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**Evaluating the Impact of Simulation on Perceived Knowledge and Confidence of New  
Graduate Nurses (NGNs) in Maternal-Newborn Care**

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## Abstract

**Background:** Nursing education worldwide varies in duration and training process, with nurses often facing rapid immersion into patient care complexities when entering the workforce. While new nurses contribute significantly to the nursing community with contemporary knowledge, their transition to practice can be daunting, necessitating support for both competence and retention. As specialty care settings integrate more new graduate nurses (NGNs) to address workforce shortages, collaboration between leaders and educators becomes crucial. Simulation emerges as a vital tool in building confidence while learning, offering a safe space for skill development and growth of confidence.

**Purpose:** This project's objective was to examine the current orientation process for NGNs in a rural community hospital. The project aimed to implement and evaluate the implementation of high-fidelity simulation and alternative education and its effect on the self-perceived confidence and competence of NGNs.

**Method:** In this descriptive, quality improvement project, a modified version of the Casey Fink Graduate Nurse Experience Survey© was used pre- and post-educational intervention for measurement to determine whether there was an effect on the self-perceived confidence and competence of the participants.

**Intervention:** NGN participants engaged in educational activities comprised of evidence-based case studies, drills, and high-fidelity simulations. The use of these scenarios not only facilitated the integration of theoretical knowledge but also promoted teamwork and interpersonal skills through experiential learning. Debriefing sessions facilitated using the PEARLS Healthcare Debriefing Tool©, provided a platform for reflection and skill development, supported by the project lead's extensive experience in simulation and maternal-newborn nursing.

**Results:** The Modified Casey Fink Graduate Nurse Experience Survey© revealed some gains in NGNs' self-reported confidence and competence levels in various clinical decision-making skills, patient care prioritization, and delegation abilities post-education. Discussion amongst NGNs echoed the sentiment of these findings, emphasizing the value of simulation-based learning in preparing nurses for real-world scenarios. Participants expressed a strong preference for incorporating high-fidelity simulation into orientation and training programs for all WCC nurses.

**Conclusions:** Overall, the findings suggest that simulation-based education can be a valuable learning tool for NGNs, fostering confidence, competence, and readiness for clinical practice. Participants' expressed positive responses to high-fidelity simulation underscores its potential role in shaping the future of nurse education for the Women & Children's Center (WCC).

**Keywords:** maternal-newborn, nursing, infant care, high-fidelity simulation, new graduate nurses, entry-level nurses

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## **Evaluating the Impact of Simulation on Perceived Knowledge and Confidence of New Graduate Nurses (NGNs) in Maternal-Newborn Care**

Nurses comprise more than half of the global healthcare workforce, totaling nearly 28 million individuals worldwide (WHO, 2020). Globally, there are ongoing concerns about a nursing shortage of almost six million nurses, which directs attention to the need to provide quality education and seamless integration of these professionals into the workforce (WHO, 2020). Nursing education exhibits considerable diversity globally, with pre-employment training programs ranging from two to five years and variable on-the-job training (WHO, 2020).

New graduate nurses (NGNs) embark on their nursing careers with a considerable amount of enthusiasm, only to find themselves rapidly inundated by the intricacies of patient care and an environment in which they are expected to acclimate quickly (Riess, 2023). Murray et al. (2019) identify that recent NGNs constitute a significant segment of the nursing community, injecting contemporary evidence-based theory and renewed energy into the workplace. However, the transition to practice can be a stressful period for these new graduates, as they are vulnerable newcomers needing understanding and support from their more experienced colleagues (Murray et al., 2019). “New nurses need support and training to speed their transition from new graduates to qualified practitioners and improve their retention” (Asber, 2019, p. 430). To mitigate shortages and maintain sufficient resources at the point of care, specialty areas are now routinely employing NGNs in many hospitals. NGNs hired into specialty care settings are likely to encounter additional challenges as they transition into their nursing roles because they immediately require specialized training and knowledge to be able to practice safely (Vanderspank-Wright et al., 2020). Specialty care settings include disciplines such as critical care, pediatric, perioperative, psychiatric, and maternal-newborn nursing, among

others. Collaboration with department leaders and educators in specialty areas holds significant importance for NGNs in addition to a structured orientation plan (Zoss et al., 2023).

Simulation has been recognized as an essential part of learning in nursing education (Ehmke et al., 2021). The creation of a safe space that promotes the opportunity to grow and learn from mistakes is a necessary part of the learning process—this can be achieved within the simulation lab (Labrague et al., 2019). High-fidelity simulation provides NGNs with a realistic environment to acquire and refine clinical skills specific to labor and delivery and newborn care (Shinnick & Woo, 2015). Through simulated scenarios, NGNs can practice skills such as high-risk deliveries, neonatal resuscitation, and postpartum care in a controlled setting. Simulation allows NGNs to practice critical thinking and clinical decision-making in complex situations encountered in labor and delivery settings (Cant & Cooper, 2017). By experiencing various clinical scenarios, NGNs can develop confidence in their ability to make effective decisions under pressure. Simulation sessions are followed by debriefing sessions where NGNs receive immediate feedback on their performance (Cant & Cooper, 2017). These debriefings allow NGNs to reflect on their actions, identify areas for improvement, and integrate feedback into future practice. Simulation provides NGNs with a safe environment to make mistakes and learn from them without compromising patient safety (Shinnick & Woo, 2015). NGNs can practice skills and procedures repeatedly until they achieve proficiency, thereby reducing the risk of errors in real clinical settings.

### **Problem Description**

The Women and Children's Center (WCC) is a level 1 perinatal center housed within the University of Vermont Health Network Champlain Valley Physicians Hospital (UVHN-CVPH). The current model of nursing care provided reflects a traditional labor, delivery, and recovery



(LDR) care model. Level 1 designation in New York State means that a healthcare facility provides basic care services for pregnant women and newborns. Deliveries at less than 35 weeks' gestation are not typically common in level 1 units, and patients who are high risk or who may deliver prematurely are referred to a nearby hospital that provides a higher level of care. The labor and delivery area of this unit is designed and staffed to provide care to pregnant individuals during labor, delivery, and for the immediate postpartum period. Patients deliver their babies and then recover from the childbirth experience within the same room. Once they are stable, they are transferred to another area of the unit that is designated for postpartum care. Well-newborns accompany their mother to a postpartum room, where rooming-in is encouraged and supported. The mom/baby couplet is cared for by a postpartum nurse. Additionally, there is a special care nursery that is available for the care of compromised newborns. Situations that require a special care nursery nurse include long-term respiratory support, IV therapy, and prolonged resuscitation.

Care in the WCC is provided by a multidisciplinary team including physicians, midwives, registered nurses, care managers, lactation consultants, and numerous ancillary staff. The process of care that exists in the WCC is supported by these separate and distinct areas: Labor and Delivery (L&D), Special-Care Nursery, and Postpartum. Nurses are typically assigned to work in one area for the duration of their shift, caring for the population of patients who are in that phase of their admission. Some nurses are cross-trained and can work in all three areas of the unit; some can work in two areas; some are only able to work in one area. Upon hire, historically nurses begin orientation in one of the three areas of the unit, often incorporating a second area within the first few months. The initial area(s) of orientation is determined by unit leadership and the preference of the new nurse in alignment with their skills or desires. Unit

leadership and WCC staff report that there is inconsistency in the determination of where orientation has begun in recent years. Currently, approximately 70% of the unit's 55 nurses have been oriented and can work in two areas; approximately 8% have been oriented to all three. The remainder of the nursing staff is currently only trained to work in one of the three areas. The process of cross-training is an ongoing effort for the WCC.

As reported by unit leadership, challenges are often encountered in the WCC when the composition of the nursing staff does not align with the requirements of the unit's patient volume or level of acuity. Leadership and staff report that there are at least three to four shifts each week when the unit is not staffed with an appropriate number of L&D, Nursery, and Postpartum nurses. Ali et al. (2020) recognize that healthcare professionals working in an environment with an insufficient skill mix may experience higher stress levels. They may feel overwhelmed, overburdened, and unsupported, which can negatively impact their job satisfaction and performance (Ali et al., 2020). The absence of the correct skill mix may result in insufficiencies in workflow and communication. This can impede the smooth coordination of care and hinder the timely response to patient needs (Ali et al., 2020). The absence of the appropriate skills within the team can negatively affect patient outcomes. Complications such as postpartum hemorrhage, cord prolapse, and preeclamptic crisis may be more challenging to manage, and the overall quality of care may be at risk (Ali et al., 2020). While unit leadership is typically available to assist in these emergent circumstances, there are times when there is no leadership present on the unit when help is needed immediately as these emergencies can arise without warning at any time. Increasing the number of nurses who can competently and confidently work in more than one or two areas of the unit would address many of these challenges (Ali et al., 2020). WCC leadership and hospital administration set a goal that all Registered Nurses

(RNs) employed in the WCC will be cross-trained in all areas of the unit for the aforementioned reasons by the end of 2025. WCC leadership reports there has been significant resistance to cross-training and reluctance for NGNs to accept positions on this unit because of the cross-training requirements. Additionally, leadership reports that NGNs frequently come forward with concerns about their lack of confidence resulting from informal and unstructured training.

UVHN-CVPH developed a New Graduate Nurse Residency Program in 2018 that is accredited as a Practice Transition Accreditation Program (PTAP) by the American Nurses Credentialing Center (ANCC). The ANCC sets the gold standard for RN transition to practice, aiming to support new nurses and help build their confidence and competence (Cosme, 2023). Additionally, training for nurses newly recruited to the hospital setting relies heavily upon exposure to available experience with skilled guidance from a preceptor (Cosme, 2023). The creation of Graduate Nurse Residency (GNR) Programs aims to enhance the crucial initial year of nursing practice by maximizing the competency growth of new nurses and providing extra support. According to a 10-year qualitative study on new nurses, 17.5% of the 750 participants reported leaving their first job within the first year of employment with a perception of being overwhelmed, understaffed, and not adequately trained (Casey et al., 2021). While UVHN-CVPH recognizes this and offers consistent training and support for staff and preceptors, NGNs hired to the WCC have reported that development specific to the maternal-newborn specialty is commonly overlooked in the GNR Program. Many other specialty areas within UVHN-CVPH that have onboarded NGNs have also found a lack of attention to specialty areas within the GNR Program and are addressing their orientation processes independently. Furthermore, NGNs hired to the WCC who have completed their PTAP Nurse Residency Program at UVHN-CVPH have consistently reported in their evaluation surveys that while the

program was supportive and valuable, something more focused on maternal-newborn care was needed. NGNs have reported that orientation and training offered on the WCC unit lack consistency and structure, resulting in a lack of self-confidence.

The process of onboarding and orientation for NGNs through the GNR differs somewhat depending on whether they are hired to a specialty or non-specialty area (Appendix A). Typically, at UVHN-CVPH, all new employees are onboarded together and will complete the New Employee Orientation (NEO) as a group. NEO provides them with information that meets regulatory and corporate compliance requirements—all new employees at CVPH attend 5 days of NEO, regardless of their hired position. NEO is not specifically a part of the GNR Program. Upon completion of NEO, all NGNs are scheduled to begin their Nurse Residency and continue orientation in the Designated Orientation Unit (DOU), which is a medical/surgical unit. This part of the Nurse Residency program was designed to support their transition to practice and offer exposure to workflow, use of hospital equipment, and interaction with other members of the healthcare team. The DOU is staffed by trained preceptors and supervised by a Clinical Education Manager (CEM) who ensures each NGN is meeting the objectives of their Competency-Based Orientation (CBO) Document. NGNs who were hired to the WCC and other specialty areas spend less time on the DOU in comparison with those hired to med/surg or other specialty areas; this determination was made in the reflection of feedback received from WCC NGNs in previous years who reported that the orientation they were being provided with on the DOU was not overly helpful and sometimes conflicted with components of their WCC orientation. NGNs hired to med/surg, and other non-specialty areas spend approximately 6 weeks on the DOU before reporting directly to their home unit; WCC NGNs (and others hired to other specialty areas) spend 2-3 weeks. While the Nurse Residency Program at UVHN-CVPH

has received stellar feedback from previous participants regarding their transition to practice, WCC NGNs and those hired to other specialty areas commonly report they need something more focused on their specific specialty. It has been determined by hospital and unit leadership as well as by current WCC staff that additional training specifically for NGNs is a necessity.

Currently, there is no dedicated person who is accountable for the learning and development of the staff on the WCC; this responsibility is being overseen by unit leadership in addition to their operational tasks. Most other units within the organization have a member of their leadership team who is devoted exclusively to onboarding, orientation, ongoing education, and staff development for their unit; a person hired for this position within this organization holds the title of “Clinical Education Manager” (CEM). From 2019 to 2023, there were three different CEMs for the WCC, indicating frequent turnover. The position became vacant in July 2023. Currently, there is active recruitment for a new CEM for the WCC. It has been expressed by WCC leadership that the creation of a structured and sustainable orientation and training program with measurable objectives would be beneficial for this unit in its current and future state, whether the CEM position is vacant or filled.

Jones & Hall (2022) acknowledge that staffing labor and delivery units has traditionally been difficult because of the unpredictable changes in patient volume and acuity, as well as the unpredictable nature of labor and childbirth. The field of maternal-newborn care for mothers and infants has undergone significant evolution over the last three decades (Jones & Hall, 2022). Providing consistent and supportive training for nurses in this specialty proves to be challenging for the same reason, requiring a well-developed timeline and plan for orientation (Ehmke et al., 2021). There is a lack of current literature demonstrating this gap specifically for maternal-

newborn nursing. Historically, UVHN-CVPH and the WCC have relied on methods recommended by other hospitals within their network to influence orientation methods.

### **Available Knowledge**

Emphasizing flexibility in staffing through cross-training in maternal-newborn units has consistently proven beneficial. This adaptability plays a crucial role in providing optimal care for patients (Manelski, 2013). Hospitals such as Northside in Atlanta, GA identified that a cross-training initiative needed to be developed to enhance the proficiency of antepartum nurses, anticipating a rise in patient acuity within the unit (Manelski, 2013). Healthcare facilities frequently employ cross-training to meet the dynamic requirements of various hospital units and maternal-newborn care is no exception. Some negative feedback reported concerning cross-training was a lack of structure or consistency (Nowrouzi et al., 2015). This is not unlike what is being reported in the WCC. According to a qualitative study by Vichitragoonthavon and colleagues (2020) recently graduated nurses expressed a sense of unreadiness for the demands of their profession and observed a decline in their ability to trust. A group of 12 graduate nurses were selected to participate in focus group discussions and in-depth interviews. The themes that emerged in the qualitative data showed that NGNs felt a lack of confidence in communication skills, communication, and holistic patient assessment skills (Vichitragoonthavon et al., 2020). Additionally, clinical skills that are crucial for new nurses entering hospital practice include fundamental skills, health promotion, disease prevention skills, rehabilitation skills, and proficiency in specific areas (Vichitragoonthavon et al., 2020). Incorporating these components can guide the development of nursing interventions and curriculum design to better prepare NGNs to perform competently and confidently (Vichitragoonthavon et al., 2020).

Nursing orientation for NGNs varies, particularly in specialized areas, and is not universally applicable in a one-size-fits-all manner. Vanderspank-Wright et al. (2020) recognize that the transition of NGNs into critical care significantly differs from their transition into general nursing practice. Maternal-newborn nursing is a critical care specialty, at times, and requires specialized skills. Orientation standards are often examined in addition to recommendations, and competencies set forth by national nursing organizations (Zoss et al., 2023). An integrated review by Gullick et al. (2019) reiterated that hiring an NGN to a specialty, critical-care area necessitates a well-organized and ongoing educational program. Nurses working in specialty and critical-care areas require the ability to combine advanced theoretical knowledge with practical and interpersonal skills to address the care needs of their unique patients (Gullick et al., 2019).

Significant collaboration and planning are necessary to facilitate a consistent and structured orientation. Zoss and colleagues (2023) recommended engaging in collaboration with department leaders, including the establishment of working sessions involving leaders in specialty areas such as managers, clinical nurse specialists, nursing professional development specialists, and clinical educators to assess existing orientation pathways. The use of a standard precepting model and the development of an orientation pathway should also be prioritized, with continuous reevaluation of the orientation being a priority to focus on competency and readiness for clinical independence. These methods have been shown to be successful when onboarding and orientating to a specialty area (Zoss et al., 2023). This approach may benefit NGN orientation in the WCC.

New nurses, whether they are entering the profession, the unit, or the organization, may experience heightened vulnerability during orientation as they encounter novel information,

teaching methods, and factors influencing their practice, such as behavior and environment (Perregrini, 2021). All members of the maternal-newborn care team are anticipated to foster a safety-oriented culture and employ communication strategies that effectively facilitate and support secure patient outcomes. Providing ongoing support to the nurse during orientation can enhance a smooth transition into perinatal practice, fostering success in their role (Sylvie et al., 2017).

It is also necessary to consider learning styles, and how certain clinical scenarios can be taught. A phenomenological study by Peachey (2021) identified that simulation has offered an opportunity to move learners beyond the confines of traditional lecture settings, allowing them to acquire practical skills and participate in reflective discussions on fundamental nursing concepts, including patient safety, role clarification, communication, and collaboration. This is especially valuable in specialty areas such as maternal-newborn nursing. Participants in this study expressed feelings of amplified pressure to perform competently and felt that the simulation scenarios were valuable in helping to bridge the gap between knowledge and practice (Peachey, 2021).

The significant implications of integrating simulation into maternal-newborn nursing education are notable. There is a consistent indication of a positive influence on self-confidence gains (Miller, 2014). NGNs in the 2022 cohort reported that they would like the incorporation of simulation into their training to strengthen their clinical skills in a safe learning environment.

The development of a dynamic and comprehensive orientation and training program is essential to build competence for the NGN as evidenced by the available literature. The clinical skills of NGNs are a critical part of enhancing the quality of care in the healthcare system in their transition period as professional nurses (Vichitragoonthavon et al., 2020). Collaboration,



creativity, and attention to the unique needs of each learner utilizing evidence-based methods are expected to yield positive results and promote confidence while endorsing support.

### **Rationale**

Upon addressing orientation and training in this microsystem, a multitude of challenges surfaced, prompting the need for a quality improvement initiative, as undertaken by the project lead. Although orientation and training have been identified as a challenge for all nursing staff in the WCC, due to the time constraints and scope of this project, focus was placed primarily on the NGNs.

Patricia Benner's Novice to Expert Model developed in 1984 serves as an appropriate basis for transitioning to specialty practice, given its foundation on the concept that expertise is specific to the context and scope of practice. As such, it supports the clinical progression of participants (Benner, 1984).

Benner's model is widely used in nursing education practice to guide understanding of the development of nurses. The model emphasizes the importance of experience and reflective practice in achieving expertise in nursing. Additionally, Benner's (1984) Novice to Expert Theory of Skill Acquisition delineates the phases of clinical competence in nursing practice. According to this framework, NGNs typically begin their careers at the novice stage, progressively accumulating knowledge, and honing skills as they traverse the spectrum from novice to advanced beginner (Benner, 1984). At the advanced beginner level, nurses exhibit modestly satisfactory performance in their nursing duties and accrue experience through hands-on encounters in real-world scenarios. Advanced beginners derive substantial growth from the presence of a preceptor or an experienced nurse who offers direction, mentorship, and elucidation on recurring and significant aspects of various clinical situations (Benner, 1984).

Benner's model emphasizes the importance of experiential learning and practical knowledge in the development of nursing expertise. It suggests that expertise is not solely based on academic knowledge but is also shaped by hands-on experience and the ability to apply knowledge in real-world situations (Benner, 1984).

The purpose of this Quality Improvement (QI) project was to define and implement simulation and alternative methods of education as part of the orientation and training process to increase the abilities, competency, and confidence of the newest nurses who are onboarded into the WCC. Shoulder dystocia is one type of complication during childbirth where one or both of the baby's shoulders become impacted behind the mother's pubic bone, potentially leading to birth difficulties and neonatal complications (Leung et al., 2018). Managing shoulder dystocia requires specific maneuvers such as the McRoberts maneuver, suprapubic pressure, and rotational maneuvers like the Woods' screw maneuver or Rubin maneuver (Leung et al., 2018). While new graduate nurses may receive basic training in labor and delivery, encountering and effectively managing shoulder dystocia requires additional specialized training due to its complexity and potential risks to both mother and baby. Additionally, neonatal resuscitation is a critical skill required when a newborn experiences difficulty breathing or fails to establish effective breathing after birth (Perlman et al., 2015). New graduate nurses may receive training in neonatal resuscitation as part of their orientation, but the urgency and high-stress environment of the delivery room present unique challenges. Skills such as effective ventilation using bag-mask ventilation, chest compressions, and medication administration in the delivery room setting may not be routinely encountered during orientation but are essential for managing neonatal emergencies (Perlman et al., 2015).

Specific areas of focus were identified and prioritized in collaboration with unit leadership and current staff. An informal survey of all WCC unit staff was performed, employing what the five greatest opportunities for learning are for NGNs. Those five opportunities for learning were identified to prioritize preeclampsia, cord prolapse, postpartum hemorrhage, shoulder dystocia, and neonatal resuscitation.

### **Specific Aims**

The aims of this project were as follows:

- Examination and evaluation of the current orientation process in a rural community hospital maternal-newborn unit.
- Evaluation of the impact of simulation and alternative methods of education to support unique clinical learning for NGNs practicing in labor, delivery, and postpartum care.
- Specifically, to examine NGNS' self-perceived confidence and competence following orientation and education.

### **Methods**

#### **Context**

The State University of New York (SUNY) at Plattsburgh is one of 3 universities located within the vicinity of UVHN-CVPH. SUNY Plattsburgh offers nearly 60 degree programs and is accredited by the Middle States Commission on Higher Education. Their Nursing Program accepts first-year entry and RN-BSN students. Both are very respected and competitive programs that graduate between 30-50 students yearly. SUNY Plattsburgh has multiple nursing skills labs that are used throughout the nursing degree programs with structured activities and simulations incorporated into many curricula. The simulation labs contain multiple “patient rooms,” where scenarios can be facilitated by trained faculty. One of the patient rooms contains

a high-fidelity simulator that can give birth. Facilitators can program the simulator to mimic dozens of birth and postpartum scenarios to prepare learners for experiences they may have in real-world settings. Additionally, a newborn simulator is available for learning scenarios related to newborn care and neonatal resuscitation. State-of-the-art equipment and comfortable debriefing rooms make this space functional and versatile for the learners and faculty who utilize it.

UVHN-CVPH currently owns one high-fidelity simulator that is not capable of performing birth scenarios and currently lacks the necessary resources and training materials that would benefit learners in this manner who require training in labor, delivery, postpartum, and neonatal care. As UVHN-CVPH does not currently have access to these resources and SUNY Plattsburgh is located very nearby, there was a potential for the development of a relationship between these two organizations to permit the use of the simulation space for training of the nurses employed in the WCC. Both organizations reached a mutual agreement that shared resources for this project would be permitted.

### **Interventions**

A cohort of 3 NGNs were hired to the WCC and onboarded in the summer of 2022. The initial collection of each NGN's self-perception of competence and confidence was obtained in an informal focus group discussion facilitated by the unit CEM within one week of the start of their orientation to the WCC. The purpose of this was to collaborate with the NGNs and develop an orientation plan moving forward, addressing perceived gaps in knowledge, skills and plans moving forward. The questions and data from this initial focus group discussion were not formally made available to the project lead; a summary was offered by unit leadership. The first stages of this proposed training program were applied after this initial focus group occurred; each

of the NGNs began orientation to postpartum and either L&D or nursery simultaneously. Preceptors were chosen from a small pool of volunteers of experienced RNs who were agreeable to mentor an orientee. A binder containing a structured orientation timeline was provided to each preceptor/orientee. Access to online learning and modules from the Perinatal Orientation and Education Program (POEP) purchased for orientation were also implemented “POEP is a clinical program that provides continuing nursing education (CNE) and nursing contact hours. It is designed to provide nurses with the theoretical knowledge needed to provide holistic, family-centered care to women, their newborns, and family members during the preconception, antepartum, intrapartum, and postpartum periods. The program is targeted toward registered nurses who are new to maternal-newborn nursing, including NGNs and those who are experienced, but new to the perinatal care setting” (*Perinatal Orientation and Education Program*, 2023, p. 1). Orientation was facilitated by each preceptor and competence was evaluated through the completion of a Competency-Based Orientation (CBO) document designed specifically for RNs hired to the WCC, which is part of the orientation protocol implemented universally and independently by each unit throughout UVHN-CVPH. Check-ins were scheduled and completed regularly between orientees, preceptors, and unit leadership to evaluate the course and progression of orientation. Each of the three nurses completed their orientation to two areas of the unit within their first year of hire. Feedback regarding satisfaction, perceived quality, and confidence gained from their orientation was provided by each of the nurses in a second focus group discussion after their orientation was complete. Again, a summary was provided to the project lead instead of raw data. Suggestions for improvement included simulation education, training for preceptors, and protected orientation time so that training could be consistent and uninterrupted. Two of the three nurses from the

2022 cohort continue to work in the WCC; one has accepted a position on another unit and did not provide any explanation as to why she left the unit.

Some of the feedback provided was applied to the orientation plan for the cohort of 3 NGNs hired and onboarded to the WCC in the summer of 2023. The Clinical Education Manager (CEM) who previously oversaw orientation left their position in July 2023, leaving NGN orientation responsibilities to the remaining members of unit leadership. More frequent meetings with the orientees and leadership occurred, and feedback was provided requesting high or low-fidelity simulation time, an updated CBO, and more interactive activities included in their orientation to promote competence and confidence.

### **Study of Interventions**

Two NGNs onboarded to the WCC in the summer of 2022 and three onboarded in the summer of 2023 were identified as potential participants in this QI project by the project lead and agency stakeholders. While two of these NGNs have been engaged in their practice for more than a year, unit leadership acknowledged the potential benefits they could gain from innovative, evidence-based educational opportunities tailored to enhance their cross-training requirements. All five NGNs were invited to take part in this quality improvement project and were asked to complete a modified version of the Casey Fink Graduate Nurse Experience Survey© (Appendix B) at the start of this project (January 2024). This survey was crafted to assess the outcomes of transition-to-practice programs, gauge the experiences of newly graduated nurses, evaluate their readiness for practice, and identify factors influencing nurse retention (Casey-Fink et al., 2008). Demographic data was not gathered for this Quality Improvement (QI) project, and skill items were adjusted to concentrate on maternal-newborn nursing.

The measurement of transition to practice aligns with Benner's model by assessing NGNs' progression through different stages of skill acquisition and proficiency (Benner, 1984; Casey et al., 2008). When measuring the transition to practice, this survey can help evaluate how well NGNs navigate the challenges associated with moving from the educational setting to the actual practice environment (Casey-Fink et al., 2008).

Over a period of 10 weeks the 5 NGNs were provided with two evidence-based case studies (Appendix C) and one drill (Appendix D). Additionally, 4 of the 5 participated in two high-fidelity simulation sessions (Appendix E). These topic choices stemmed from feedback provided by both nurses and leadership, highlighting areas lacking in the previous orientation that required enhancement.

Case studies enable learners to integrate theoretical knowledge with real-life situations, requiring them to formulate solutions within carefully crafted scenarios (Seshan et al., 2021). An essential observation is that teaching based on case studies exposes students to diverse cases, decision-making contexts, and environments, fostering teamwork and interpersonal skills through experiential learning (Seshan et al., 2021). The growing acknowledgment of the value of interprofessional simulation training underscores its effectiveness in elevating learning and performance, ultimately contributing to the enhancement of nurse confidence and patient safety (Egenberg et al., 2017). Evidence-based simulation scenarios were utilized, drawing from the resources available to UVHN-CVPH and SUNY Plattsburgh. These scenarios were tailored to reflect the priority areas of focus identified by WCC staff surveyed previously.

All activities were debriefed using the PEARLS Healthcare Debriefing Tool© (Bajaj et al., 2018) (Appendix F). Healthcare debriefing involves the exploration of performance in a clinical or simulated setting through facilitated conversation. The PEARLS Healthcare debriefing

model has been proven to offer an opportunity for supporting development, especially when utilized for learning debriefing skills by reducing the cognitive load (Meguerdichian et al., 2022). This debriefing model is standardly utilized post-simulation at both colleges attended by these 5 NGNs, so they were familiar with it. The coordination and facilitation of all case studies, drills, and simulations were overseen by the project lead, who brings more than 7 years of experience and extensive training in conducting high-fidelity simulations and holds a relevant certification. Additionally, the project lead possesses 11 years of experience in maternal-newborn nursing.

Upon completion of all interactive educational activities, all participants were again asked to complete the modified Casey Fink Graduate Nurse Experience Survey© used pre-intervention. Additional questions to evaluate the perceived quality of education were added for evaluation. Only 4 sets of questionnaires were completed as the 5<sup>th</sup> participant was unable to attend the simulation events and withdrew their voluntary participation in the project.

### **Measures**

Data from the Casey Fink Graduate Nurse Experience Survey© was collected utilizing a printed paper form completed by all engaged participants. The previous intent to use Google Docs for this purpose was not successful as organizational internet security prevented access to the forms from unit computers. Two printed paper copies of the questionnaire were provided to each of the participants by the project lead. Participants were asked to create a unique code of their choosing to write at the top of their paper each of the two times they completed this survey so their responses could be linked and compared anonymously. Participants were asked to reflect on their experience onboarding and orienting to the WCC and their interaction with the population of patients they care for at the start of the project and then asked to repeat the questionnaire at the project's conclusion.



Each pre-questionnaire included 2 sections. In Section I, the perception of role transition experience was evaluated by asking participants to respond to 41 statements, rating their agreement with each one. This part of the questionnaire utilized a 4-point Likert scale to assess participants' perception of their experience as they transitioned into their professional nursing role on WCC. Participants were asked to rate their agreement with each statement on a scale from 1 to 4, where 1 represented 'Strongly Disagree,' 2 represented 'Disagree,' 3 represented 'Agree' and 4 represented 'Strongly Agree.'" In Section II, the learning needs assessment of skills included 11 specific areas of knowledge content. This part of the questionnaire also utilized a 4-point Likert scale to assess participants' perception of their competence in performing certain skills. Participants were asked to rate their confidence with each statement on a scale from 1 to 4, where 1 represented 'Not relevant to my clinical practice,' 2 represented 'Not confident,' 3 represented 'Somewhat Confident,' and 4 represented 'Highly Confident.'

After the educational activities were completed, all participants were asked to repeat the same questionnaire in the same manner, with a third section added which included an evaluation of the education provided. This part of the questionnaire utilized a 4-point Likert scale to assess participants' evaluation of their learning experiences throughout the project. Participants were asked to rate their agreement with each statement on a scale from 1 to 4, where 1 represented 'Strongly Disagree,' 2 represented 'Disagree,' 3 represented 'Agree,' and 4 represented 'Strongly Agree.'

All questionnaires remained in the possession of participants until provided to the project lead after the project in a sealed envelope. Responses received were anonymous and unidentifiable. Responses remained in the explicit possession of the project lead for the next 12 hours, stored in a sealed envelope until they were removed for transcription and analysis in a

private office setting. Once data was transcribed by the project lead into a password-protected spreadsheet, all paper copies were destroyed.

To ensure the validity and reliability of these measures, existing literature and educational materials were reviewed to ensure that questionnaire items were in alignment with the objectives of this QI project and the learning needs of the WCC. Questionnaire items were clear, unambiguous, and free from bias. The questionnaire was provided to participants on two separate occasions to compare their responses after a lapse of time. Each participant received an individual copy of each of the questionnaires independently to ensure consistency in data collection. Clear instructions were provided to participants regarding how to complete the questionnaire and it was also emphasized how important honest and accurate responses were to this process. Descriptive statistics were applied to analyze the data.

### **Analysis**

The data was arranged in a spreadsheet and analyzed to draw conclusions. Descriptive analysis was performed to focus on the characteristics, patterns, and trends present in the data. Descriptive analysis aims to summarize the main features of the data, offering insights into its central tendencies and variations without drawing conclusions or making inferences beyond what the data directly reveals. The pre- and post-intervention survey responses were displayed and described graphically. Additionally, an informal 30-minute group discussion was held with the 4 participants who attended the simulations to discuss this project and further educational activities that they would like in the future. Learning objectives established at the start of each activity were discussed, along with each NGN's perception of their own confidence and competence post-education. Analysis was based on the data responses obtained from the questionnaires.

## **Ethical Considerations**

Participants who took part in this project were fully informed about the purpose, nature, and potential risks and benefits of their involvement. The project lead clearly explained how the data would be collected and stored, and how it would be analyzed and utilized regarding the orientation process. Data shared with unit leadership was generalized, anonymous, and aggregated with no identifiers. It was voluntary for NGNs to participate. It was not required for them to identify themselves in any way, and they were not required to answer every question on the questionnaires if they felt it may identify them. If they no longer wished to participate at any point during the measurement process, it was known that they could withhold participation without facing any negative consequences. The identity of each NGN was protected, and as previously stated data were handled securely and used only for purposes as intended concerning this QI Project. Ethical considerations are essential for maintaining the integrity of the data collection process and ensuring the best interest of the participants.

## **Results**

Results are presented separately for survey data and qualitative, group discussion data.

### ***Survey Response Data***

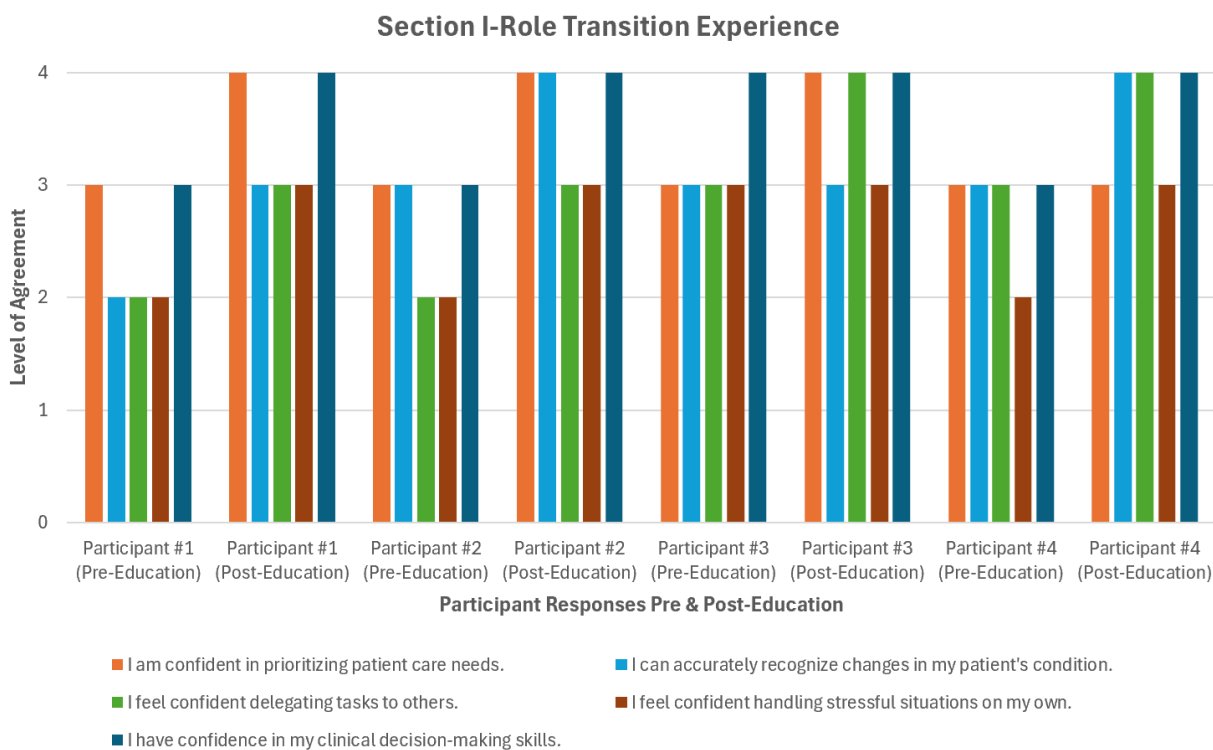
The graph below (Figure 1) shows a comparison of pre- and post-education responses from Section I-Role Transition Experience as reported by the participants on the questionnaires.

Post-education, 3 of the 4 NGNs reported increased perception of confidence in their clinical decision-making skills, increased perception of confidence in their ability to handle stressful situations on their own, increased perception of confidence in prioritizing patient care needs, and increased perception of confidence in accurately recognizing changes in their patient's condition. All 4 reported increased perception of confidence in delegating tasks to

others. Only 1 of 4 reported increased perception of comfort in asking for help from other nurses.

Figure 1

*Participants' self-perceived confidence in their nursing role*



Level of Agreement Legend	
Strongly Disagree	1
Disagree	2
Agree	3
Strongly Agree	4

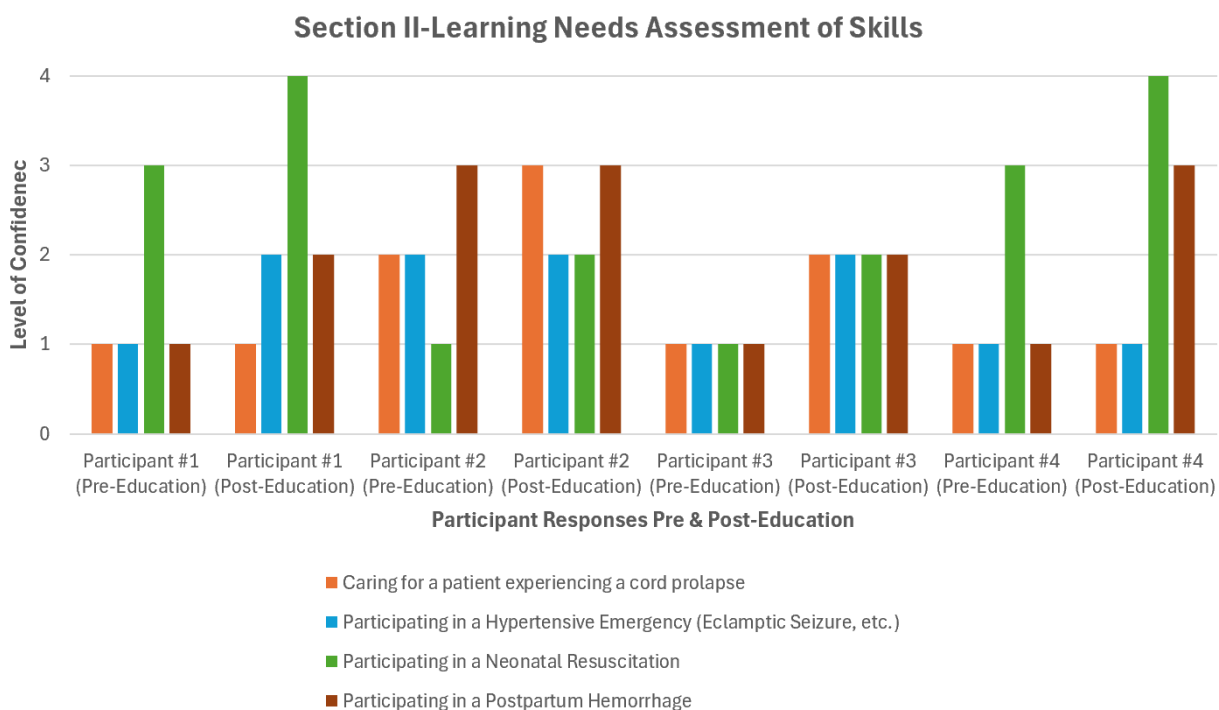
(Casey-Fink et al., 2008)

The remaining statements of evaluation in Section I of the questionnaire were not included for comparative illustration as there were no increases in self-perceived confidence in any of the NGNs who completed it. There were no measurements of a decrease in self-perceived confidence shown in any of the questionnaires upon analysis.

The graph below (Figure 2) shows a comparison of pre- and post-education responses from Section II-Learning Needs Assessment of Skills as provided by participants in the questionnaires. Post-education, 3 of the 4 NGNs reported increased confidence when participating in a Postpartum Hemorrhage and increased confidence when participating in a Neonatal Resuscitation. 2 out of the 4 reported increased confidence when participating in a Hypertensive Emergency and when caring for a patient experiencing a cord prolapse.

Figure 2

*Participants' self-perceived confidence in specific skills*



Level of Agreement Legend	
Strongly Disagree	1
Disagree	2
Agree	3
Strongly Agree	4

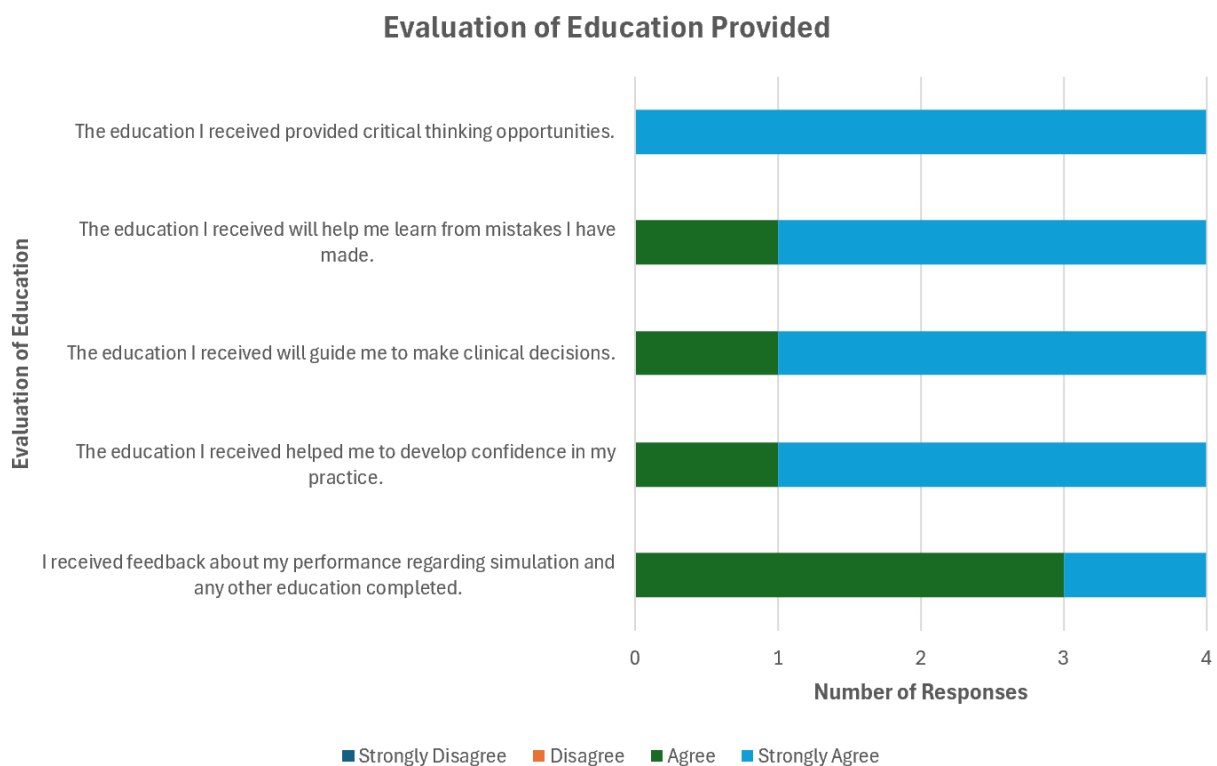
*(Casey-Fink et al., 2008)*

The remaining skill confidence levels included in Section II of the questionnaire were not included for comparative illustration as there were no increases in self-perceived confidence for any of the NGNs who completed it. However, there were no measurements of a decrease in self-

perceived confidence shown in any of the questionnaires upon analysis. Areas where growth in confidence was not reported include: adult IV starts, infant IV starts, maternal assessment, newborn assessment, reporting abnormal vital signs or lab values, caring for a patient receiving magnesium sulfate, participating in a code pink (infant abduction), and caring for a patient experiencing a cord prolapse. A majority of these topics were not directly addressed in the education as part of this QI project; while cord prolapse was a topic of one of the case studies, it did not show that there was any increase in confidence caring for a patient experiencing this obstetrical emergency by these participants as a result of the education provided.

The graph below (Figure 3) shows responses to Section III-Evaluation of Education Provided. This data was collected after the project was completed. When asked if they received feedback about their performance regarding simulation and any other education completed, 3 out of 4 participants agreed that they had; 1 out of 4 strongly agreed. When asked if the education received provided critical thinking opportunities, all 4 of the participants strongly agreed with that statement. When asked if the education received will help them learn from the mistakes they made, 1 out of 4 agreed, and 3 out of 4 strongly agreed. When asked if the education received will guide them to make clinical decisions, 1 out of 4 agreed, and 3 out of 4 strongly agreed. When asked if the education received helped to develop confidence in practice, 1 out of 4 agreed while 3 out of 4 strongly agreed.

Figure 3

*Participants' evaluation of education provided**(Casey-Fink et al., 2008)****Discussion Group Data***

Comments reported by NGN participants throughout the project and during discussion at the conclusion of the project strongly support the incorporation of these educational components into orientation and training for all WCC nurses. One participant stated, “I really wish I could have done simulation at the beginning of orientation, learning it this way at a slower pace where there is no risk to a patient is such an easier way to learn. I feel so much more ready for this situation the next time I experience it.” Another agreed with that statement saying, “This is definitely not something you want to learn from reading a book or discussing with a preceptor—

sometimes the first time we are truly understanding an emergency is when it happens. Having simulation prior to that would make it so much easier to comprehend.”

Overall, there was an abundance of positive comments and verbal support to include more education as included in this project; most expressed a strong desire for high-fidelity simulation to be plentiful as that education appeared to be the highlight of the project.

## **Discussion**

### **Summary**

Some NGNs reported increased confidence and competence after participating in high-fidelity simulations and other alternative methods of education. During the implementation and evaluation period, in general, there was a positive trend in the self-perception of increased competence and confidence in some areas measured. In debriefing and discussion following education, some support mostly for high-fidelity simulation was expressed.

The development of a relationship between UVHN-CVPH and SUNY Plattsburgh is a strength of this project. Having access to high-fidelity simulators and other resources that were made available provided unprecedented opportunities that proved beneficial to all participants. WCC leadership was also very supportive of this project, granting each of the participating NGNs paid education time to complete these education components and protected time to be away from the unit without a patient assignment. In the future, WCC leadership has expressed their desire to continue to be supportive of scheduling small groups of nurses to participate in educational opportunities and high-fidelity simulation at SUNY Plattsburgh.



## **Interpretation**

Responses received from NGN participants highlight the popularity of integrating updated and alternative educational components, particularly high-fidelity simulation, into the orientation and training program for all WCC nurses. Participants expressed a preference for stimulation-based learning over methods currently utilized, emphasizing their effectiveness in preparing them for real-world scenarios without risk to the patients. Cost of equipment and materials has been identified as barrier at this time, however, the partnership developed during this QI project offers a promising opportunity to eliminate the cost of purchasing a birthing simulator.

## **Limitations**

Due to time limitations and resources available, this study included only the 5 newest nurses onboarded to the unit, with the resulting data only including 4 as one withdrew. This small convenience sample of 4 participants completing the project limited statistical analysis and generalizability of findings. Data was self-reported only with no independent measures of outcomes of interest.

This project was completed during a period when the organization was actively recruiting for vacant nursing positions and the census was consistently high. This had the potential to affect the opportunity for participants to be permitted additional education time and complete components of this project at a location outside of the organization. Additionally, not having access to the schedules of each NGN created a challenge for the project lead in coordinating education.

To mitigate potential cyber-attacks, strong internet security prevented the project lead from interacting with participants at times in addition to blocking the provision of education

components and surveys. Most interactions were done in person. As the schedules of NGNs did not consistently align, the project lead spent a significant amount of time on the unit working with participants individually.

### **Conclusions**

Incorporating high-fidelity simulation into the continuous education of maternal-child health nurses presents obstacles such as costs, time constraints, and staffing limitations. Nevertheless, it represents a promising strategy for enriching nurses' comprehension and confidence in this domain. Despite being infrequent, critical scenarios like shoulder dystocia, cord prolapse, or the requirement for neonatal resuscitation may arise in rural community hospital perinatal settings. Offering high-fidelity simulation training could efficiently bridge the knowledge and confidence disparity among nurses when confronted with such emergencies.

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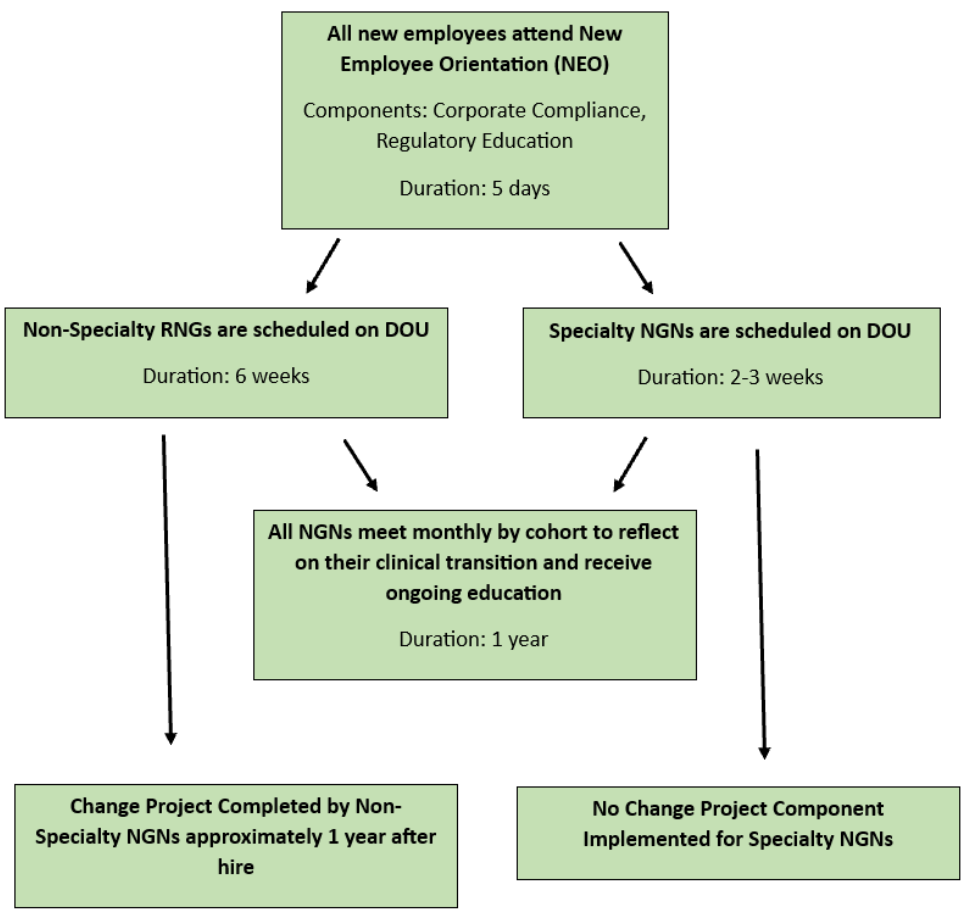
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### Appendix A

## UVHN-CVPH Graduate Nurse Residency Program Summary



## Appendix B

### Modified Casey-Fink Graduate Nurse Experience Survey

Please provide a unique 4-digit code below. The purpose of this is to maintain anonymity while associating pre-education and post-education scores for comparative purposes. This same code should be written on both the pre-survey and post-survey.

\_\_\_\_\_

Pre-Education Survey

Post-Education Survey

#### Section I-Role Transition Experience

The following are statements about your experience as you have transitioned into the professional nursing role on WCC. All responses are anonymous and will be kept confidential. Please select the response that best describes your recent clinical experience.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I am confident in prioritizing patient care needs.				
2. I feel confident delegating tasks to others.				
3. I am comfortable making suggestions to the physician/provider on changes to the plan of care.				
4. I feel confident communicating with physicians and other providers.				
5. I feel confident using best evidence when making clinical decisions.				
6. I feel confident communicating a plan of care with patients, families, and caregivers.				
7. I have confidence in my clinical decision-making skills.				
8. I can accurately recognize changes in my patient's condition.				
9. I can complete my patient care assignment on time.				
10. I feel confident managing my patient workload.				
11. I can organize my time effectively to complete my patient care tasks.				
12. I can prioritize competing tasks during my shift.				
13. I feel supported by my peers.				
14. I feel comfortable asking for help from other nurses on my team.				
15. Co-workers are available to help me during new situations and procedures.				

### Appendix B (Continued)

	Strongly Disagree	Disagree	Agree	Strongly Agree
16. I feel supported by the nurses in my clinical practice area.				
17. My team works well together during stressful shifts.				
18. I feel safe asking my co-workers questions.				
19. I am satisfied with the clinical practice area I am working in currently.				
20. I feel valued for the work I do.				
21. My team debriefs after difficult clinical situations.				
22. I have resources at my work to help me manage my stress.				
23. I am satisfied with my current role in nursing.				
24. I feel that I am a valued member of the health care team.				
25. I feel included in my clinical practice area.				
26. I would recommend nursing as a career to a friend.				
27. I consistently feel overwhelmed by my workload.				
28. I consistently feel high levels of stress while at work.				
29. I feel exhausted at the end of my shifts.				
30. I am experiencing stress in my personal life that is affecting my work.				
31. I feel overwhelmed by the patient acuity in my clinical practice area.				
32. I feel stressed because of my workload.				
33. I feel comfortable if I need to handle bullying from others.				
34. I feel comfortable managing incivility from co-workers if/when it occurs.				
35. I feel confident handling stressful situations on my own.				
36. I tend to bounce back quickly after difficult clinical situations.				
37. When faced with difficult tasks, I am certain that I will accomplish them.				

### Appendix B (Continued)

	Strongly Disagree	Disagree	Agree	Strongly Agree
38. Even when times are tough, I believe that I can perform my role quite well.				
39. I feel a strong commitment to stay on this unit.				
40. This organization's values align with my professional values.				
41. I am likely to be working on this unit in one year.				

#### Section II-Learning Needs Assessment of Skills

Please rate your confidence in doing these **skills** using the following scale:

	Not Confident	Somewhat Confident	Highly Confident	Not relevant to my clinical practice
1. Adult IV Starts				
2. Infant IV Starts				
3. Maternal Assessment				
4. Neonatal Assessment				
5. Participating in a Hypertensive Emergency (Eclamptic Seizure, etc.)				
6. Participating in a Neonatal Resuscitation				
7. Participating in a Postpartum Hemorrhage				
8. Reporting abnormal vital signs or lab values				
9. Caring for a patient receiving Magnesium Sulfate				
10. Participating in a Code Pink (Infant Abduction)				
11. Caring for a patient experiencing a cord prolapse				

## Appendix B (Continued)

### Section III-Evaluation of Education Provided

The following are statements about your learning experience during this QI Project. All responses are anonymous and will be kept confidential. Please select the response that best describes your experience. **This page only needs to be answered after the education has been completed.**

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I received feedback about my performance regarding simulation and any other education completed.				
2. The education I received helped me to develop confidence in my practice.				
3. The education I received will guide me to make clinical decisions.				
4. The education I received will help me learn from mistakes I have made.				
5. The education I received provided critical thinking opportunities.				

**Please provide any additional feedback you would like to share regarding your perception of your confidence and competence working in your current role on WCC before and after this educational experience.**

## Appendix C

### Case Studies (Overview)

#### Nursing Case Study: Complicated Pregnant Patient (Preeclampsia)

##### Scenario & Background:

Jane Doe, a 27-year-old primigravida at 38 weeks gestation, presents to Labor and Delivery triage complaining of vaginal bleeding and headache. She has a history of asthma. Jane's prenatal course has been uneventful until now. She had routine prenatal care visits, and all previous ultrasounds were normal. She denies any history of hypertension or bleeding disorders.

##### Key Learning Points:

- Recognizing signs and symptoms of preeclampsia.
- Managing hypertensive emergencies in pregnancy.
- Administering seizure prophylaxis with magnesium sulfate.
- Assessing and managing maternal asthma exacerbation.
- Conducting continuous fetal monitoring.
- Collaborating with other members of the healthcare team (e.g., nurse midwife).

#### Nursing Case Study: Suspected Cord Prolapse

##### Scenario & Background:

Janice Smith, a 35-year-old gravida 3, para 2 at 37 weeks gestation, was admitted to L&D last evening after being triaged for rule-out labor. Upon evaluation, she was determined to be in active labor. She has a history of polyhydramnios and has been laboring for approximately 12 hours.

##### Key Learning Points:

- Recognizing signs and symptoms of cord prolapse in high-risk patients, especially those with polyhydramnios and prolonged labor.
- Prioritizing continuous fetal heart rate monitoring and initiating prompt interventions to optimize fetal well-being.
- Collaborating effectively with the interprofessional team to ensure timely management of obstetric emergencies.

## Appendix D

### Postpartum Hemorrhage Drill

#### Scenario & Background:

Mrs. Smith, a 32-year-old gravida 3, para 2 at 41 weeks gestation, has just delivered a healthy baby via vaginal delivery. She presents on the postpartum unit 6 hours after delivery with heavy vaginal bleeding and signs of hypovolemia. Mrs. Smith has a history of postpartum hemorrhage with her previous deliveries. Her prenatal course was uncomplicated, and she received routine prenatal care.

#### Key Learning Points:

- Early recognition of postpartum hemorrhage.
- Prompt initiation of interventions to manage uterine atony.
- Administration of uterotonic medications and their dosages.
- Importance of continuous monitoring for signs of ongoing bleeding and hemodynamic instability.
- Consideration of additional measures such as tranexamic acid and blood transfusion if hemorrhage persists.

## Appendix E

### High-Fidelity Simulation Overview (Maternal, Shoulder Dystocia)

#### Purpose

In this scenario, participants are expected to demonstrate evidence-based team care of the family unit during a shoulder complication.

#### Patient Information

This laboring patient is a 37-year-old G2P0 at 41+5 weeks of gestation. Her physician performed an artificial rupture of membranes (AROM) yesterday to induce labor, and she began contracting during the night. She was admitted in active labor.

#### Learning Outcomes

Upon completion of this SLE, the participant will be able to:

1. Recognize signs and symptoms of an infant with a shoulder dystocia.
2. Demonstrate ISBARR communication with the healthcare team.
3. Demonstrate at least 2 evidence-based techniques to relieve shoulder dystocia.
4. Demonstrated evidence-based care for the mother and infant during a birthing complication.

#### QSEN Competencies Addressed

- Patient-centered care
- Safety
- Evidence-based practice
- Teamwork & collaboration
- Quality improvement
- Informatics



## **Appendix E (Continued)**

### **High-Fidelity Simulation Overview (Neonatal Resuscitation)**

#### **Purpose**

In this scenario, participants are expected to treat a neonate with a life-threatening event of prolonged shoulder dystocia during delivery. Participants are expected to engage in multidisciplinary resources.

#### **Patient Information**

This infant has just been delivered after a four-minute-plus shoulder dystocia. Prior to delivery, the fetus was 41 weeks plus 5 days gestation. The mother is a 37-year-old G2P0. During prolonged labor of greater than 56 hours, she developed chorioamnionitis and received a dose of IV antibiotics. Additionally, the amniotic fluid had progressed from clear to meconium-stained over the last 18 hours, and the fetus had experienced numerous decelerations shortly before delivery.

#### **Learning Outcomes**

Upon completion of this SLE, the participant will be able to:

1. Recognize signs and symptoms of a life-threatening event.
2. Demonstrate evidence-based care for an infant with respiratory failure.
3. Demonstrate proficiency in a simulated neonatal resuscitative event.
4. Demonstrate effective communication with the members of the healthcare team and other disciplines (ISBARR).

#### **QSEN Competencies Addressed**

- Patient-centered care
- Safety
- Evidence-based practice
- Teamwork & collaboration
- Quality improvement
- Informatics

## Appendix F

## The PEARLS Healthcare Debriefing Tool

	Objective	Task	Sample Phrases
1 <b>Setting the Scene</b>	Create a safe context for learning	State the goal of debriefing; articulate the basic assumption*	"Let's spend X minutes debriefing. Our goal is to improve how we work together and care for our patients." "Everyone here is intelligent and wants to improve."
2 <b>Reactions</b>	Explore feelings	Solicit initial reactions & emotions	"Any initial reactions?" "How are you feeling?"
3 <b>Description</b>	Clarify facts	Develop shared understanding of case	"Can you please share a short summary of the case?" "What was the working diagnosis? Does everyone agree?"
4 <b>Analysis</b>	Explore variety of performance domains	See backside of card for more details	<b>Preview Statement</b> <i>(Use to introduce new topic)</i> "At this point, I'd like to spend some time talking about [insert topic here] because [insert rationale here]" <b>Mini Summary</b> <i>(Use to summarize discussion of one topic)</i> "That was great discussion. Are there any additional comments related to [insert performance gap here]?"
<b>Any Outstanding Issues/Concerns?</b>			
5 <b>Application/ Summary</b>	Identify take-aways	Learner centered Instructor centered	"What are some take-aways from this discussion for our clinical practice?" "The key learning points for the case were [insert learning points here]."

## Appendix F (Continued)

### The Analysis Phase

#### Performance Domains

The analysis phase can be used to explore a variety of performance domains:



Decision Making



Technical Skills



Communication



Resource Utilization



Leadership



Situational Awareness








Teamwork

#### Three Approaches

- 1 **Learner Self-Assessment**  
Promote reflection by asking learners to assess their own performance
- 2 **Focused Facilitation**  
Probe deeper on key aspects of performance
- 3 **Provide Information**  
Teach to close clear knowledge gaps as they emerge and provide directive feedback as needed

#### Sample Phrases

-  What aspects were managed well and why?
-  What aspects do you want to change and why?
-  **Advocacy:** I saw [observation], I think [your point-of-view].
-  **Inquiry:** How do you see it? What were your thoughts at the time?
-  I noticed [behavior]. Next time you may want to consider [suggested behavior], because [rationale].