support and guidance needed when learning new skills (Simone et al., 2016). Mentorship and structured onboarding programs that include specific areas of learning and role responsibilities have emerged as components of onboarding programs that have demonstrated improved perceptions of APN readiness, anxiety-reduction, and high scores in job satisfaction (Anglin et al., 2021; Bahouth & Esposito-Herr, 2009; Barnes, 2015; Barrett & Wright, 2019; Cusson & Strange, 2008; Thompson, 2019). Bowe (2018) noted that a focused

program onboarding with set objectives, clear expectations, mentorship support, and clinical education demonstrated significant success. Onboarding staff are essential for safe and efficient clinical practice and the achievement of organizational goals. The training of staff depends on APN preceptors who guide the nAPNs through phased learning. Precepting nAPNs is an additional task undertaken by a preceptor APN in their workday and often involves double patient assignments for the preceptors until the nAPNs are competent and independent. Onboarding and precepting in PACs can be time-consuming and challenging as they require practical communication skills, efficient time management, and critical thinking abilities. The OBPAAC aids in fostering communication regarding the learning needs of nAPNs, with the expectation that at the end of the program, the nAPN will become competent and provide care within the expectations, guidelines, and policies of the PAC.

## **II. REVIEW OF THE LITERATURE**

In developing this clinical project, the topic explored was onboarding nAPNs to a PAC. The purpose of the review was to support the project's needs and comprehensively review current knowledge around the topics. A database search using the elements of a Population, Intervention, Comparative Intervention, Outcome, (Time) (PICO (T)) question was initiated. The questions were formed using the terms in the PICO method. P, the population consisted of providers in a pre-anesthesia clinic; APP, defined as nurse practitioners, APNs, and physician assistants; and intervention (I) terms used in the query were onboarding, orientation, learning, simulation, role play, and case study. No comparative interventions were searched in this PICO, but the outcome (O) terms searched consisted of improving knowledge in PACs, competency in perioperative care, reducing preceptor burnout, diminishment of APP turnover, and debriefing.



The timeframe (T) included in the questions entered were onboarding program, orientation program, pre-anesthesia residency, and 10 weeks. The search period had the current year and retrospectively, the past 5 years.

The following databases were used for the literature review: PubMed, Scopus, Embase, and CINAHL. The search keywords used to conduct the search were advanced practice providers, advanced practice nurses, pre-anesthesia clinics, orientation, learning, simulation, role play, case study, and debriefing. The result of the search listed 41 citations from the databases and entered queries. The objective of exploring literature surrounding the topic was to evaluate the evidence and relevant components for successful APP onboarding and ascertain what is germane to nAPNs for the competence required for practice in a PAC. The project's endpoint was to improve the readiness of APNs for practice in the PAC and incorporate multiple learning modalities to enhance experiential learning.

The success of newly hired personnel often results from the onboarding process and “on-the-job training” is commonly used in healthcare settings to prepare nurses and APNs. Martin (2021) noted a wide learning gap between APN education and clinical independence in practice. Successful onboarding programs have had elements that engage the learner in the process of learning, which helps the APNs develop a sense of confidence, acclimatize to the role, and form a self-identity as an APN (Jain et al., 2020; Klein et al., 2021; Moran & Nairn, 2018.; Weston et al., 2021). There has been much literature on novice APNs and their transitional training to complete competence and independence in clinical practice. Preceptors, mentorship, and structured onboarding programs that include specific areas of learning and role responsibilities have emerged as essential components of onboarding programs that have demonstrated the improved perception of APN readiness, anxiety-reduction, and high scores in job satisfaction.

The literature has offered several recommendations for onboarding, such as checklists, explicit goals, and written expectations (Anglin et al., 2021; Bahouth & Esposito-Herr, 2009; Barnes, 2015; Barrett & Wright, 2019; Cusson & Strange, 2008; Thompson, 2019). However, Benner (1984) offered strategies for teaching novice learners, specifically checklists and guidelines, based on their needs for experience and contextual understanding in clinical situations. An nAPN refers to the following tools as rule books: onboarding checklists, policies, procedures, and set learning goals established with a preceptor as a path to clinical learning. Preceptors have emerged as essential partners and teachers, as they act as sherpas who offer context to nAPNs and serve as role models (Bowe, 2018). As experience is gained during onboarding, learning strategies are expanded to apply new clinical knowledge through case presentations and case studies (Benner, 1984). The perpetual emergence of new evidence and knowledge to specialized areas of medicine and nursing practice is both a joy and challenge of pursuing training for an APN caring for pre-anesthesia surgical patients. The knowledge of general internal medicine, surgical oncology, peri-anesthesia care, regional and general anesthesia knowledge, and associated competencies are necessary for successful training as an APN in a PAC (Bowe, 2018). Bowe (2018) detailed training in a PAC, defined compelling elements and informal feedback, made suggestions for teaching simulations, and compiled competency lists. The cost of APN onboarding has remained constant over time. However, the retention of APNs has been identified as an important goal for onboarding that will, over time, yield economic benefits and improve quality (Chaney et al., 2021; Thompson, 2019).

### **III. PROJECT METHODOLOGY**

#### **Methodology**

The methodology was an evidence-based project guided by the American Association of Colleges of Nursing recommendations and criteria for the Doctor of Nursing Practice (DNP), in addition to the Seton Hall University course guidelines. This scholarly exploration and evidence-based project applied onboarding evidence and created an innovative approach for the pre-anesthesia onboarding of new APNs using strategies and current technologies to formulate educational resources (American Association of Colleges of Nursing, 2006). The structure and framework of two complementary theoretical models were used to improve this key area of professional development and APN education to facilitate successful transitional clinical competencies. As the classic work of Benner (1984) has informed and framed learning development in nursing practice, these recommendations were incorporated in the APN onboarding to the PAC. The current pre-anesthesia guidelines and standard of care for pre- and perioperative patients have been included in a Microsoft Teams resource library. Every APN who works in the PAC was given access to the new educational resource library, introduced to, and familiarized with the OBPAC. The nAPNs were welcomed to the PAC and given access to the educational library for self-directed learning; an onboarding checklist with a review of each educational topic in the library was also provided. Open communication and concrete learning objectives were included in the onboarding blueprint documents.

The process of onboarding nAPNs is necessary and tends to be continuous as APN staff leave the PAC or retire, leaving vacant positions filled by new APNs. The onboarding process varies based on the clinical nursing unit specialty and experiences of the APNs. However, the time for onboarding is standard for the institution in which the project was implemented. Basic orientation included general hospital orientation alongside nursing and APN onboarding and was slated to last 12 weeks. The nAPN onboarding consisted of the general orientation of APNs

within the institution, offered through didactic classes and self-directed learning for the specialty unit and population in practice. In addition, on-unit learning was facilitated by an APN preceptor. The preceptor acted as a peer, teacher, social liaison, and an evaluator of clinical judgment and growth of the nAPN in the specialty of pre-anesthesia nursing.

The development of an onboarding blueprint for PAC was intended to standardize the education that nAPNs receive and provide evidence-based, PAC-specific education. The OBPAC emphasized the distribution of responsibilities across the onboarding timeframe, a phased learning approach, open communication between the preceptor and nAPN regarding clinical learning and growth, and a method of providing feedback to the nAPN. One area of concentration within the project was the compilation of educational resources identified as relevant and necessary for nAPN knowledge in a PAC. The educational resources were identified, indexed, and catalogued into an appropriate learning phase of the OBPAC. The ultimate goals of the OBPAC project were to diminish staff APN turnover and thereby save institutional resources, increase knowledge and retention of trained APNs, and concurrently reduce preceptor fatigue experienced while onboarding new APNs. The project director or doctoral student created a blueprint based on institutional guidelines while incorporating PAC-specific knowledge with the guidance and mentorship of a residency preceptor, who played the role of manager for the PAC.

Implementation of the OBPAC was contingent on the vacancies and resulting nAPN staff hires to the PAC. As new APNs were hired and start dates were decided, introductory letters were sent via email, welcoming them with information about their preceptor's name and educational material to review before the start date. Preceptors were selected before new APNs started in the clinic. This was based on the preceptors' experience, motivation to precept, and

willingness to share the precepting role with more experienced PAC APNs. The nAPNs were given the OBPAC blueprint and familiarized with the OBPAC document, including the phased learning approach (Appendix A). They were exposed to the Microsoft Teams platform, from which educational resources and some of the clinical guidelines could be used as references during the onboarding. The preceptors would ideally have attended the quarterly in-service preceptor workshops conducted by the institution and be familiar with the new OBPAC. At the conclusion of the onboarding, an evaluation tool was provided to the nAPNs for completion. The tool (Appendix B), designed by the onboarding committee, had a 5-point Likert scale to evaluate the overall onboarding, preceptor, and PAC leadership support provided during onboarding (1 = *Almost Never* and 5 = *Always*). Two open-ended questions captured areas that could be developed further or improved upon in the OBPAC. After completion of the onboarding, two post-onboarding meetings were arranged with the nAPN, onboarding committee, preceptor, and PAC manager to offer support and address continued learning requirements for the nAPN.

The logic model is a visual representation of the OBPAC resources inputted to the OBPAC, the assumptions made about processes leading to the achievement of project outcomes, and consequential impacts of the inputs and activities on the OBPAC (Appendix E). The logic model had two primary assumptions serving as the glue that holds the structure of the OBPAC together. The first assumption was the need for a fortified, up-to-date, evidence-based orientation to the PAC. This justified the project and investment of inputs, such as the staffing of preceptors, educational development specialists, and technology resources. The second assumption was that phased learning and standard multimodality educational resources with the utilization of a clinical judgment tool would enhance communication and debriefing during the onboarding of APNs. Bahouth and Esposito-Herr (2009) reported the possibility of an enriched and

standardized onboarding with improved communication and phased learning engendering a culture of continued clinical growth and knowledgeable PAC APNs as a medium outcome. This implies that the ultimate long-term outcome of clinically expert peri-anesthesia APN staff, who retain their positions for many years, is achievable (Chaney et al., 2021). In addition, improved communication with regular debriefing of onboarding nAPNs through clinical judgement tools will build collegial partnerships and support continued clinical growth.

The most critical assumption in the model is that the nAPNs will self-direct their learning with the educational resources. The knowledge gained from textbooks, lectures, and other resources are essential for the development of strong clinical practice in the PAC and cannot be learned solely through clinical practice. The novice APN needs to have background knowledge as an input. However, on-the-job training and clinical experiences with preceptors advance clinical knowledge. The OBPAAC will standardize the expectations of nAPNs and educational resources used for onboarding, thereby enhancing the onboarding experience.

### **Theoretical Framework**

Patricia Benner's (Benner, 1984) seminal work, *From Novice to Expert*, formed the theoretical foundation for this DNP scholarly project. The basis for Benner's theory is the Dreyfus model of skill acquisition for the experiential learning of US (United States) Air Force pilots (Dreyfus, 1985). Both the Dreyfus and Benner models are situational and require context, prior learning, and experience for the development of knowledge. The models describe the stages of clinical maturity and knowledge development. This classic work has chronicled the process of skill and knowledge learning in nurses through five stages. The model recommends teaching strategies to nurses during each stage of clinical development (Benner, 1984). The OBPAAC assumes that the APNs hired to start PAC onboarding are minimally prepared as advanced

beginner clinical learners and sufficiently competent to follow clinical checklists and guidelines. Benner's suggested learning strategies of case study, situational observation, and practice provided a vehicle for advanced beginner clinical learners. Specific learning opportunities for learning have been suggested through nAPN communications with preceptors. In addition, novice nurse practitioners need support and leadership to succeed over time (Fitzpatrick & Gripshover, 2016). To provide clinical support to the nAPNs, check-in meetings and various institutional programs aimed at mentoring and supporting nAPNs were scheduled during the onboarding. Onboarding (Benner, 1984) emphasizes situational and clinical experiences to advance clinical learning in the nAPN. This scholarly project applied Benner's stages of learning and recommended teaching strategies as the OBPA educational initiative's basic premise.

### **Risk Analysis**

As part of comprehensive project management, a risk matrix for onboarding new APNs to the PAC was created (Appendix G). The risk matrix was arranged with a key and risk expectation scale of one through five. The risk type categories were titled across the top, namely the type of loss, expectation of risk type, severity of risk, and impact of the risk of losing the chart (Baker, 2003). Within the risk matrix, each area was rated using the risk severity scale and a contingency plan of action was drawn up for each risk type. The most severe financial risk to the project was the loss of administrative support. Although it was not rated likely to occur in the absence of financial assistance, the trickle-down impacts on educational resources, nAPN learning time with preceptors, and dedicated independent learning time would reduce. Lack of preceptor interest in PAC APNs would significantly impact the PAC onboarding project as well. The project has several benefits and can impact APN retention and job satisfaction. It also has the potential to improve patient outcomes and meet quality indicators for Medicare

reimbursement. The project was initially proposed to stakeholders by the DNP scholarly project mentor, with a focus on the benefits of the new onboarding guidelines as the marketing strategy. The new OBPAAC was already part of staffing activities. Recruitment for APN preceptors was essential and gained momentum with full support of the PAC manager. The recognition for preceptors was emphasized in PAC meetings. Every preceptor volunteer peer could take a day to attend the preceptor workshop and be encouraged to apply for promotion in the new APN clinical ladder, which financially incentivized precepting. Needs assessment was performed as the PAC had several vacancies on the table of organization. Some staff members retired and two APNs resigned within a year of onboarding. The loss of new APNs within a year highlighted the PAC's need for an improved onboarding process with increased support following the precepting portion of onboarding. An onboarding initiative within the APP division, meant to centralize and standardize onboarding record management, was also begun. A key step of the DNP scholarly project was volunteering to lead the onboarding initiative and proposing the onboarding guideline along with education resources. The PAC manager and DNP project mentor were enthusiastic about creating guidelines with phased learning and accepted their mentor role in the DNP scholarly project.

### **Implementation Timeline**

The onboarding blueprint was divided into three phases of learning. Phase one was general institutional learning, comprising medical record systems, essential technologies, appropriate documentation, and billing basics. Observation and independent care of noncomplex patients were expected results for the successful evaluation of phase one. Phase two consisted of the nAPN assumption of clinical duties and case load, as directed by the preceptor. This phase involved self-directed learning, wherein the new APN availed programs pertinent to their



specialty unit. The PAC had many multi-modality learning resources that fulfilled a range of adult learning styles. These educational resources were collated and developed for the onboarding project and process. Some of the resources were enhanced recovery after anesthesia, guidelines for practice by surgical stakeholders, and online texts to research new clinical situations. Pertinent knowledge for PAC learning was guided by evidence and literature-based recommendations on perioperative care, anesthesia, and oncology. In phase three, the nAPNs were close to clinical competence and prepared for independent practice in the PAC. The recipients of the project benefits were new PAC APNs hired after the creation of the PAC onboarding blueprint. The changes offered clarity of APN roles and timelines for independence. The associated learning resources reduced the time required by the preceptor to seek out resources for the new APN. As preceptor time is valuable, the onboarding blueprint had built-in checkpoints that offered support from the manager and onboarding team. The checks also provide a forum for communicating challenges faced by nAPNs after they gain competence and practice independently, immediately after onboarding. The 60- and 90-day check-in meetings were conducted with the onboarding team, manager, new APN, and preceptors. The recipient of the most significant impact of the improved and successful PAC onboarding blueprint was the institution or hospital system. The economic savings from reduced staff turnover per position was estimated to be \$1,500 per day (Auffermann et al., 2020). Patients also reaped the benefits of well-trained, competent staff, thereby enriching the reputation of the healthcare system. The overall goal of the onboarding project was to make the PAC staff a cohesive unit with superior levels of staff job satisfaction, owing to well-supported APN role transitions, clear expectations, robust educational resources, and strong preceptorship.

## **Budget**

The budget for the OBPAC had both direct and indirect costs, as most budgets do (Appendix D). The budget finances were paid through the pre-anesthesia cost center and APP division. The costs were tabulated and totaled to represent the entire expense of the new OBPAC. Most of the OBPAC expenses in the onboarding budget consisted of salaries and benefits. Total funding must account for wages for both tenured, experienced, precepting APN and nAPNs, regardless of the volunteering status of the preceptor. The cost associated with precepting ended after the third phase. The impact of precepting an nAPN on unit productivity in early stages of the onboarding blueprint was not included in the 12-week OBPAC. However, indirect expenses shared with the department were included until phase two of the learning. Supplies, such as APN uniforms, technology, computer programs such as UpToDate, Lexicon, Microsoft Teams, textbooks, other clinical resources, and frequently used subscriptions were included in the budget. A few other included expenses were stationery supplies, a binder for the guideline book, a perioperative reference textbook utilized in the unit, and plastic covers for the guideline grids. The reference book had current evidence-based guidelines for surgical services and encouraged nAPNs to familiarize themselves with surgical pre- and perioperative considerations. Onboarding implementation and education for newly hired APNs required intermittent debriefing time and formal evaluation meetings with the PAC APN manager to discuss clinical growth of the nAPNs. A second tool was used to analyze the onboarding experiences of individual nAPNs. The DNP students' time was included in the budget, consisting of time spent in planning the OBPAC and in compiling and statistically analyzing the collected data. Budgeting is critical to ensure adequate resources are set aside for project implementation, and to gauge project feasibility and success if a financial benchmark is to be achieved.

## **Marketing Plan**

The stakeholders who granted approval for this evidence-based APN onboarding in the PAC were the PAC manager and the director of advanced practice credentialing and quality. Fortunately, as the APP division of the hospital had already set objectives to revamp the APP onboarding, the manager was eager to lead the project. Establishing an onboarding team in the PAC was a starting point for this DNP project. Three APN peers from the PAC volunteered to be on the onboarding committee. Meetings were set monthly, with the manager reviewing the project's goals.

The setting of this scholarly project was the PAC of a large, New York tristate hospital system. The patients were ambulatory and the majority were being evaluated in preparation for elective surgical procedures. The APNs took histories, conducted physical exams on adult oncology patients, reviewed medications, performed medication reconciliation and laboratory tests, and reviewed test results. Communication with external providers and consulting services was exclusive of the pre-anesthesia evaluation. The visit history, physical exam, anesthesia evaluation, surgical optimization, and ordering of preoperative and post-operative standard requirements for recovery and enhanced recovery from anesthesia were completed for each patient interaction. The practice site person acting as a mentor for the scholarly project and crucial member of the Scholarly Project Committee was the PAC manager. As the manager of a large group of APNs in a busy PAC, the expertise of an individual responsible for the hiring, onboarding, and practice evaluation of APNs offered essential qualifications and primary support for the scholarly project. The DNP scholarly project mentor was a key stakeholder and critical for the vision, methodology, and objective development of this evidence-based project. Marketing the onboarding change to PAC staff and stakeholders occurred in a staff meeting presentation. The presentation objectives were to announce onboarding changes to PAC

staff and recruit future preceptors and an onboarding committee of peer APNs working in the PAC. Volunteers for the onboarding committee and precepting contacted either the DNP project leader or PAC manager. PAC APNs are important stakeholders as they are affected by the competence of the nAPNs and vacancies on the PAC table of organization. The initial implementation steps were planned for the onboarding project. The meeting schedule was created with an agenda and timeline for the project. The blueprint for onboarding was drafted simultaneously with the phases of learning guidelines, preceptor-led clinical learning experiences, and educational resources that were built into the phased blueprint. During the implementation process, five nAPNs were hired to the PAC and onboarded. The implementation of the DNP scholarly project refined educational resources for the OBPAC, allowing for the continuous recruitment and preparation of PAC preceptors and onboard committee members. The success of the OBPAC could thus, be measured in the post-onboarding nAPN evaluations. The documentation of satisfied nAPNs through their evaluations will fortify the sustainability of the OBPAC.

#### **IV. PROJECT OUTCOMES**

The five nAPNs onboarded in the OBPAC DNP scholarly project offered basic demographic information and previous experience as an APN. The captured demographics of the nAPNs (n = 5) were years of experience as APN and last clinical practice setting. The majority (75%) of nAPNs had more than 5 years of previous experience as an APN. The remaining nAPN were newly hired from an APN fellowship program and had less than 2 years of previous experience as an APN. The clinical settings varied among the nAPNs, with two having internal medicine as the last clinical setting, one having been in a critical care unit before onboarding,

and the nAPN fellow having rotated through several services during their fellowship. Appendix F shows the years and clinical experiences of the nAPNs. All five newly hired APNs successfully completed the onboarding and are now competent APNs in the PAC. The nAPNs completed evaluations upon conclusion of the onboarding, with precepting and documentation of demonstrated competence in the PAC. The evaluation tool had two open-ended questions about areas that could be improved, the most valuable experience, and what could be added to the learning process. In addition, the tool evaluated the preceptor, leadership, and onboarding experience, with lowest score representing never and the highest score representing always. The results of the OBPAC evaluation were positive. The evaluation score ranged from 4 to 5, with a mean score of 4.95. The open-ended questions at the end of the evaluation elicited feedback from the nAPNs. The responses to these questions followed themes such as requesting more time to complete the educational resources for the checklist. Scheduling was noted as a challenge because familiarity with the scheduling computer application was initially deficient and 50% of the nAPNs requested to rotate preceptors during the onboarding.

Antibiotic stewardship testing revealed an average 16% increase in test scores over the pretest scores of PAC staff APNs. The same test was administered to PAC staff attending the staff meetings via a live poll antibiotic stewardship education (Appendix F), which was derived from the enriched training and education in antibiotic stewardship in OBPAC. As a result, improved beta-lactam allergy assessment documentation, multidisciplinary collaboration, and discussion was encouraged. Other qualitative data were offered in the 60- and 90-day check-in meetings, with different themes and qualitative findings. At the check-in meetings, the themes of work-life balance and work management during the workday were common issues discussed.

## V. SUMMARY

### **Sustainability, Conclusions, and Recommendations**

Several factors contribute to the sustainability of the OBPAC scholarly project. Staff vacancies and the hiring schedules of nAPNs were outside the project's scope of control. The blueprint testing with  $n = 5$  conducted for the OBPAC DNP scholarly project was deemed successful based on the evaluation outcomes. Continued sustainability was demonstrated as the established onboarding team met regularly to discuss items such as the recruitment of preceptors and announcement of onboarding events. The onboarding team planned for coordination at the start of the nAPNs' arrival to the table of organization. Preceptor selection for the nAPNs was factored into the OBPAC. The preceptors' availability depended on scheduling limitations and the time of conclusion of the previous precepting assignment. Preceptors were encouraged to attend preceptor workshops to gain familiarity with the OBPAC blueprint documents and debriefing techniques. Shadowing experiences for nAPNs with external consultants, i.e., general internal medicine, cardiology, and didactic classes were scheduled based on availability and educational resources. Scheduling classes within the health system was out of the PAC's control, but the nAPNs were encouraged to enrich their practice if desired after onboarding. The focus of this project was on education and building a checklist for OBPAC. Individual self-directed learning time was incorporated into the phased learning blueprint for the education required for the checklists. The educational resources were available remotely through the hospital system's private network. Other learning resources available to the staff and nAPNs were abundant and widely accessible. This was important for continued use of current and up-to-date clinical information. The preceptors were heavily relied upon in the OBPAC. The voluntary PAC staff APNs who precepted were essential to the onboarding of nAPNs. Recognition of their efforts

and additional work as preceptors would ideally be rewarded or compensated for by the institution. Acting as role models, preceptors are clinically proficient. However, the training and teaching they provide to incoming nAPNs can be enhanced with preceptor training. The institution offers a preceptor workshop on a quarterly basis, which has been attended by an increasing number of PAC preceptors. The preceptor workshop is one way of recompensing preceptors with an education day. Preceptor education and preparation through the workshop is another factor contributing to the sustainability of the OBPAC's successful onboarding and preceptorship. The preceptor workshop class focused on feedback and debriefing techniques after clinical situations. The PAC manager also served as a preceptor for the scholarly project and was involved in hiring, goal setting at the onset of onboarding, and navigating challenges or misunderstandings with policy, job responsibilities, and expectations. The OBPAC was deemed successful by the PAC manager, thereby fortifying its sustainability.

Sufficient evidence has shown that dedicating time for a well-organized onboarding plan, laying clear job expectations for precepting, and continuous mentoring will increase precepting, job satisfaction, and staff retention (Bowe, 2018). The OBPAC was developed with concrete, clear objectives using a phased learning approach based on the novice-to-expert model of clinical learning (Benner, 1984). Teaching strategies in various clinical stages have been demonstrated to promote clinical competence in the PAC. The successful integration of newly hired APNs at varying levels of experience, with preceptor support, regular communication, and leadership both during and after onboarding using a standardized blueprint and educational resources has yielded favorable evaluation scores. Support from leadership, preceptors, and overall onboarding evaluations have generated a successful onboarding blueprint and achieved objectives set for the scholarly DNP project. The strength of the OBPAC may grow with repeated successful

transitions of nAPNs to competent PAC APNs. This project converted evidence into action by organizing a successful onboarding program for APNs in the PAC. Future exploration of this onboarding DNP scholarly project could include measuring APN retention and job satisfaction over time using tools such as the Misner Nurse Practitioner Job Satisfaction Tool. The ability to onboard APNs to competent independent providers is essential for healthcare systems. The benefits of onboarding endow the healthcare system with financial gains that in turn improve care quality. Many aspects of OBPAC can impact APNs' professional development and job satisfaction. Using learning and nursing theory, current educational resources, timely teaching strategies, evaluations, and clinical post-tests, onboarding can be made objectively successful.



## VI. REFERENCES

- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education*, 39(1), 38–42. <https://doi.org/10.1177/002248718803900109>
- Anglin, L., Sanchez, M., Butterfield, R., Rana, R., Everett, C. M., & Morgan, P. (2021). Emerging practices in onboarding programs for PAs: Strategies for onboarding. *Journal of the American Academy of Physician Assistants*, 34(1), 32–38. <https://doi.org/10.1097/01.JAA.0000723932.21395.74>
- Auffermann, K., O’Keefe, R., Smith, T., & Cohn, T. (2020). Exploring novice nurse practitioner job satisfaction. *Journal of the American Association of Nurse Practitioners*, 33(10), 802–810. <https://doi.org/10.1097/JXX.0000000000000454>
- Bahouth, M. N., & Esposito-Herr, M. B. (2009). Orientation program for hospital-based nurse practitioners. *AACN Advanced Critical Care*, 20(1), 82–90. <https://doi.org/10.1097/NCI.0b013e3181945422>
- Baker, S., Baker, K., & Campbell, G. (2003). *The complete idiot’s guide to project management*. Penguin. <https://books.google.com/books?id=MSYLHYhoU3cC>
- Barnes, H. (2015). Nurse practitioner role transition: A concept analysis. *Nursing Forum*, 50(3), 137–146. <https://doi.org/10.1111/nuf.12078>
- Barrett, N., & Wright, M. E. (2019). Key elements of advanced practice provider integration. *Journal for Nurse Practitioners*, 15(5), 370–373. <https://doi.org/10.1016/j.nurpra.2018.12.004>
- Benner, P. (1984). *From novice to expert, excellence and power in clinical nursing practice*. Addison-Wesley Publishing Company. <https://doi.org/https://doi.org/10.1002/nur.4770080119>
- Bowe, E. A., Schell, R. M., & DiLorenzo, A. N. (2018). *Education in anesthesia: How to deliver the best learning experience*. Cambridge University Press. <https://doi.org/10.1214/ANE.0000000000003788>
- Chaney, A., Martin, A., Cardona, K., & Presutti, R. J. (2021). Nurse practitioner and physician assistant onboarding in a family medicine practice. *Journal of the American Association of Nurse Practitioners*, 34 (3), 522-528. <https://doi.org/10.1097/JXX.0000000000000611>
- Cusson, R. M., & Strange, S. N. (2008). Neonatal nurse practitioner role transition: The process of reattaining expert status. *Journal of Perinatal and Neonatal Nursing*, 22(4), 329–337. <https://doi.org/10.1097/01.JPN.0000341365.60693.39>

- Dreyfus, H. L., & Dreyfus, S. E. (1985). *Mind over machine: the power of human intuition and expertise in the era of the computer*. Basil Blackwell. <https://doi.org/10.1109/MEX.1987.4307079>
- Fitzpatrick, S., & Gripshover, J. (2016). Expert nurse to novice nurse practitioner: The journey and how to improve the process. *Journal for Nurse Practitioners*, *12*(10), e419–e421. <https://doi.org/10.1016/j.nurpra.2016.05.012>
- Hartsell, Z., & Noecker, A. (2020). *Quantifying the cost of advanced practice provider turnover*. SullivanCotter. <https://www.physicianleaders.org/articles/quantifying-the-cost-of-advanced-practice-provider-turnover>
- Jain, P. N., Jones, M. B., & Thammasitboon, S. (2020). Envisioning distinctive professional identity for critical care advanced practice providers: Fostering integrative transformation beyond orientation. *Pediatric Critical Care Medicine*, *21*(8), e581–e583. <https://doi.org/10.1097/PCC.0000000000002342>
- Martin, K. L., Todd, S. E., Gomez, M. M., Singer, L. L., & Cagney, D. N. (2021). Needs assessment for an introductory radiation oncology curriculum for advanced practice providers. *International Journal of Radiation Oncology, Biology, Physics*, <https://doi.org/10.1016/j.ijrobp.2021.05.158>
- Misra-Hebert, A. D., Kay, R., & Stoller, J. K. (2004). A review of physician turnover: Rates, causes, and consequences. *American Journal of Medical Quality*, *19*(2), 56–66. <https://doi.org/10.1177/106286060401900203>
- Moran, G. M., & Nairn, S. (2018). How does role transition affect the experience of trainee Advanced Clinical Practitioners: Qualitative evidence synthesis. *Journal of Advanced Nursing*, *74*(2), 251–262. <https://doi.org/10.1111/jan.13446>
- Porter-O’Grady, T., & Malloch, K. (2017). *Leadership in nursing practice: Changing the landscape of healthcare*. Jones & Bartlett. [https://www.google.com/books/edition/Leadership\\_in\\_Nursing\\_Practice/0ETLoQEACA-AJ?hl=en&kptab=getbook](https://www.google.com/books/edition/Leadership_in_Nursing_Practice/0ETLoQEACA-AJ?hl=en&kptab=getbook)
- Schutte, L., & Search, C. (2014). *Physician retention: Essential data and trends to maximize ROI*. AAPPR. [https://member.aappr.org/custon.asp?page=ACP\\_Winter14\\_B](https://member.aappr.org/custon.asp?page=ACP_Winter14_B)
- Shanafelt, T., Goh, J., & Sinsky, C. (2017). The business case for investing in physician well-being. *JAMA Internal Medicine*, *177*(12), 1826–1832. <https://doi.org/10.1001/jamainternmed.2017.4340>
- Thompson, A. (2019). An educational intervention to enhance nurse practitioner role transition in the first year of practice. *Journal of the American Association of Nurse Practitioners*, *31*(1), 24–32. <https://doi.org/10.1097/JXX.0000000000000095>

Weston, C., Jones-Schubart, K., Hare, M., Gosselin, K., & Cook, S. (2021). Benefits of a pediatric clinic simulation using standardized patients in family nurse practitioner education. *Nursing Education Perspectives*, 42(6), E31–E33.  
<https://doi.org/10.1097/01.NEP.0000000000000871>

## Appendix A

### *Onboarding blueprint example phase 1*

Patient Assignment	Goal for PAC Learning	Strengths	Weaknesses
		Additional Comments	

## Appendix B

### *Evaluation of NP orientation*

Please complete this survey to help evaluate and improve the NP orientation at PAC

	Almost Never (1)	Seldom (2)	Usually (3)	Almost Always (4)	Always (5)
How often did your preceptor:					
Present information clearly?					
Encourage independent decision making?					
Provide you with assistance when you had questions and/or concerns?					
Assist you to select learning experiences to meet your clinical learning needs?					
Listen with empathy?					
Acknowledge your feelings?					
Assist in making you feel welcome?					
Assist in making you feel like an integral part of the unit staff?					
Show enthusiasm for the orientation process?					
Give feedback related to your progress during daily interactions?					
Please rate/circle the aspects of orientation on a scale of 1–5 (1 being poor and 5 being excellent)					
Support from leadership team	1	2	3	4	5

## Appendix C

### *OBPAC evaluation results*

	Almost Never (1)	Seldom (2)	Usually (3)	Almost Always (4)	Always (5)
Preceptor				2	2
Leadership				2	2
Overall onboarding experience				1	3

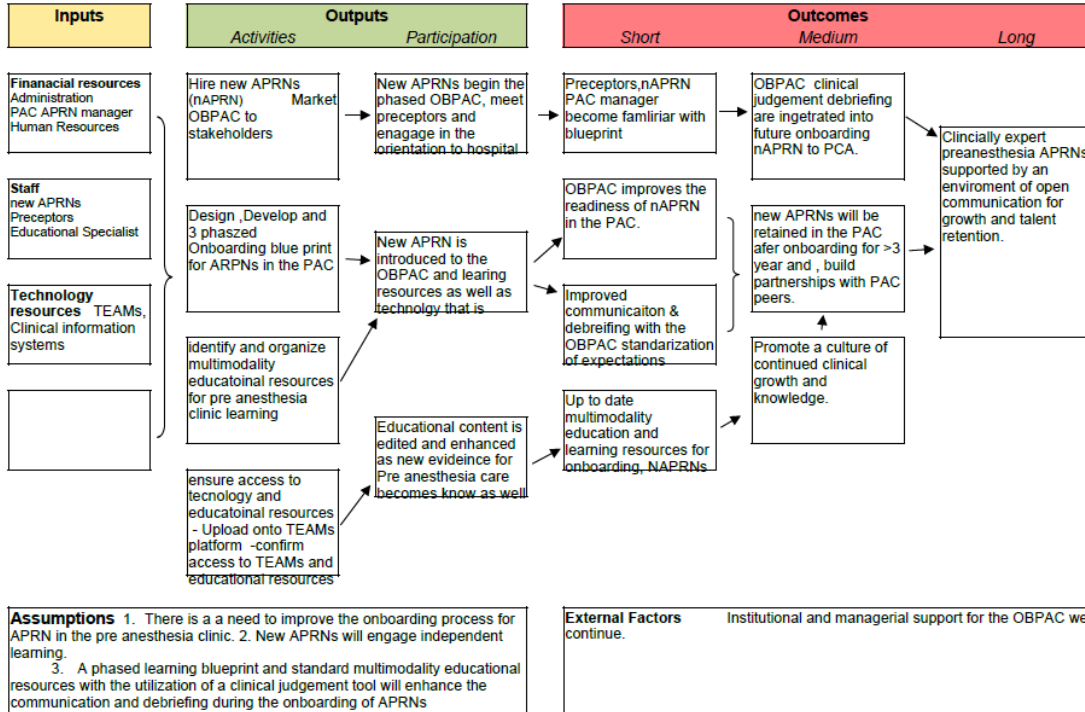
## Appendix D

*Proposed budget*

<u>Resources</u>	<u>Estimated expense</u>	<u>Actual expense</u>
<b>Salary/Benefits</b>		
OBPAC project development DNP student, estimated 680 hours at \$50/h	\$34,000.00	\$0
OBPAC new APNs 40 h x 12 weeks	\$28,880.00	\$0
Evaluation debrief time 4 h x 12 weeks	\$2,800.00	
<b>Educational material:</b>		
Subscriptions	\$499.00	\$0
UptoDate, Lexicon	\$199.00	
	\$347.00	
ASCO Oncology Essentials	\$199.00	
Microsoft Word, Excel, TEAMS		
Lab coats	\$300	\$0
Survey software	\$99	\$0
Internet (Wi-Fi) cost (used hospital Wi-Fi)	\$250	\$0
Hard copy of guidelines, binder stationary supplies	\$35.00	\$0
<u>Total</u>	\$67,608.00	\$0

# Appendix E

## Theory logic model





## Appendix F

### *Pretest antibiotic stewardship*

1. The patient is a 63 yo female undergoing robotic colectomy, she has no drug allergies, and her weight is 75 kg. What would be the best time for her to receive antibiotics to prevent a surgical infection?

- a. 2–24 h before surgery
- b. Less than an hour before surgery
- c. At 6 pm and 7 pm the night before surgery.
- d. During the procedure

2. Which is the best antibiotic for this patient for surgical prophylaxis?

- a. Cefazolin 1 g IV on call to OR
- b. Clindamycin 900 mg IV on call to OR
- c. Cefotetan 2 g IV on call to OR
- d. Cefotetan 1 g IV on call to OR

3. The patient is a 45 yo obese male with a BMI of 40, weight of 107kg, s/p a THR 2 y ago, and is being seen in the pre-anesthesia clinic for a renal mass, for a robotic partial nephrectomy. Which antibiotic choice is the best for this patient with no medication allergies?

- a. Cipro 400 mg po on call to OR
- b. Cefazolin 1 g IV on call to OR.
- c. Gentamicin 120 mg/clindamycin 900 mg on call to OR
- d. Cefazolin 2 g IV on call to OR

4. The patient reports a PCN allergy that is documented in the EMR. A careful assessment of the reaction reveals that the patient has been told by her mother that, as an infant, she developed a rash when given penicillin and has never had it since. The patient is scheduled for a left mastectomy with tissue expander reconstruction, she weighs 101 kg. Which antibiotic is the best selection for this patient?

- a. Clindamycin 900 mg on call to OR
- b. Cefazolin 1 g on call to OR
- c. It's a clean surgery, no antibiotic required
- d. Cefazolin 2 g on call to OR

Answer key 1. b; 2. c; 3. d; 4. d.

## Appendix G

### *SWOT Analysis*

Strengths	Weakness
<p>Strong administrative support and flexibility</p> <p>Plenty of educational resources for onboarding advance practice nurses and preceptors supporting the onboarding.</p> <p>Time to develop and reevaluate the onboarding program with the flow of new candidates.</p>	<p>Urgent need for an improved onboarding program for advanced practice nurses.</p> <p>Learning while developing the onboarding program, with no previous structure.</p> <p>Limited mentors and nurse practitioner preceptor fatigue.</p>
Opportunities	Threats
<p>Nascent process with emerging literature on the topic of onboarding of nurse practitioners.</p> <p>New candidates are onboard on a regular basis.</p> <p>Fellowship programs are gaining favor and will potentially create more expertise in advanced practice nurse onboarding.</p>	<p>Reduced motivation to make improvements in new onboarding.</p> <p>Potential withdrawal of independence and financial support by administration for program development with organizational change.</p>