

**ENHANCING CLINICAL JUDGMENT AND PRACTICE TRANSITION WITH  
SIMULATION**

By

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## Abstract

Decreased practice readiness among new graduate nurses can lead to struggles with transition to practice, connecting theory to practice, and demonstrating adequate clinical judgment. These challenges within the first year contribute to significant attrition of new graduate nurses. The purpose of this project was to determine if the introduction of simulation-based education could assist the transition process and improve the clinical judgment of the new graduate nurses. Pre- and post-analysis used the Casey Fink-Graduate Nurse Experience Survey (CF-GNES) and the Lasater Clinical Judgment Rubric (LCJR). A Residency Post Simulation Questionnaire (RPSQ) helped differentiate the influence of simulation on the transition process apart from the residency program. Statistical improvement occurred for the statement, “I am comfortable knowing what to do for a dying patient,”  $p = .01$  on the CF-GNES. No other findings were statistically significant in this survey. No statistical differences were observed on the LCJR pre- and post-surveys. The RPSQ demonstrated that participants felt simulation assisted the transition process and contributed to learning. The participants also felt that including more simulations would further assist the transition process. The impact of simulations can be understood better if future studies examined a larger TTP group of participants over one year-period. A control group without the simulation intervention would further assist our understanding.

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## **Chapter I: Introduction**

Following graduation, nurses entering the nursing profession face a complex and demanding field where transitioning from academics to practice is challenging.

Alshawush et al. (2020) predicted that one million experienced nurses will retire by 2025, creating vacancies that must be filled by new graduates.

Researchers found that many new graduate registered nurses (RNs) either change jobs or leave the profession during their first year (Alshawush et al., 2020; Murray et al., 2019; Ulupinar & Aydogan, 2021). The reported attrition rate for nurses within the first year of practice in many countries varies from 10% to 30% (Alghamdi & Baker, 2020; Feeg et al., 2022; Murray et al., 2019; Ulupinar & Aydogan, 2021). Per Alshawush et al. (2020), the turnover costs when new graduates leave the organization can be as high as \$88,000 per person, depending on specialty and location. Insufficient knowledge and skills contribute to the turnover rate (Alshawush et al., 2020; Ulupinar & Aydogan, 2021).

The Performance Based Development System evaluated 5000 new nurses entering the profession, and only 23% scored in the acceptable competency range (Kavanagh & Szweda, 2017). According to Kavanagh & Szweda (2017) increased patient acuity and faster discharges present a challenge to novice nurses who lack adequate clinical reasoning development (2017). Further analysis demonstrates that the problem continues to worsen, dropping to 8-9 % preparedness among assessments conducted in 2020 (Kavanagh & Sharpnack, 2021). The global pandemic exacerbated the situation as new graduates faced interruptions in their education and entered a more complex healthcare environment (Feeg et al., 2022). Alghamdi & Baker (2020) emphasized the

critical need for additional support for new graduates during the transition.

Benner's (1984) novice to expert model identifies newly graduated nurses as advanced beginners who enter the profession with basic practice knowledge and limited experience. Benner adapted her model from the Dreyfus model of skill acquisition, an experiential learning model used to ensure competency and safety in the aviation industry (Murray et al., 2019). Experiential learning plays a large role in aviation and healthcare to assist individuals in acquiring the skills necessary to do their jobs (Murray et al., 2019). Simulation-based education (SBE) assists aviators and nurses by creating controlled life-like scenarios that will not cause harm if participants make mistakes.

The complications of staffing turnover and new graduate transition impacted the project site. Before the pandemic, facility stakeholders initiated a transition-to-practice (TTP) program to improve the move from academia to practice for new graduate nurses. The TTP's goals were to improve graduate nurse retention and training. Prior to the pandemic, administrators purchased a simulator to include simulation in the TTP. Simulation implementation into the TTP was delayed because the project facility's education staff were unfamiliar with SBE

This Doctor of Nursing Practice (DNP) quality improvement (QI) project added leveled and responsive simulation to an existing TTP program. Leveled simulations include objectives and activities appropriate for the participants. Responsive scenarios adapt to the decisions made by the participants.

TTP programs facilitate new graduate nurses' professional transition by bridging the knowledge-to-practice gap (Alshawush, 2020). TTP programs cost-effectively advance clinical skills, provide professional development, and improve retention



(Alshawush, 2020; Alghamdi & Baker, 2020). The TTP educators wanted to incorporate SBE to enhance clinical reasoning skills and lessen the transition burden for graduate nurses with less than one year of experience. The graduate nurses worked across various settings, including the emergency room, medical-surgical department, progressive care unit, and intensive care unit. During the project, participants completed three realistic simulations requiring clinical decision-making skills following the facility policies and procedures. The project manager provided the TTP nurse educators with instructions on proper SBE facilitation using Healthcare Simulation Standards of Best Practice (HSSBP) to ensure sustainability after project completion.

### **Statement of the Problem**

New graduate nurses with less than one year of experience beginning a job at a midwestern hospital in a college town needed assistance transitioning to practice and developing clinical judgment to address the complex nature of today's healthcare environment. Because of the complexities of healthcare and the increased acuity of patients in the practice environment, previous educational opportunities could not fully bridge the knowledge-to-practice gap (Kavanagh & Swzeda, 2017; Kavanagh & Sharpnack, 2021; Ulupinar & Aydogan, 2021). In 2021, the global pandemic aggravated the situation, resulting in increased hospitalizations, increased acuity of illness, and limited clinical opportunities resulting from restrictions and online substitution for many learning activities that the new graduates participated in before becoming nurses (Feeg et al., 2022). New graduate nurses are not adequately prepared to practice in today's environment, complicating their transition to practice. Steps must be taken to address this issue (Kavanagh & Swzeda, 2017; Kavanagh & Sharpnack, 2021).

### **Purpose/Aim of the Project**

The aim of the project was to increase the training, competency, collaboration, and clinical reasoning abilities of inexperienced new graduate nurses entering the profession using SBE. Ragsdale and Schuessler (2021a) found many studies noted improved clinical reasoning through SBE. Staff educators can assist new graduate nurses in the transition process by using simulated scenarios that are leveled and responsive to decisions made by the participants. To better prepare incoming nurses to work competently and safely in the practice environments, this author designed scenarios based on facility needs and recognized gaps in knowledge.

### **Background/Problem of Interest Supported by the Literature**

Medical errors account for many complications and patient deaths each year. Researchers noted that mistakes increase with the influx of inexperienced healthcare workers (Murray et al., 2019). New graduates face increased medication errors, flawed systems, dissatisfaction with work, and inexperience within the work environment (Ulupinar & Aydogan, 2021; Zimmerman & House, 2016; Urban & Barnes, 2020). The knowledge-to-practice gap is a common theme discussed in the literature and practice (Ragsdale & Schuessler, 2021a; Feeg et al., 2022).

Many new graduate nurses experience transition shock when entering the profession (Thomas & Mraz, 2017). Transition shock is "the negative experience of suddenly shifting from the known student role to the less familiar role of professional nurse" (Thomas & Mraz, 2017, pp. 465-466). The new graduate's responsibilities and expectations significantly differ from a student's, and the transition impacts them physically, emotionally, socially, and intellectually (Thomas & Mraz, 2017). In the early

months of transition to practice, new graduates have an idealized version of nursing and their capabilities, which many discovered are unrealistic, creating reality shock (Murray et al., 2019). The first year of adapting to the role of an RN is rife with challenges, and role adaptation is a complex process (Murray et al., 2019). Published literature supports the value simulation-training provides to help address the issues discussed (Ragsdale & Schuessler, 2021a; Lugo et al., 2021; Feeg et al., 2022).

### **Significance of the Project**

The Institute of Medicine (2000) recommended that simulations be integral to the learning environment, especially for novice healthcare workers. SBE is one approach to addressing the issues related to safety and competency. Simulations can be designed in multiple ways and adapted to fit the specific needs of different healthcare organizations. Ulupinar and Aydogan (2021) found that intent to leave the profession is highest within the first five months of a new position. Components that helped ease this problem include improved training, support, and education (Ulupinar & Aydogan, 2021). The addition of simulation to a TTP program will provide additional training and education to new graduate nurses.

High turnover rates cause financial hardships to organizations that must rehire and train additional workers and fill vacancies with overtime or staffing agencies. Murray et al. (2020) discussed increased medication errors among less experienced staff. As nurses gain additional experience and competence, the risk of medication errors declines (Murray et al., 2020). Medication errors can lead to patient harm, increased length of stay, and financial burdens to the hospital (Zimmerman & House, 2016). Koivisto et al. (2018) argued that clinical reasoning abilities improve through simulated learning with

proper design, including realistic patient experiences, observable consequences, and timely feedback. The project site administrators desired SBE implementation in the TTP for new graduates. The project also provided the facility's educational staff with the skills required to utilize SBE in future TTP cohorts.

### **Impact of the Project**

The purpose of the project was to improve new graduate nurses' clinical reasoning skills and the transitioning process. The increased knowledge, enhanced ability to properly perform skills, and improved confidence acquired through SBE embedded in TTP programs can lead to the cost savings associated with medication errors and related complications (Zimmerman & House, 2016). Nationwide costs associated with medication errors average around twenty billion dollars (Rodziewicz et al., 2022). Zimmerman and House (2016) found simulation integration can financially impact an organization, with a potential return on investment of \$461,200 in an average of 7.6 months.

Researchers conferred that simulation can help increase clinical reasoning, decrease medication errors, improve collaboration and staff retention, and improve patient outcomes (Kavanagh & Szveda, 2017; Ragsdale & Schuessler, 2021a; Ulupinar & Barnes, 2020). In one study, simulations within a nurse residency program increased staff retention significantly, yielding an overall cost avoidance of 3,542,000 dollars over three years (Harper et al., 2021).

New graduate nurses needed additional preparation to ensure a smoother transition to practice and adequate clinical reasoning skills. This project integrated adaptive and leveled simulation into the TTP to improve the transition process.

Additionally, the simulations focused on specific organizational needs and areas of weakness. Discussions with educational staff revealed that new graduates needed training on stroke recognition, death and dying, and prioritization of nursing tasks. The simulations developed focused on these topics and included hospital-specific policies and procedures.

## **Chapter II: Literature and Theory Review**

The project aimed to improve the transitioning process and clinical judgment of new graduate nurses by adding SBE into a current TTP program. Many researchers have examined new graduates' clinical judgment as they transition from nursing school to real-world practice. Substantial evidence supports the use of SBE and its positive impact on nursing.

### **Literature Review**

A literature search was conducted utilizing the online campus library services digital library system of Indiana Wesleyan University and Indiana University. Search criteria included full-text articles in peer-reviewed journals published within the last five years. Keywords searched included clinical reasoning, simulation, readiness for practice, new graduate nurses, theory-to-practice gap, critical thinking, and transition to practice. With the authors' review of the literature, several themes emerged.

#### **New Graduate Clinical Reasoning**

Clinical judgment, critical thinking, and diagnostic reasoning all refer to clinical reasoning (Hong et al., 2021; Nunes et al., 2020). Researchers recognize that clinical reasoning skills are necessary to improve clinical judgment at the undergraduate level (Hong et al., 2021; Bae et al., 2019; Kavanagh & Szweda, 2017). Clinical judgment is “the observed outcome of critical thinking and decision making. It is an iterative process that uses nursing knowledge to observe and assess presenting situations, identify a prioritized client concern, and generate the best possible evidence-based solutions in order to deliver safe client care” (National Council of State Boards of Nursing, 2019, p. 1).

The complexities of the modern healthcare environment continue to grow and outpace the preparation among graduating nurses (Hong et al., 2021; Bae et al., 2019; Kavanagh & Szweda, 2017). Kavanagh and Szweda (2017) studied 5000 participants utilizing the performance-based development system assessment designed to examine the application of theoretical content and clinical reasoning among new graduates revealing that only 23% had adequate clinical competency. Kavanagh & Sharpnack (2021) further identified a decline in clinical competency to as low as 8%.

Determining SBE's impact on clinical competence and judgment is difficult due to small sample sizes and the studies' rigor (Cantrell et al., 2021; Harper et al., 2021; Ragsdale & Schuessler, 2021b). Cantrell et al. (2021) integrated four simulation to enhance clinical judgment and competence. The intervention group demonstrated improved clinical judgment and competence, but the findings were not statistically significant (Cantrell et al., 2021). More research is necessary to discover how much SBE can impact clinical reasoning among new graduate nurses.

The project's simulation design placed participants in complex situations requiring clinical judgment to meet the scenario objectives. The participants worked through the situations and participated in a debriefing period at the conclusion of each simulation to assist with developing critical thinking and clinical judgment skills. Clinical reasoning is enhanced with effective debriefing processes during simulation (INASCL Standards Committee, Decker et al., 2021).

### **Knowledge-to-Practice Gap**

The knowledge-to-practice gap is evident throughout the literature and contributes to the decreased clinical judgment among undergraduates and new graduate nurses

(Alghamdi & Baker; Murray et al., 2019; Kavanagh & Szweda, 2017). Increasing healthcare demands, the knowledge-to-practice gap, and reduced clinical reasoning make transitioning into practice challenging and complicated (Alghamdi & Baker, 2020; Murray et al., 2019; Urban & Barnes, 2020). Urban & Barnes (2020) found that new graduates transitioning to practice are overwhelmed with thinking through processes outside their routine.

The pandemic further complicated the transitioning process due to interrupted educational opportunities worsening the knowledge-to-practice gap (Feeg et al., 2022). SBE assists in bridging the knowledge-to-practice gap (Brown, 2019; Guerrero et al., 2021; Thomas & Mraz, 2017). Thomas & Mraz (2017) discuss that participants in their study stated SBE combined with debriefing allowed them to apply theory, problem solve and critically think. SBE allows participants to apply theoretical knowledge in a simulated environment. The application of knowledge combined with the debriefing process assists new graduates in making connections between theory and practice. The process allows for improvement of clinical reasoning. Guerro et al. (2021) found that substituting SBE for clinical hours among undergraduates enhanced proficiency and competency in the clinical environment. SBE was added to the TTP to address the knowledge-to-practice gap between theory and practice.

### **Transition Shock and Intent to Leave**

Transition shock is another complication for recent nurse graduates. Transition shock is “the negative experience of suddenly shifting from the known student role to the less familiar role of professional nurse” (Thomas & Mraz, 2017, pp. 465-466). New graduates often have an idealized version of nursing and their capabilities when they



transition to clinical practice, which they discover to be unrealistic, resulting in reality shock. (Murray et al., 2019). Reality shock sets in as new graduates realize that what they learned has not fully equipped them for today's healthcare environment (Murray et al., 2019; Urban & Barnes, 2020). The first year of adapting to the role of an RN is rife with challenges, and role adaptation is a complex process (Murray et al., 2019).

The culmination of these factors leads to significant attrition among new graduates (Urban & Barnes, 2020; Ulupinar & Aydogan, 2021; Zimmerman & House, 2016). The actual rates of turnover vary throughout the literature. In various studies, the one-year retention rate of new graduate nurses ranged from 17.6% to 27.6% (Blegen et al., 2017; Ulupinar & Aydogan, 2021). Ulupinar & Aydogan (2021) found inadequate knowledge and skills to be a large factor in the intent to leave. SBE contributes to the learning process and knowledge of participants. SBE can target specific learning gaps in a controlled environment. For example, if the organization is experiencing difficulties with stroke recognition and response, a simulation could be integrated that targets that specific gap in knowledge.

### **Impacts of Simulation**

Several researchers determined SBE improves the participants' self-efficacy and readiness for practice and confidence (Harper et al., 2022; Lee et al., 2016; Lugo et al., 2021). Harper et al. (2022) conducted a literature review of nine quantitative studies, all of which looked how effective SBE was in TTP programs. More research is needed on SBE effect on organizational outcomes; however, SBE was perceived by participants to improve competence, self-efficacy, and confidence in the studies (Harper et al., 2022).

A review of the results supports improved readiness for practice and practice

application of the students exposed to simulation (Guerrero et al., 2021; Thomas & Mraz, 2017). Thomas & Mraz (2017) explored through qualitative questions how simulation experiences as students contributed to transitioning to the role of RN. The themes that emerged about SBE's impact on practicing nurses' lived experiences include confidence, improved communication, valuing critique, applying knowledge-to-practice, seeing the big picture, and independence (Thomas & Mraz, 2017). SBE education during the transition period will allow further improvement in the application of knowledge and recognition of the big picture.

SBE effectiveness is enhanced with preparation and pre-briefing (INASCL Standards Committee, McDermott et al., 2021). A critical part of pre-briefing is creating a fiction contract and suspending disbelief. Suspension of disbelief often occurs when reading a book or watching a movie; individuals become absorbed into a world that may contradict their current reality (Muckler, 2017). Likewise, when participating in a simulation, the participants' experience is greatly enhanced by avoiding judgment of the unrealistic parts of the experience and embracing the fantasy of the scenario (Muckler, 2017). The fiction contract is an agreement between simulation hosts and the participants that the simulation directors will optimize the simulation's realism (Muckler, 2017). Additionally, the participants suspend disbelief, which is observable in their actions (Muckler, 2017). As part of the fiction contract, participants will know that the goal of the experience is learning, not consequences (Muckler, 2017).

Self-efficacy was maintained during the project. Pre-briefing provided clear expectations, and participants understood it was a safe learning environment. The facilitator leveled simulations and assigned roles based on the departments worked.

Cueing occurred as needed to ensure the attainment of the objectives. Cueing occurs by providing prompts that draw attention to specific information that can guide the simulation forward (INASCL Standards Committee, Perisco et al., 2021). The cues may be determined before or during the simulation (INASCL Standards Committee Perisco et al., 2021). Non-judgmental debriefing facilitated the maintenance of self-efficacy.

### **Review of Theory**

The theories of Benner's novice to expert model, Duchscher's stages of transition theory, and Bandura's self-efficacy theories supported the project. The theories apply to the transition to practice for nurses and can guide SBE.

#### **Benner's Novice to Expert Model**

Benner's model is an adaptation of the Dreyfus model of skill acquisition (Murray et al., 2019). The Dreyfus model explained skill acquisition among pilots to ensure safety in the aviation industry, especially in emergencies (Murray et al., 2019). The aviation industry and healthcare rely on competent professionals to provide safe outcomes to the communities they serve (Murray et al., 2019). Experiential learning plays a significant role in both (Murray et al., 2019). According to Benner (1984), nurses move from novice to expert throughout their careers, with the majority entering the profession at the advanced beginner level. Advanced beginners' performance meets basic expectations by drawing from experiences and lessons taught by preceptors (Benner, 1984). The participants in this project would be advanced beginners since they are new graduates with less than one year of experience.

#### **Duchscher's Stages of Transition Theory**

Duchscher's theory consists of three stages: the doing stage, the being stage, and

the knowing stage (Duchscher & Windey, 2018; Murray et al., 2019). The doing stage is the first three to four months of new graduate transition and is a time of linear thought processes, the discovery of boundaries, and figuring out the right and wrong of healthcare (Duchscher & Windey, 2018; Murray et al., 2019). Transition shock occurs during the doing stage (Duchscher & Windey, 2018; Murray et al., 2019). New graduate nurses face transition shock resulting from the idealistic meeting reality in which their expectations do not align with the reality of the situation (Duchscher & Windey, 2018; Murray et al., 2019).

The second stage is the being or transition crisis stage (Murray et al., 2019). The new graduate struggles between viewing themselves as a student or new graduate versus recognizing themselves as an RN (Duchscher & Windey, 2018; Murray et al., 2019). Nurses grow in knowledge and make significant discoveries about themselves during this phase (Murray et al., 2019). The second stage lasts from month four to month nine (Duchscher & Windey, 2018; Murray et al., 2019). New graduates in this phase are starting to move from Benner's "knowing that" and "knowing how" (Murray et al., 2019, p.202).

The knowing is the third and final phase (Murray et al., 2019). The graduates overcome their insecurities and become nurses. The graduates may become frustrated regarding the healthcare system and their lack of seniority within the organization during this stage. The graduates may find themselves answering rather than asking questions and being able to assist others with their workload. The three stages occur over one year, with the nurses still classified as advanced beginners.

### **Bandura's Self-Efficacy Theory**

Bandura's theory postulates that individuals develop or lose self-efficacy within situations based on the outcomes of the scenarios (Bandura, 1977). Self-efficacy is an internal belief that actions, and behaviors can lead to similar outcomes within similar situations. If individuals are exposed to situations at attainable levels and obtain proficiency in these situations, the individual's self-efficacy is improved. Improving self-efficacy allows the individual to approach similar problems confidently and successfully in the future. Establishing self-efficacy decreases setbacks. Scenarios that are leveled and have attainable outcomes allow for continued growth in learning and improvement of the individual's self-efficacy.

### **Alignment of Theory**

New nurses entering practice often feel overwhelmed, need supportive relationships, and struggle to develop a routine (Urban & Barnes, 2020). Based on Benner's model, the new graduate nurses participating in this project are advanced beginners (Benner, 1984). Benner discussed that the difference between practical and theoretical knowledge, and expertise comes from working in clinical situations (Benner, 1984). Advanced beginners have limited prior experience to draw from, which can limit their performance and cause them to need supportive guidance (Murray et al., 2019). SBE can provide additional experience through activities and should assist advanced beginners in the transition process. The participants in this project gained further experience through simulations that were leveled and integrated specific hospital protocols. The SBE did not intend to move the new graduates beyond the advanced beginner stage. The purpose was to provide tools that would assist the graduates in navigating the advanced beginner stage.

The transition of new graduates to nursing practice is a difficult period. Significant attrition occurs during this transition period (Ulupinar & Aydogan, 2021; Urban & Barnes, 2020). Duchscher's theory and Benner's novice-to-expert model provide a framework that explains the process and assists in combatting negative trends. Helping new nurse graduates through the transition shock process and progressing them to the knowing stage can reduce attrition (Murray et al., 2019).

The design of the simulations took into account meeting participants' goals and enhancing self-efficacy by creating scenarios with outcomes that the learners could attain. The facilitator utilized cues during scenarios if participants struggled to achieve the outcome. Self-efficacy is the feeling that one controls their actions and decisions (Lugo et al., 2021). Bandura's self-efficacy theory guided the simulation development by ensuring an environment safe for learning and judgment-free debriefing. The simulations were properly leveled, and the outcomes were attainable.

Researchers note that new graduate nurses face a challenging environment when transitioning into the practice setting. The knowledge-to-practice gap is ongoing and further complicates transitioning. Most new graduates lack sufficient clinical judgment abilities for practice. Transition shock further complicates the transition process. SBE is an effective tool for improving clinical judgment, enhancing self-efficacy, and assisting in the readiness for practice, which can minimize transition shock.

### **Chapter III: Method**

Practice transition is a complicated period for new graduate nurses. Recent graduates need support and additional training to close the knowledge-to-practice gap and improve clinical judgment. SBE is one tool that can assist the transition process, decrease the knowledge-practice-gap, and enhance clinical judgment. The project manager aimed to enhance the clinical reasoning skills and the transition to practice of new graduate RNs using leveled and responsive simulation experiences. Furthermore, the project manager aimed to prepare the hospital educators to continue implementing and developing other simulations for future nursing graduates.

#### **Design of the Project**

The International Nursing Association for Clinical Simulation and Learning (INASCL) Healthcare Simulation Standards of Best Practice (HSSOBP) guided this project's development. The HSSOBP comprises 11 criteria that assist simulation developers in creating relevant and educationally sound simulations based on best practices (INASCL standards committee et al., 2021). The criteria are as follows:

- **Criterion 1.** Simulation experiences should be designed in consultation with content experts as well as simulationists who are knowledgeable and competent in best practices in simulation education, pedagogy, and practice.
- **Criterion 2.** Perform a needs assessment to provide the foundational evidence of the need for a well-designed simulation-based experience.
- **Criterion 3.** Construct measurable objectives that build upon the learner's foundational knowledge.
- **Criterion 4.** Build the simulation-based experience to align the modality with

the objectives.

- **Criterion 5.** Design a scenario, case, or activity to provide the context for the simulation-based experience.
- **Criterion 6.** Use various types of fidelity to create the required perception of realism.
- **Criterion 7.** Plan a learner-centered facilitative approach driven by the objectives, learners' knowledge and level of experience, and the expected outcomes.
- **Criterion 8.** Create a prebriefing plan that includes preparation materials and briefing to guide participant success in the simulation-based experience.
- **Criterion 9.** Create a debriefing or feedback session and/or a guided reflection exercise to follow the simulation-based experience.
- **Criterion 10.** Develop a plan for evaluation of the learner and of the simulation-based experience.
- **Criterion 11.** Pilot test simulation-based experiences before full implementation. (INASCL Standards Committee, Watts et al., 2021, p.15).

The project included three monthly simulations leveled for the participants that had responsive elements to their decisions at a midsize hospital in a college town. For example when the client experienced sepsis the blood pressure improved after fluid administration. The simulation objectives and a brief description are in (Appendix A). Four educational staff educators involved in the TTP program assisted in piloting and implementing each simulation.

The simulation design allowed for up to eight participants. The first two



simulations unfolded, allowing participants to act as observers during some sections. The first simulation involved a patient who suffered a stroke following a heart catheterization. The participants needed to recognize the stroke symptoms, call a stroke one, and follow the hospital stroke protocols. The project leader consulted with the stroke educator and a speech therapist to develop the scenario. The second scenario was the same patient from the first simulation that returned to the hospital with aspiration pneumonia due to the unresolved dysphagia that developed in simulation one. The patient passed away during the scenario. The hospital educators provided policies for treating sepsis and patient death. Faculty from Indiana Wesleyan University provided the third simulation in which multiple scenarios were run simultaneously. The participants prioritized their decisions and delegated appropriately.

The needs and objectives of the simulation determined the necessity of including interprofessional roles. Simulation participants and educational staff performed the interprofessional roles. Interprofessional roles included respiratory therapists, radiology staff, speech therapists, chaplains, and physicians.

The simulations started with pre-briefing following HSSOBP criterion eight. The pre-briefing included an overview of expectations, a description of the scenario, orientation to the environment, required teaching, and the timeframe for the simulation. Additionally, the pre-briefing period included discussing the suspension of disbelief and agreeing to a fiction contract.

Simulations happened once a month over four months. The scenarios utilized simulated patients and manikins to enhance realism. The scenes lasted approximately 60-75 minutes. Conversations about facility needs determined the simulation topics and

timeframes used for TTP. The scenarios were leveled based on the expectations of advanced beginner nurses, and responsive changes occurred based on the participants' decisions.

After each scenario concluded, debriefing took place per criterion nine. Techniques utilized in the debriefing process included feedback, debriefing, and guided reflection by the facilitator and the educational staff (INACSL Standards Committee, Decker et al., 2021). Feedback, a unidirectional process, occurred by the facilitator and the assisting educational staff and allowed for a greater understanding of the concepts and the participants' overall performance (INACSL Standards Committee, Decker et al., 2021). Debriefing is a bidirectional process that employs collaborative conversations (INACSL Standards Committee, Decker et al., 2021). Educators used a power point to remind participants of the objectives and guide the conversation through each phase, reflecting on what went well and what could be improved. The guided reflection also occurred during the debriefing process outlined above. To accomplish this, the facilitators used Socratic conversations to explore the critical elements of the experience and gain insights regarding what occurred (INACSL Standards Committee, Decker et al., 2021).

The educational staff participated in a Train-the-Trainer experience developed by the project manager. The educational staff that assisted with pilot tests and implementing the simulations were invited to be part of the project. The educators completed a post-simulation questionnaire for educators after the simulations (Appendix B) and completed a short checklist that tracked the completion of tasks (Appendix C). The educational staff completed a narrated educational training presentation on simulation-based education (Appendix D).

**Setting**

Simulations occurred within an educational classroom at a midsize hospital in the Midwest. The classroom houses several tables, a projector attached to a computer, and a Laerdal Nursing Anne Simulator area. The area included a hospital bed, a BD Alaris infusion pump and equipment, and a code cart with a Zoll defibrillator. Due to the need for additional space, the third and final simulations were conducted in a larger conference room at the same facility, with multiple scenarios running simultaneously.

**Population**

The project population was a convenience sample of new graduate nurses within a TTP program at a midsize hospital in the Midwest. The TTP nurses were required to participate in the simulations as part of their onboarding process. The author gained access to the participants through collaboration with the educational staff of the TTP program. Participation in the data collection for the project was voluntary, and informed consent was obtained (Appendix E). Participants could withdraw the consent at any point during the project.

Per Benner's novice to expert model, as new graduates with less than one year of experience, the participants were advanced beginners. Advanced beginners can draw from prior experiences in clinical and simulation environments to display mildly acceptable performance in real-life settings (Benner, 1984).

The project site's educational staff participated by assisting with pilot tests and implementing the simulations. Educators who agreed to participate completed an electronic informed consent (Appendix F).

### **Data Collection**

Data collection utilized the Casey-Fink Graduate Nurse Experience Survey (CF-GNES) (Appendix G) and the Lasater Clinical Judgment Rubric (LCJR) (Appendix H) to measure transition to practice and clinical judgement. The CF-GNES and the LCJR were completed as pre- and post-tests. During a four-month project that included simulations, the tools were assessed for improvements in clinical judgment and the transition process. The CF-GNES survey contained a section that collected demographic information from the participants.

The CF-GNES survey examines how employees rate their job satisfaction, support, confidence in their roles, professional interactions, and how they organize and prioritize care (Casey, 2019). An extensive survey review for validity and reliability revealed a Cronbach alpha score ranging from 0.73 to 0.94, demonstrating adequate reliability (Casey, 2019). Drs. Casey & Dr. Fink granted permission to use this scale through email correspondence (Appendix I).

The LCJR was used to measure clinical judgment. The LCJR has four dimensions: noticing, interpreting, responding, and reflecting (Miraglia & Asselin, 2015). The LCJR allows the observer to evaluate the clinical judgment, or it can be completed as a pre-and post-experience self-analysis (Miraglia & Asselin, 2015). The tool is reliable with good internal consistency, with a reported Cronbach Alpha score of 0.80-0.97 (Miraglia & Asselin, 2015). Dr. Lasater provided permission to use this survey and to modify it into an electronic Qualtrics through email correspondence (Appendix J).

After the simulations, the participants completed the residency post-simulation questionnaire (RPSQ) (Appendix K) developed to distinguish the impact of simulation

apart from the TTP program and the continued experience gained through working. Throughout the project period, TTP participants continued to work at the bedside. The other survey tools did not differentiate between practice experience and SBE. The residency post-simulation questionnaire was created through collaboration with the project manager, project mentor and practice advisors, with several revisions based on feedback. A group of senior nursing students and a statistician assessed the survey for readability and comprehension. The survey contained seven Likert statements and two qualitative questions. The first question asked participants to describe how simulation-based learning influenced their transition to practice. The second question asked to provide two examples of valuable lessons learned from the simulation experiences.

For confidentiality, data collection occurred without participant names. Each participant provided their employee identification number minus the last digit on each survey to allow for pre- and post-survey results comparison. Participants provided demographic information, age, sex, ethnicity, and previous healthcare experience.

Indiana Wesleyan University's Internal Review Board approved the project (Appendix L), determining it was exempt from further review (Appendix M). The nurses were compensated at their standard hourly rate for participating in the simulations as part of the program. Participants' compensation did not vary with completing the project's surveys.

## **Chapter IV: Results**

The project integrated SBE into an existing TTP program at a midsize hospital in a college town. New graduate participants attended three simulations over four months. The CF-GNES, LCJR, and a project-specific RPSQ were used to determine the effectiveness of the project interventions. The project did not measure attrition; however, TTP participants that began the project remained employed by the facility at the conclusion of the project period four months later.

The facility's educational staff assisted with simulation pre-briefing activities, simulation facilitation, and debriefing. The facility's educational staff received instructions and education about SBE standards. They assisted with simulation pre-briefing activities, facilitating the simulations, and debriefing to ensure project sustainability.

### **Results of Data Collection/Analysis**

The TTP participants ( $n=7$ ) participated in three simulations. The TTP participants completed two surveys, the LCJR and CF-GNES. Prior to the simulations, six participants completed the CF-GNES, and four completed the LCJR. After the three simulations, the resident TTP participants completed both surveys again. The project included an additional survey to evaluate the simulation's role in the participants learning apart from other residency days and practice experiences. The post-survey response rate varied among the three surveys, with the CF-GNES ( $n=5$ ) and the LCJR being ( $n=3$ ). Three participants completed the RPSQ.

The Train-the-Trainer program evaluation included a created project-related survey following the educational offerings. Four educational staff agreed to participate in

the project, and two completed the post-survey.

### **Casey-Fink Graduate Nurse Experience Survey**

The demographic information in this project was captured within the CF-GNES (Table 1). Participants were, on average, 25.16 years old ( $SD=3.66$ ).

**Table 1**

#### *Sociodemographic Characteristics of the Participants*

Sample Characteristics	<i>n</i>	%
Gender		
Male	1	16.5
Female	5	83.5
Race		
Caucasian	6	85.7
Other	1	14.3
Degree		
ASN	1	16.5
BSN	5	83.5
Area of specialty		
Medical/Surgical	5	83.5
Intensive Care	1	16.5

*Note.*  $n=6$

A paired *t*-test compared the pre and post-test GF-GNES results. The first section of the survey provided 23 statements for participants to rate on a five-point Likert scale, with one representing very dissatisfied and five very satisfied. The statement “I am comfortable knowing what to do for a dying patient” was the only response with statistical significance. No other scores had statistical significance, but mean scores increased on a variety of the responses (Table 2).

**Table 2***Casey Fink Graduate Nurse Experience Survey*

Question	Pre-Test Mean and SD	Post-Test Mean and SD	p-value and effect size
I feel confident communicating with physicians.	3.16 (.41)	3.40 (.55)	$p = .39, d = -.50$
<b>I am comfortable knowing what to do for a dying patient.</b>	<b>2.67 (1.03)</b>	<b>3.40 (.55)</b>	<b><math>p = .01, d = -2.50</math></b>
I am comfortable delegating tasks to the Nursing Assistant.	3.17 (.41)	3.20 (.45)	$p = .39, d = -.50$
I feel at ease asking for help from other RNs on the unit.	3.50 (.55)	3.60 (.55)	$p = 1.00, d = .00$
I am having difficulty prioritizing patient care needs.	1.75 (.50)	2.20 (.45)	No variance
I feel my preceptor provides encouragement and feedback about my work.	3.83 (.41)	3.60 (.55)	$p = .39, d = .50$
I feel staff is available to me during new situations and procedures.	3.33 (.82)	3.40 (.55)	$p = 1.00, d = .00$
I feel overwhelmed by my patient care responsibilities and workload.	2.50 (.55)	2.80 (.45)	$p = .39, d = -.50$
I feel supported by the nurses on my unit.	3.83 (.41)	3.60 (.55)	$p = .39, d = .50$
I have opportunities to practice skills and procedures more than once.	3.50 (.55)	3.40 (.55)	$p = 1.00, d = .00$
I am able to complete my patient care assignment on time.	3.33 (.52)	3.20 (.45)	$p = 1.00, d = .00$
I feel the expectations of me in this job are realistic.	3.50	3.20 (.45)	No variance



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	(.55)		
I feel prepared to complete my job responsibilities.	3.17	3.00 (.00)	No variance
	(.75)		
I feel comfortable making suggestions for changes to the nursing plan of care.	2.83	2.80 (.84)	$p = .79, d = -.15$
	(.98)		
I am having difficulty organizing patient care needs.	1.50	2.00 (.71)	$p = .18, d = .87$
	(.55)		
I feel I may harm a patient due to my lack of knowledge and experience.	1.80	2.20 (.45)	No variance
	(.45)		
There are positive role models for me to observe on my unit.	3.83	3.80 (.45)	No variance
	(.41)		
My preceptor is helping me to develop confidence in my practice.	3.50	3.40 (.55)	$p = .39, d = .50$
	(.55)		
I am supported by my family/friends.	3.83	3.80 (.45)	No variance
	(.41)		
I am satisfied with my chosen nursing specialty.	3.33	3.40 (.55)	No variance
	(.52)		
I feel my work is exciting and challenging.	3.50	3.40 (.55)	$p = .18, d = .87$
	(.55)		
I feel my manager provides encouragement and feedback about my work.	3.00	3.20 (.84)	$p = .64, d = -.26$
	(1.10)		
I am experiencing stress in my personal life.	2.67	2.60 (.55)	$p = .18, d = .87$
	(1.03)		

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Note. Pre-Test  $N = 7$  Post-Test  $N = 5$

The CF-GNES included a section about job benefits. The section utilized Likert scale questions to examine satisfaction with benefits, salary, vacation, hours worked, time off, advancement opportunities, and what shift is worked. No statistically significant

changes were present on the paired *t*-tests. Satisfaction with salary displayed a decline on the post-test. Satisfaction with vacation, employee benefits, time off, responsibility, opportunities, and the encouragement received all showed improvement in the post-test analysis (Appendix N).

### **Lasater Clinical Judgment Rubric**

Participants completed the LCJR was utilized in this project as a self-assessment tool. The participants ranked themselves using the following Likert scale 1=Beginning, 2=Developing, 3=Accomplished, and 4= Exemplary. The ranking occurred across four domains, including effective noticing, effective interpreting, effective responding, and effective reflecting. A paired *t*-test compared the surveys' pre- and post-results (Table 3). No statistically significant changes were observed with the *t*-test.

**Table 3**

#### *Lasater Clinical Judgment Rubric*

Clinical Judgement Skill	Pre-Test Mean and SD	Post-Test Mean and SD	p-value and effect size
Focused Observation	2.25 (.96)	3.00 (1.00)	No variance
Recognizing deviations from expected patterns	2.50 (1.00)	3.33 (.58)	$p = .21, d = -2.12$
Information seeking	2.50 (1.00)	3.33 (1.16)	$p = .30, d = -1.41$
Prioritizing data	2.75 (.96)	2.67 (.58)	No variance
Making sense of data	2.50 (.58)	2.67 (.58)	No variance
Calm, confident manner	2.50 (1.29)	2.67 (.58)	$p = .50, d = -.71$
Clear communication	2.75 (.50)	3.33 (.58)	$p = .50, d = -.71$
Well-planned intervention/flexibility	2.50 (.58)	2.67 (.58)	$p = .50, d = -.71$
Being skillful	2.75 (.50)	3.00 (.00)	No variance
Evaluation/self-analysis	2.50 (.58)	3.00 (1.00)	$p = .21, d = -2.12$
Commitment to improvement	3.00 (.82)	3.00 (1.00)	$p = .50, d = -.71$

Note. Pre-test  $n = 4$  Post-Test  $n = 3$

### Residency Post-Simulation Questionnaire

The RPSQ utilized seven Likert questions with participants rating on a one to five scale, with one being strongly disagreed and five strongly agreed (Appendix K). The participants also completed two fill-in-the-blank qualitative-style questions. Three participants completed this survey at the conclusion of the project (Table 4)

**Table 4**

#### *Residency Post Simulation Questionnaire*

Question	Mean
Participation in a residency program improved my transition to nursing practice.	4.33
Simulations during the residency contributed to my learning.	4.67
The simulation experiences were realistic.	3.67
If my residency did not include simulation, my transition to nursing practice would not have changed.	2.33
Including additional simulation learning experiences within the residency program would improve new graduates' transition to nursing practice.	4.67
The simulation facilitators provided clear expectations.	4.67
The simulation facilitators provided a safe learning environment.	4.67

Note. n=3

The fill-in-the-blank questions provide additional insights. Valuable lessons were learned included understanding death and dying procedures and the NIH stroke scale.

New graduate nurses reported learning skills of early stroke recognition, post-arterial

sheath removal care, and interprofessional communication. Another nurse discussed seeing nursing from the perspective of other professionals and early recognition of patient deterioration. The following statements revealed the influence simulation-based learning had on the transition to practice, “Gave us a safe place to ask questions and learn things I had not been exposed to yet. I have been an RN for a year now, and there is still so much I haven’t seen, which is why it was nice to have a safe place to learn,”. Also, it was stated, “I was able to be confidently unsure with delivering care and developing my thought process, which helps me retain information for future practices, and build confidence.”

### **Post-Simulation Questionnaire for Educators**

As well as new nurse graduates, facility nurse educators participated in the project ( $n=4$ ). The post-simulation questionnaire for educators was the final survey used in the project. Four educators agreed to participate in the project; two completed the survey at the conclusion. The educators completed a seven-question Likert scale survey, with one being strongly disagreed and five strongly agreed (Appendix O).

The following statements were part of the survey (See Table 5)

**Table 5**

#### *Post-Simulation Questionnaire for Educators*

Question	Mean
The video presentation explaining developing, implementing, and facilitating simulations increased my confidence to participate in simulation-based education.	5.0
Participating in the simulation pilot test increased my confidence to develop,	5.0

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implement, and facilitate simulations.

I feel comfortable pre-briefing simulations. 4.0

I feel comfortable facilitating simulations. 4.5

I feel comfortable debriefing simulations. 4.0

The educational healthcare staff plan to continue offering simulation-based learning experiences in future residencies. 5.0

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Note.  $n=2$

### Discussion

The project aimed to assist new graduate nurses during practice transition, enhance clinical judgment, and improve participant self-efficacy by adding SBE into an existing TTP program. Educational staff received training to continue utilizing simulations in the program.

The CF-GNES survey was used to measure how the participants' perceptions of the transition process. The survey had one statistically significant response regarding knowing what to do for a dying patient. Early conversations while developing the simulations revealed that new graduates needed education on caring for a dying patient, calling Indiana Organ Procurement Organization, and completing end-of-life paperwork. TTP participants received training on nursing care during death and dying in the second simulation. The simulation met the new graduates' need to be more comfortable with the death and dying process.

The LCJR analyzed the perceived clinical judgment of the participants. No response yielded statistical improvement. The post-test scores demonstrated increased mean scores regarding observations, making sense of the data, seeking information,

communication, planning appropriate interventions, improving skills, and evaluating patient information. SBE may have contributed to this improvement by allowing participants to gather data, plan interventions, observe for patient changes, and practice skills. Since participants continued to practice during the TTP program and other educational offerings were part of the program, it is impossible to confirm that the simulation impacted their LCJR scores.

The RPSQ survey developed for this project provided valuable information regarding the benefit of adding simulation-based education. Participants noted that the simulation improved their transition to practice and contributed to the learning in the TTP program. The participants expressed a desire for more simulations. After the first simulation, one participant stated they had a similar patient in practice and felt equipped to handle the situation because of the simulation. Future cohorts will benefit from continued simulation in the TTP program.

The narrative questions demonstrated that the scenarios met some of the targeted outcomes. Early recognition of a stroke and the proper response was an outcome of simulation one. Participants reported learning about stroke recognition and the NIH stroke scale. Interprofessional communication was an outcome for all three scenarios. The participants listed improved interprofessional communication when asked about learning that occurred. SBE can target specific hospital learning needs and enhance competency in these areas.

The post-simulation questionnaire for educators measured how the educators felt about their knowledge of SBE and the continued future use of SBE. The educational staff received SBE to enhance the project's sustainability. The educational staff can continue

SBE implementation in future TTP groups by participating in the SBE process and completing the educational presentation developed for them. The educators intend to continue using simulation during the future transition to practice groups.

### **Implications for Practice**

As new graduates transition from academia to practice, SBE provides a safe learning environment, exposure to new knowledge, and the opportunity to be unsure about their role. Transition shock occurs during this first year as the nurses move from the known role of a student into the unknown nurse position (Thomas & Mraz, 2017). SBE improves confidence among recent graduates that can carry over to the work environment. Including simulation in a TTP program can improve competence and practice readiness among recent graduates, making care safer (Harper et al., 2021).

Simulation provides a controlled way to introduce specific educational scenarios that will assist in meeting specific knowledge gaps within the organization. Future use of SBE may help new graduate nurses transition to practice at the project implementation site.

### **Limitations**

When interpreting the project results, several limitations must be considered. The first limitation was the small sample size of 9 participants. The sample was a convenience sample of one TTP program within one facility and had no control group. The project design used self-assessment with pre- and post-experience analysis. However, several participants did not complete the post-test, impeding data analysis. Since the project took place in one hospital, there were many similarities in age, race, and gender among the participants. Thus, the findings may be limited in their application. The participants

completed the CF-GNES and LCJR surveys before and immediately after the intervention. Baseline assessments conducted at hire, 6 and 12 months, and after the intervention would provide broader information. The realism of the scenarios could be improved based on the feedback. Limitations regarding electronic health record use, limited simulated medications, and some supplies may have impacted the scenarios. Additional questions are necessary to determine what would have improved the realism.

### **Recommendations**

Many new graduates are unprepared to enter a complex and demanding work environment (Kavanagh & Szweda, 2017; Kavanagh & Sharpknack, 2021). Nurse residency or TTP programs in healthcare organizations attempt to help the transition. Although the sample size in this project was small, research shows that adding simulation helped the transition process. The project builds on Brown's (2019) study, which revealed that undergraduate exposure to realistic simulations improved their transition into the practice environment. The new graduates' transition will be improved through the continued inclusion of simulation in the TTP program. Further research could determine how much simulation is necessary to attain the best outcomes for the new graduates.

The results of the LCJR, although not statistically significant, displayed mean score improvement in the perceived clinical judgment among most areas measured. The information builds on similar research regarding simulated learning's impact on clinical judgment conducted by Cantrell et al. (2021), where simulated learning did improve clinical judgment over time. The researchers in this study found the effect size to be small, which likely limited the ability to demonstrate the findings statistically (Cantrell et al., 2021). Similar limitations existed in this project because the LCJR only received post-



experience feedback of ( $n=3$ ). The attrition rate of responses and a small sample population limited the findings. Future studies should include a larger sample size to address the effect size.

The participants in this project reported positive findings regarding SBE assisting their TTP. The TTP time is difficult for new graduates, and significant attrition of employees occurs during this time (Ulupinar & Aydogan, 2021). Positive learning experiences will assist the transition process and improve job satisfaction, leading to decreased attrition. SBE has upfront costs, but the return on investment is net positive when considering revenue savings associated with reduced staff turnover, decreased medication errors, and related costs (Zimmerman & House, 2016). SBE should be incorporated into the onboarding process of new graduates coming into the profession.

The QI project integrated three simulations into an existing TTP program. The purpose was to improve the participants' transition to practice, clinical judgment, and self-efficacy. A data review showed that the addition of simulation benefited the new graduates in this project. The educational staff learned about the process of simulation-based education and intends to continue using SBE in the future.

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## **Appendices**

### **Appendix A**

#### **Simulation Objectives and Overview**

Objectives for simulation one:

**Participants will:**

1. Recognize the risk factors and signs and symptoms of a stroke.
2. Initiate Stroke One per IU Arnett policy and recognize critical time frames in providing stroke care.
3. Safely care for patients recovering from heart catheterization.
4. Provide interprofessional collaborative care

**Overall Scenario:**

Simulation one focused on a patient who had a stroke after having a cardiac catheterization. There were three phases to the simulation. Phase one was the stroke and participants needed to recognize and intervene. Phase two was diagnostic results and transfer to the ICU. It was also a time of Tenecteplase administration. The final phase integrated speech therapy and a full speech evaluation.

Objectives for simulation two

**Participants will:**

- 1) Recognize signs and symptoms of Pneumonia and sepsis
- 2) Recognize the deterioration of a patient
- 3) Understand differences in DNR status
- 4) Provide care for the dying patient and gain an understanding of the process for organ donation and communication with IOPO
- 5) Understand the nurse's role in death paperwork and communication with funeral services

**Overall Scenario:**

The second simulation had the same patient from the first simulation that returned to the hospital 65 days later from a rehab facility. The patient developed sepsis in phase one. Further treatment and decline in phase two. The patient passed away in the final phase.



The scenario began in the emergency room for phase one. Phase two and three occurred in a medical-surgical setting.

**Objectives for simulation three:**

1. Prioritize patient care based on report and assessment findings.
2. Utilize effective delegation to provide safe, effective care in the clinical setting.
3. Collaboration with health care team members, patient, and family.
4. Demonstrate responsible patient care based on clinical reasoning while managing a group of patients.

**Overall Scenario:**

This is a cardiac step-down unit with five beds. Four beds are occupied, and one patient is coming from the catheterization lab later in the shift. 2 nurses receive reports on the patients, make assignments, determine who is the charge nurse or if the task will be shared, and provide care to the patients. There is a respiratory therapist (RT), CNA/PCT, and potentially a student nurse for the nurses to delegate tasks to as appropriate. The nurses are assigned a mentor, a simulation facilitator, to ask questions. He/she has a full patient assignment. So, the nurses will need to go to that person as required (in the supply room). A provider is available via phone to report abnormal assessment findings, get orders, and consult with as necessary.

## **Appendix B**

### **Post-Simulation Questionnaire for Educators**

#### **Post-simulation questionnaire survey for educators**

The video presentation explaining developing, implementing, and facilitating simulations increased my confidence to participate in simulation-based education.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

Participating in the simulation pilot test increased my confidence to develop, implement, and facilitate simulations.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

The simulation-based education workbook is a valuable resource for developing, implementing, and facilitating future simulation-based educational offerings.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

I feel comfortable pre-briefing simulations.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

I feel comfortable facilitating simulations.

- 1) Strongly Agree

- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

I feel comfortable debriefing simulations.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

The educational healthcare staff plan to continue offering simulation-based learning experiences in future residencies.

- 1) Yes
- 2) No

## Appendix C

### Train the Train Checklist

- Participants will Complete video educational presentations explaining the International Nursing Association for Clinical Simulation and Learning Standards and the Healthcare Simulation Standards of Best Practice
- Participants will be required to attend pilot tests of simulations and provide feedback.
- Participants will apply the knowledge gained from the educational presentations during the simulations by assisting with pre-briefing, implementation, and the debriefing process.
- Participants will assist with the setup of the simulation environment.

#### Example Checklist

	Completed video educational presentations explaining the International Nursing Association for Clinical Simulation and Learning Standards and the Healthcare Simulation Standards of Best Practice
	Attended pilot tests of simulations
	Assisted with set up of educational classroom for simulations
	Assisted with the implementation and facilitation of simulations, including pre-briefing and debriefing.

## **Appendix D**

### **Educational Presentation Outline**

#### **Educational presentation outline:**

The presentation discussed the INASCL Healthcare Simulation Standards of Best Practices-

- Professional Development
- Pre-briefing: Preparation and Briefing
- Simulation Design
- Facilitation
- The Debriefing Process
- Operations
- Outcomes and Objectives
- Professional Integrity
- Sim-Enhanced IPE
- Evaluation of Learning and Performance

Additionally, the presentation discussed In Situ Simulation

- Definition of
- Application to facility
- Benefits of

## Appendix E

### Letter of Invitation for Residents

Hello,

We would like to invite you to participate in a mixed-method research study related to the integration of simulation into the nursing residency program. We are seeking new graduate nurses to participate in this study. The aim of this study is to see if high-fidelity simulation-based education enhances clinical judgment and transition to practice of the nurses participating in the residency program.

Your participation in this study is voluntary and confidential. Should you choose to participate, you understand that participation starts on November 1<sup>st</sup>, 2022, and ends on January 11<sup>th</sup>, 2023. During this period, you agree to participate in three simulations: the first on November 7<sup>th</sup>, 2022, the second on December 9<sup>th</sup>, 2022, and the final on January 4<sup>th</sup>, 2023. You understand that each simulation day will be three hours in length, from 8 am to 11 am on those days. You understand that you will be emailed two Qualtrics surveys five days before the first simulation. The surveys will include the Casey Fink Graduate Nurse Experience Survey and the Lasater Clinical Judgment Rubric. After this project, you will once again be emailed these surveys for your completion. Additionally, there will be one more survey consisting of Likert questions that look at how simulation itself contributed to your transition to practice and clinical judgment. Completion of the surveys may take up to one hour.

I certify that I am over the age of 18 and am participating in this survey of my own free will. I understand that the potential risk of participating in this study is minimal. Performing self-evaluation at times can be distressing. I can choose to stop participation in the research at any point.

I understand that by performing self-evaluation, I can recognize areas of growth that have occurred during my participation in the study. The results of this study may provide a better understanding of the value high-fidelity simulation provides to new graduate nurses.

I authorize David Cunningham to gather information regarding my responses to questions asked on these surveys. I understand that my responses will be utilized for research and may become part of a published journal article or scholarly presentation.

I understand that there is no financial compensation for participating in this study. I understand that my employer will compensate me for hours attending the required residency days. Additionally, there are no monetary costs associated with participation.

I understand that my demographic data provided will be kept confidential and

de-identified. The lead principal investigator will store the data on a secure, password-protected computer for a minimum period of three years after the completion of the study.

I understand that I do not have to participate in this research project, and my choice to participate is wholly voluntary. I understand that if I agree to participate, I can withdraw my participation at any time without penalty. My employment status will not be impacted negatively or positively based on participation. If I withdraw from the study, I understand that I will still participate in the simulations as part of my employee residency training.

The data will be gathered electronically using Qualtrics surveys. When completing the survey, I will use my employee number as a designated classification.

I participate of my own accord in this research project and release any claim to the collected data, research results, or publication in any form, including thesis/dissertation, journal article, conference presentation, or commercial use of such information or products resulting from the collected information.

If I have any questions about this research project, I can contact:

- David Cunningham, MSN, RN  
[David.cunningham2@myemail.indwes.edu](mailto:David.cunningham2@myemail.indwes.edu)  
 574-727-1244
- Dr. Angela Bailey, Ph.D.  
[angela.bailey@indwes.edu](mailto:angela.bailey@indwes.edu)

If I have concerns about the treatment of research participants, I can contact the Institutional Review Board (IRB) at Indiana Wesleyan University, 4201 South Washington Street, Marion, IN 46953. (765) 677-2090.

The survey is designed not to collect e-mail addresses or Internet protocol (IP) addresses. To further maintain confidentiality of the survey, please do not include your name or any other information by which you can be identified in any of the comment boxes in the survey.

The survey is designed not to collect e-mail addresses or Internet protocol (IP) addresses. To further maintain confidentiality of the survey, please do not include your name or any other information by which you can be identified in any comment boxes that may be included in the survey.

**BY CLICKING ON “CONTINUE,” I ACKNOWLEDGE THAT I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO CONSENT TO MY PARTICIPATION IN THIS SURVEY.**

## Appendix F

### Letter of Invitation for Educators

Hello,

We would like to invite you to participate in a mixed-method research study related to the integration of simulation into the nursing residency program. The aim of this study is to see if high-fidelity simulation-based education enhances clinical judgment and transition to practice of the nurses participating in the residency program. We are seeking education staff members to participate in this study. By agreeing to do so, you are agreeing to participate in simulation-based education and assist with the facilitation and implementation of simulation-based education in the residency program.

Your participation is voluntary and confidential. Should you choose to participate, you understand that participation in this study starts on November 1<sup>st</sup>, 2022, and ends on January 11<sup>th</sup>, 2023. During this period, you agree to participate in three simulations: the first on November 7<sup>th</sup>, 2022, the second on December 9<sup>th</sup>, 2022, and the final on January 4<sup>th</sup>, 2023. You understand that each simulation day will be three hours in length, from 8 am to 11 am on those days. You understand that you will also need to assist with a pilot test for the second simulation. You understand that you will have an educational video that you will be required to view and a checklist that you will need to complete before the conclusion of this project. You understand that you will need to complete a survey after the conclusion of the simulation experiences and the objectives on the checklist.

I certify that I am over the age of 18 and am participating in this research project of my own free will. I understand that participation in this research project will provide me with learning opportunities that will allow me to continue using simulation-based education in the future. The results of this study may provide a better understanding of the value high-fidelity simulation provides to new graduate nurses.

I understand the purpose of this research project is to determine if the integration of high-fidelity simulation into the nurse residency program assisted my transition to practice and clinical judgment capabilities. I understand that my participation is necessary to sustain the project going forward.

I authorize David Cunningham to gather information regarding my responses to questions asked on these surveys. I understand that my responses will be utilized for research and may become part of a published journal article or scholarly presentation.

I understand that there is no financial compensation for participating in this study. I understand that my employer will compensate me for hours attending



the required residency days. Conversely, there are no monetary costs for my participation.

I understand that I do not have to participate in this research project and that my choice to participate is wholly voluntary. I understand that if I agree to participate, I can withdraw my participation at any time without penalty. My employment status will not be impacted negatively or positively based on participation.

I understand that the potential risk of participating in this study is minimal. Performing self-evaluation at times can be distressing. I can choose to stop participation in the research at any point.

I understand that my demographic data provided will be kept confidential and de-identified. The lead principal investigator will store the data on a secure, password-protected computer for a minimum period of three years after the completion of the study.

The data will be gathered electronically using Qualtrics surveys. When completing the survey, I will use my employee number as a designated classification.

I participate of my own accord in this research project and release any claim to the collected data, research results, or publication in any form, including thesis/dissertation, journal article, conference presentation, or commercial use of such information or products resulting from the collected information.

If I have any questions about this research project, I can contact:

- David Cunningham, MSN, RN  
[David.cunningham2@myemail.indwes.edu](mailto:David.cunningham2@myemail.indwes.edu)  
 574-727-1244
- Dr. Angela Bailey, Ph.D.  
[angela.bailey@indwes.edu](mailto:angela.bailey@indwes.edu)

If I have concerns about the treatment of research participants, I can contact the Institutional Review Board (IRB) at Indiana Wesleyan University, 4201 South Washington Street, Marion, IN 46953. (765) 677-2090.

The survey is designed not to collect e-mail addresses or Internet protocol (IP) addresses. To further maintain confidentiality of the survey, please do not include your name or any other information by which you can be identified in any of the comment boxes in the survey.

The survey is designed not to collect e-mail addresses or Internet protocol (IP) addresses. To further maintain confidentiality of the survey, please do not include your name or any other information by which you can be identified in any

comment boxes that may be included in the survey.

BY CLICKING ON “CONTINUE,” I ACKNOWLEDGE THAT I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO CONSENT TO MY PARTICIPATION IN THIS SURVEY.

## Appendix G

### Casey Fink Graduate Nurse Experience Survey

#### Casey-Fink Graduate Nurse Experience Survey

Q1 List the top three skills/procedures you are uncomfortable performing independently at this time? (please select from the list below)

Assessment skills

Bladder catheter insertion/irrigation

Blood draw/venipuncture

Blood product administration/transfusion

Central line care (dressing change, blood draws, discontinuing)

Charting/documentation

Chest tube care (placement, pleurovac)

Code/Emergency Response

Death/Dying/End-of-Life Care

Nasogastric tube management

ECG/EKG/Telemetry care

Intravenous (IV) medication administration/pumps/PCAs Intravenous (IV) starts

Medication administration

MD communication

Patient/family communication and teaching

Prioritization/time management

Tracheostomy care Vent care/management

Wound care/dressing change/wound vac

Unit specific skills \_\_\_\_\_

I am independent in all skills

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Q2 I feel confident communicating with physicians.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q3 I am comfortable knowing what to do for a dying patient.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q4 I am comfortable delegating tasks to the Nursing Assistant.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q5 I feel at ease asking for help from other RNs on the unit.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q6 I am having difficulty prioritizing patient care needs.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q7 I feel my preceptor provides encouragement and feedback about my work.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q8 I feel staff is available to me during new situations and procedures.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q9 I feel overwhelmed by my patient care responsibilities and workload.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q10 I feel supported by the nurses on my unit.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q11 I have opportunities to practice skills and procedures more than once.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q12 I feel comfortable communicating with patients and their families.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q13 I am able to complete my patient care assignment on time.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q14 I feel the expectations of me in this job are realistic.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q15 I feel prepared to complete my job responsibilities.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q16 I feel comfortable making suggestions for changes to the nursing plan of care.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Agree (3)
- ☐ Strongly Agree (4)

Q17 I am having difficulty organizing patient care needs.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q18 I feel I may harm a patient due to my lack of knowledge and experience.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q19 There are positive role models for me to observe on my unit.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q20 My preceptor is helping me to develop confidence in my practice.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q21 I am supported by my family/friends.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q22 I am satisfied with my chosen nursing specialty.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q23 I feel my work is exciting and challenging.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q24 I feel my manager provides encouragement and feedback about my work.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q25 I am experiencing stress in my personal life.

\_\_\_\_\_ Strongly Disagree (1)

\_\_\_\_\_ Disagree (2)

\_\_\_\_\_ Agree (3)

\_\_\_\_\_ Strongly Agree (4)

Q26 If you chose agree or strongly agree, to #24, please indicate what is causing your stress. (You may circle more than once choice.)

☐ Finances (1)

☐ Child Care (2)

☐ Student loans (3)

☐ Living situation (4)

☐ Personal relationships (5)

☐ Job performance (6)

☐ Other (7) \_\_\_\_\_

Q27

	Very Dissatisfied (1)	Moderately Dissatisfied (2)	Neither Satisfied (3)	Moderately Satisfied (4)	Very Satisfied (5)
Salary (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vacation (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benefits Package (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hours that you work (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weekends off per month (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your amount of responsibility (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities for career advancement (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of encouragement and feedback (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity for choosing shifts worked (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**1. Gender:**

- a. Female
- b. Male

**2. Ethnicity:**

- a. Caucasian (white)
- b. Black
- c. Hispanic
- d. Asian
- e. Other
- f. I do not wish to include this information

**3. Area of specialty:**

- a. Adult Medical/Surgical
- b. Adult Critical Care
- c. OB/Post Partum
- d. NICU
- e. Pediatrics
- f. Emergency Department
- g. Oncology
- h. Transplant
- i. Rehabilitation
- j. OR/PACU
- k. Psychiatry
- l. Ambulatory Clinic
- m. other\_\_\_\_\_

4. **School of Nursing Attended (name, city, state located):**
5. **Date of Graduation:** \_\_\_\_\_
6. **Degree Received:** AD: \_\_\_\_\_ Diploma: \_\_\_\_\_ BSN: \_\_\_\_\_  
ND: \_\_\_\_\_
7. **Other Non-Nursing Degree (if applicable):**
8. **Date of Hire** (*as a Graduate Nurse*):
9. **What previous health care work experience have you had:**
- a. Volunteer
  - b. Nursing Assistant
  - c. Medical Assistant
  - d. Unit Secretary
  - e. EMT
  - f. Student Externship
  - g. Other (*please specify*):
10. **Have you functioned as a charge nurse?**
- a. Yes
  - b. No
11. **Have you functioned as a preceptor?**
- a. Yes
  - b. No
12. **What is your scheduled work pattern?**
- a. Straight days
  - b. Straight evenings
  - c. Straight nights
  - d. Rotating days/evenings
  - e. Rotating days/nights
  - f. Other (*please specify*):
13. **How long was your unit orientation?**
- a. Still ongoing
  - b.  $\leq 8$  weeks
  - c. 9 – 12 weeks
  - d. 13 – 16 weeks
  - e. 17 - 23 weeks
  - f.  $\geq 24$  weeks

**14. How many *primary* preceptors have you had during your orientation?**  
 \_\_\_\_\_ number of preceptors

**15. Today's date:** \_\_\_\_\_

**Drop down list of skills**

Assessment skills

Bladder

catheter

insertion/irrigat

ion Blood

draw/venipunct

ure

Blood product administration/transfusion

Central line care (dressing change, blood  
draws, discontinuing)

Charting/documentation

Chest tube care

(placement,

pleurovac)

Code/Emergenc

y Response

Death/Dying/E

nd-of-Life Care

Nasogastric

tube

management

ECG/EKG/Tele

metry care

Intravenous (IV) medication

administration/pumps/PCAs Intravenous (IV)

starts

Medication administration

Communication

Patient/family

communication and

teaching

Prioritization/time

management

Tracheostomy care

Vent care/management

Wound care/dressing change/wound vac

Unit specific skills \_\_\_\_\_

## Appendix H

### Lasater Clinical Judgement Rubric

Q13 Please type your employee number minus the last digit. This will allow for comparison of scores with the final survey.

#### **Start of Block: Effective Noticing Involves**

##### Q1 Focused observation

- ☐ Exemplary- Focuses observation appropriately; regularly observes and monitors a wide variety of objective and subjective data to uncover any useful information. (1)
- ☐ Accomplished- Regularly observes and monitors a variety of data, including both subjective and objective; most useful information is noticed; may miss the most subtle signs. (2)
- ☐ Developing- Attempts to monitor a variety of subjective and objective data but is overwhelmed by the array of data; focuses on the most obvious data, missing some important information. (3)
- ☐ Beginning- Confused by the clinical situation and the amount and kind of data; observation is not organized and important data are missed, and/or assessment errors are made. 4)

##### Q2 Recognizing deviations from expected patterns

- ☐ Exemplary- Recognizes subtle patterns and deviations from expected patterns in data and uses these to guide the assessment. (1)

☐ Accomplished- Recognizes most obvious patterns and deviations in data and uses these to continually assess. (2)

☐ Developing- Identifies obvious patterns and deviations, missing some important information; unsure how to continue the assessment. (3)

☐ Beginning- Focuses on one thing at a time and misses most patterns and deviations from expectations; misses opportunities to refine the assessment. (4)

---

### Q3 Information seeking

☐ Exemplary- Assertively seeks information to plan intervention; carefully collects useful subjective data from observing and interacting with the patient and family. (1)

☐ Accomplished- Actively seeks subjective information about the patient's situation from the patient and family to support planning interventions; occasionally does not pursue important leads. (2)

☐ Developing- Makes limited efforts to seek additional information from the patient and family; often seems not to know what information to seek and/or pursues unrelated information. (3)

☐ Beginning-Is ineffective in seeking information; relies mostly on objective data; has difficulty interacting with the patient and family and fails to collect important subjective data. (4)

**Start of Block: Effective interpreting involves****Q4 Prioritizing data**

- ☐ Exemplary- Focuses on the most relevant and important data useful for explaining the patient's condition. (1)
- ☐ Accomplished- Generally focuses on the most important data and seeks further relevant information but also may try to attend to less pertinent data. (2)
- ☐ Developing- Makes an effort to prioritize data and focus on the most important, but also attends to less relevant or useful data. (3)
- ☐ Beginning- Has difficulty focusing and appears not to know which data are most important to the diagnosis; attempts to attend to all available data. (4)

**Q5 Making sense of data**

- ☐ Exemplary- Even when facing complex, conflicting, or confusing data, is able to (a) note and make sense of patterns in the patient's data, (b) compare these with known patterns (from the nursing knowledge base, research, personal experience, and intuition), and (c) develop plans for interventions that can be justified in terms of their likelihood of success. (1)
- ☐ Accomplished- In most situations, interprets the patient's data patterns and compares with known patterns to develop an intervention plan and accompanying rationale; the exceptions are rare or in complicated cases where it is appropriate to

seek the guidance of a specialist or a more experienced nurse. (2)

☐ Developing- In simple, common, or familiar situations, is able to compare the patient's data patterns with those known and to develop or explain intervention plans; has difficulty, however, with even moderately difficult data or situations that are within the expectations of students; inappropriately requires advice or assistance. (3)

☐ Beginning- Even in simple common, or familiar situations, has difficulty interpreting or making sense of data; has trouble distinguishing among competing explanations and appropriate interventions, requiring assistance both in diagnosing the problem and developing an intervention. (4)

**Start of Block: Effective responding involves**

Q6 Calm, confident manner

☐ Exemplary- Assumes responsibility; delegates team assignments; assesses patients and reassures them and their families. (1)

☐ Accomplished- Generally displays leadership and confidence and is able to control or calm most situations; may show stress in particularly difficult or complex situations. (2)

☐ Developing- Is tentative in the leader role; reassures patients and families in routine and relatively simple situations, but becomes stressed and disorganized easily. (3)

☐ Beginning- Except in simple and routine situations, is stressed and disorganized,

lacks control, makes patients and families anxious or less able to cooperate. (4)

Q7 Clear communication

☐ Exemplary- Communicates effectively; explains interventions; calms and reassures patients and families; directs and involves team members, explaining and giving directions; checks for understanding. (1)

☐ Accomplished- Generally communicates well; explains carefully to patients; gives clear directions to team; could be more effective in establishing rapport. (2)

☐ Developing- Shows some communication ability (e.g., giving directions); communication with patients, families, and team members is only partly successful; displays caring but not competence. (3)

☐ Beginning- Has difficulty communicating; explanations are confusing; directions are unclear or contradictory; patients and families are made confused or anxious and are not reassured. (4)

Q8 Well-planned intervention/flexibility

☐ Exemplary- Interventions are tailored for the individual patient; monitors patient progress closely and is able to adjust treatment as indicated by patient response. (1)

☐ Accomplished- Develops interventions on the basis of relevant patient data; monitors progress regularly but does not expect to have to change treatments. (2)

☐ Developing- Develops interventions on the basis of the most obvious data; monitors progress but is unable to make adjustments as indicated by the patient's



response. (3)

- ☐ Beginning- Focuses on developing a single intervention, addressing a likely solution, but it may be vague, confusing and/or incomplete; some monitoring may occur. (4)

#### Q9 Being skillful

- ☐ Exemplary- Shows mastery of necessary nursing skills. (1)
- ☐ Accomplished- Displays proficiency in the use of most nursing skills; could improve speed or accuracy. (2)
- ☐ Developing- Is hesitant or ineffective in using nursing skills. (3)
- ☐ Beginning- Is unable to select and/or perform nursing skills. (4)

#### **Start of Block: Effective reflecting involves**

#### Q10 Evaluation/self-analysis

- ☐ Exemplary- Independently evaluates and analyzes personal clinical performance, noting decision points, elaborating alternatives, and accurately evaluating choices against alternatives. (1)
- ☐ Accomplished- Evaluates and analyzes personal clinical performance with minimal prompting primarily about major events or decisions; key decision points are identified, and alternatives are considered. (2)
- ☐ Developing- Even when prompted, briefly verbalizes the most obvious

evaluations; has difficulty imagining alternative choices; is self-protective in evaluating personal choices. (3)

☐ Beginning- Even prompted evaluations are brief, cursory, and not used to improve performance; justifies personal decisions and choices without evaluating them. (4)

#### Q11 Commitment to improvement

☐ Exemplary- Demonstrates commitment to ongoing improvement; reflects on and critically evaluates nursing experiences; accurately identifies strengths and weaknesses and develops specific plans to eliminate weaknesses. (1)

☐ Accomplished- Demonstrates a desire to improve nursing performance; reflects on and evaluates experiences; identifies strengths and weaknesses; could be more systematic in evaluating weaknesses. (2)

☐ Developing- Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improve performance but tends to state the obvious and needs external evaluation (3)

☐ Beginning- Appears uninterested in improving performance or is unable to do so; rarely reflects; is uncritical of himself or herself or overly critical (given level of development); is unable to see flaws or need for improvement. (4)

## Appendix I

### Permission to use Casey Fink Graduate Nurse Experience Survey

Hi David- Thanks for your interest in using our survey in your DNP study.

I agree with Regina that the Graduate Nurse Experience Survey would be a better fit for your study population.

I'm wondering if there may be a survey that measures clinical judgement pre and post simulations. Many pre-licensure programs use simulations to support and measure critical thinking development. Our survey measures 5 sub-factors: Support, Organize/Prioritize care, Communication/Leadership, Professional Satisfaction, and Stress. The mean summary score of the 1-24 items in section II measure role confidence.

I hope this helps you narrow your search for a reliable and valid survey to enhance (measure) clinical judgement and readiness for practice in graduate nurses. Your topic is timely as there are not many studies that measure simulation and clinical judgement in graduate nurses. The Journal for Nurses in Professional Development may be a great place to search.

Please reach out if you have further questions.

Kathy

Kathy Casey PhD RN NPD-BC  
Professional Development Specialist  
Nurse Residency Program Coordinator  
Nursing Education and Research  
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## Appendix J

### Permission to use Lasater Clinical Judgment Rubric

Hi David,

Thanks for reaching out. There has been some work on self-evaluation: my colleague Dr. Stephanie Sideras compared student and faculty scores, using the LCJR, in her doctoral dissertation. Here is the reference for that and believe it is available online:

Sideras, S. (2007). An examination of the construct validity of a clinical judgment evaluation tool in the setting of high-fidelity simulation (Unpublished dissertation). Oregon Health & Science University, Portland, OR.

If memory serves me, Miraglia and Asselin did not do a study but rather were reporting what they considered to be the usefulness of the LCJR in acute care settings. Another non-research paper was written by Cato et al. (2009), describing self-evaluation using the LCJR after simulation. I'm attaching that paper in case you haven't seen it.

I think self-evaluation is an important skill and practice, but I do think it's useful to give participants a framework or some standards (e.g., LCJR) along with guidelines for completing a self-evaluation rather than giving them carte blanche. Here is my standard blurb for permission and a few other helpful (hopefully!) facts:

*Thank you for your interest in the Lasater Clinical Judgment Rubric (LCJR). You have my permission to use the tool for your project. I ask that you (1) cite it correctly, and (2) send me a paragraph or two to let me know a bit about your project when you've completed it, including how you used the LCJR. In this way, I can help guide others who may wish to use it. Please let me know if it would be helpful to have an electronic copy. You should also be aware that the LCJR describes four stages of the Tanner Model of Clinical Judgment—Noticing, Interpreting, Responding, and Reflecting—and as such, does not measure clinical judgment because clinical judgment involves much of what the individual student/nurse brings to the unique patient situation (see Tanner, 2006 article). We know there are many other factors that influence clinical judgment in the moment, many of which are impacted by the context of care and the needs of the particular patient as well as the relationship of the nurse with the patient.*

*The LCJR was designed as an instrument to describe the trajectory of students' clinical judgment development over the length of their program. The purposes were to offer a common language between learners, faculty, and preceptors in order to talk about learners' thinking and to serve as a help for offering formative guidance and feedback (See Lasater, 2007, 2011). For measurement purposes, the rubric appears to be most useful with multiple opportunities for clinical judgment vs. one point/patient in time. Let me know if can be of further help.*

Kathie

Kathie Lasater, EdD, RN, ANEF, FAAN  
Professor Emerita, OHSU School of Nursing  
Visiting Professor, Edinburgh Napier University

Kathie Lasater is also Assistant Editor of Nurse Education Today  
<http://www.nurseeducationtoday.com>

## Appendix K

### Residency Post Simulation Questionnaire

Participation in a residency program improved my transition to nursing practice.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

Simulations during the residency contributed to my learning.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

The simulation experiences were realistic.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

If simulation were not included in my residency, my transition to nursing practice would not have changed.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

Including additional simulation learning experiences within the residency program would improve new graduates' transition to nursing practice.

- 1) Strongly Agree
- 2) Agree

- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

The simulation facilitators provided clear expectations.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

The simulation facilitators provided a safe learning environment.

- 1) Strongly Agree
- 2) Agree
- 3) Neutral
- 4) Strongly Disagree
- 5) Disagree

Please provide two examples of valuable lessons learned from the simulation experiences.

- 1)
- 2)

Describe how simulation-based learning influenced your transition to practice.

## Appendix L

### IRB Approval



Institutional Review Board  
4201 South Washington Street  
Marion, IN 46953

Tel: 765-677-2090

Fax: 765-677-6647

Date	10/11/2022	Proposal Number	1783.22	Reviewer	Don Sprowl
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Your research proposal, with respect to the rights and safety of the human subjects, has been evaluated as follows:

#### 1. INFORMATION FOR THE IRB:

- ☒ The information given to the IRB is complete and accurate enough to reach a valid decision concerning the research.
- ☐ The information for the IRB as presented is incomplete or defective in that:

#### 2. RISKS TO SUBJECTS:

- ☒ The proposed research involves minimal risk and/or the subject's safety is adequately protected.
- ☐ The proposed research involves an element of risk to the research subjects and further measures seem advisable to protect the subjects:
- ☐ The research subject population has specific vulnerabilities not yet adequately addressed in the research proposal:
- ☐ The risk seems greater than can be justified by the research in that

#### 3. INFORMATION FOR THE SUBJECTS:

- ☒ The information to be given the subjects (or their legal representatives) is complete and accurate enough for them to reach a valid decision concerning participation in the research. The information given to the subjects provides a clear description of the experience that the research subject should anticipate due to participation in the research



project.

- ☐ The information for the subjects as presented is incomplete or defective in that:

4. CONSENT METHOD:

- ☒ The format and manner of obtaining informed consent from the subjects (or their legal representatives) is satisfactory. Any circumstance that might expose subjects to coercion-to-participate is addressed in the research proposal.

- ☐ The method of obtaining informed consent is defective in that:

5. CONFLICTS OF INTEREST:

- ☒ Conflicts of interest have been adequately addressed. Potential harm to human subjects and to study integrity arising from conflicts of interest is appropriately minimized by study design. A conflict of interest is anything that might cause investigators to favor one research outcome over another.

- ☐ Conflicts of interest require further attention:

6. BELMONT REPORT:

a. Respect for Persons

- ☒ The proposed study adequately provides for the self determination of research subjects and/or provides adequate protections for subjects with reduced capacity for self-determination.

- ☐ The proposed study needs further attention in the area of respect for persons in that:

b. Beneficence

- ☒ The proposed study is worthy in that it is expected to produce adequate benefit to the research subjects or to society, while minimizing the risk of harm to the research subjects.

- ☐ The proposed study needs further attention in the area of beneficence in that:

c. Justice

- ☒ The proposed study does not inappropriately burden the proposed subject population while benefiting other populations. The subject population is appropriate to the study and not chosen for inappropriate reasons of convenience.

- ☐ The proposed study needs further attention in the area of justice in that:

7. FURTHER COMMENTS:

8. RECOMMENDATION:



The proposed research is approved as submitted.



The proposed research needs to be revised and resubmitted.

All Revisions Made Must Be Highlighted Upon Resubmission



The research as described is rejected.



---

Signature      Date

10/11/2022

## Appendix M

### Exemption Letter



Institutional Review Board  
4201 South Washington Street  
Marion, IN 46953

Tel: 765-677-2090  
Fax: 765-677-6647

### Notice of Exemption

#### Enhancing Clinical Judgment and Practice Transition with Simulation

Title of Research Topic

#### David Cunningham, Angela Bailey, Rhonda Oldham

Investigator(s)

1783.22

IRB ID Number

The IWU Institutional Review Board has reviewed your proposal and has determined that your proposal is exempt from further review by the IRB under Exemption Rule 2iii:

- (2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
- (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §11.111(a)(7).

The limited review associated with this exemption accompanies this exemption letter. This exemption is valid for one year from the date of this notice. If there are any changes in the project during the year or if the project extends beyond the one-year period, the IRB must be notified.

Please note that this exemption regards only the oversight of human subjects research by the IRB. The IRB has not reviewed any other aspects of the research project and makes no judgement on the merits of the project or its methodologies. All research executed at IWU must conform to all applicable state and federal laws and regulations and to all applicable IWU policies.

Comments:

A handwritten signature in blue ink, appearing to read 'David Cunningham'.

Ph.D.

Chair, Institutional Review Board

October 11, 2022

## Appendix N

### Casey Fink- Graduate Nurse Experience Survey Results

**Table 6**

*Casey Fink Graduate Nurse Experience Survey Results*

<b>Benefit</b>	<b>Pre-Test Mean and SD</b>	<b>Post-Test Mean and SD</b>
Salary	3.29 (1.25)	3.00 (1.41)
Vacation	3.29 (.95)	3.40 (1.34)
Benefits Package	3.14 (.90)	3.20 (.84)
Hours that You Work	3.71 (1.38)	4.20 (.45)
Weekends Off Per Month	3.43 (1.51)	3.60 (1.14)
Your Amount of Responsibility	2.57 (1.13)	3.60 (.55)
Opportunities for Career Advancement	3.43 (1.51)	4.00 (.71)
Amount of Encouragement and Feedback	3.71 (1.38)	4.00 (.71)
Opportunity for Choosing Shifts Worked	4.00 (1.53)	4.80 (.45)

*Note.* Pre-Test  $n=7$  Post-Test  $n=5$