2022

Improving the New Graduate Nurse Residency Program Through Enhanced Preceptor Education

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A DNP project submitted in the partial fulfillment of

the requirements for the degree of

Doctor of Nursing Practice

Seattle University

2022

Approved by: Kumhee Ro DNP Date: 6/9/2022

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Acknowledgements

I would like to express my sincere gratitude to my project chair, Dr. Kumhee Ro for her continued support and guidance throughout the lifespan of this project. To my reader, Dr. Jaime Navetta for her ever willingness to help and providing me with valuable feedback. To my clinical instructors Kristi Farrell and Stanley Kong for their knowledge, encouragement, and reassurance. Thank you to Elizabeth Hinkson for her mentorship during this project. And to all the other professors and instructors that have played a role in my education.

A heartfelt thank you to my mom and grandmother for their constant and unwavering support for as long as I remember. Thank you to my husband for his encouragement and picking up the extra slack and making this journey possible. And finally, to baby Mason who joined this journey a few short months ago and will make his earthly appearance just days after graduation.

Abstract

New graduate nurse residency programs' primary function is to provide new graduates with clinical experience and bridge the gap between student and competent registered nurse (Walsh, 2018). While the focus of these programs is on teaching new graduates, a gap in practice has been identified when it comes to the education of the nurses that are training these new graduates. The purpose of this program evaluation was to increase preceptor feelings of preparedness for the precepting role, as well as increase preceptor education attendance rates to at least 50% of eligible nurses. This was a program evaluation with a pre-/post-test design that evaluated the impact of preceptor education in 10 registered nurses. Participants submitted surveys to evaluate their feelings of support and preparedness for their educator roles before and after the educational presentation. There was a statistically significant increase in post-education scores (M=11.2, SD=2.15) when compared to pre-education scores (M=6.6, SD=2.8); $t(9) = -5.81$, p=0.00025597. Furthermore, 100% of respondents had a higher total score on the post-survey than the pre-survey with a mean difference of +4.6 points +/-2.5 (SD), indicating that they felt more supported and prepared to act as preceptors after the education. By offering a preceptor education curriculum that is easily accessible, organizations will see increased attendance rates and therefore higher feelings of support and preparedness from nurse preceptors. These preceptors will then be able to teach and empower new RNs on their journey to practice, offering a smoother and safer transition to professional independence, and decreasing burnout rates and turnover costs to the healthcare organization (Trepanier et al., 2012).

Keywords: preceptor, education, nurse residency, new graduate nurse

Introduction

The transition from student nurse to registered nurse (RN) can be an incredibly stressful and tremulous time for new graduate RNs. While nursing school provides students with basic foundational knowledge and prepares them to take the National Council Licensure Examination (NCLEX), becoming a competent nurse that can manage a full load of patients takes time and clinical experience that cannot be taught in a classroom. The stress experienced by new graduates in an acute care setting during this transition period can lead to high anxiety levels, feelings of inadequacy, and ultimately high levels of new graduate burnout (Kim & Choi, 2022). Burnout rates, and subsequent staffing issues, have only been exacerbated by the current COVID-19 pandemic, making retention of new graduates more important than ever before (Bourgault & Lynch, 2021). Elevated levels of burnout lead to increased turnover rates; an extremely costly phenomenon for healthcare organizations, resulting in higher healthcare costs (Carman et al., 2021; Trepanier et al., 2012).

To bridge the gap from novice to competent registered nurse, many facilities have implemented new graduate nursing residency programs (NGRPs). These programs include educational classes in conjunction with slowly easing a new graduate into independently caring for patients, usually by starting with a lower nurse-to-patient ratio, and slowly working up to a full patient load. During this slow immersion to patient care, new graduates are paired with an experienced nurse, often called a "preceptor", to facilitate their learning of patient care, and provide psychological support (Kim & Choi, 2022). Successful residency programs are proven to decrease new graduate burnout rates, which can cost an organization upwards of $60,000 per new graduate lost before the two-year mark (National Healthcare Retention & RN Staffing Report, 2016). By addressing the issue of insufficient preceptor education, healthcare

organizations will see reduced new graduate burnout, retention of nurses which will improve staffing ratios, and decreased costs to healthcare organizations (Bourgault & Lynch, 2021; Kim & Choi, 2022; Kovner et al., 2007).

Problem Statement

Effective nurse residency programs are proven to support transition to practice for new registered nurses and are associated with decreased nurse burnout, practice errors, and organizational costs amongst new graduates (Bodenheimer & Sinsky, 2014; Dwyer & Hunter Revell, 2016; Kim & Choi, 2022).

The Commission on Collegiate Nursing Education (CCNE) defines preceptor as "an experienced practitioner who facilitates and guides residents' clinical learning experiences in the preceptor's area of practice expertise" (Commission on Collegiate Nursing Education, 2021, p. 21). The key to a successful residency program is strong preceptors who meet this definition and can provide new graduates with clinical skills and psychological support (Dwyer & Hunter Revell, 2016; Kim & Choi, 2022; Quek & Shorey, 2018). Preceptors are tasked with identifying learning needs of their trainees, developing mutual goals, and constructing a plan to help these new RNs meet these goals in the allotted time period (Bourgault & Lynch, 2021). Lack of structured preceptor education has been identified as a serious barrier to the success of these programs (Kim & Choi, 2022).

To meet and maintain accreditation, the CCNE states that preceptors must be "oriented to their roles and responsibilities with respect to the [residency] program, and these roles and responsibilities are clearly defined" (Commission on Collegiate Nursing Education, 2021, p. 8). At Providence Regional Medical Center Everett, there are a substantial number of nurse residents

and a rapid decline of experienced RNs. This leaves nurses with mere months of experience and no orientation to the preceptor role with the task of precepting. With high volumes of resident nurses and low attendance rates for the preceptor education class, these standards set forth by the CCNE are not being met on the step-down intensive care unit at Providence Regional Medical Center Everett. Preceptor selection on this unit is largely based off of charge nurse discretion, and the preceptors have reported feeling unprepared and unsupported in their teaching roles. Based on current literature and practice recommendations set forth by the CCNE, it can be reasoned that this issue could be improved upon with a convenient and readily available form of structured preceptor education.

Organizational Assessment

Providence Regional Medical Center Everett (PRMCE) is a level two trauma center located in Everett, Washington. It is comprised of two campuses located just blocks from each other and hosts a total of 571 beds. This hospital is central to many nursing schools and offers a nurse residency program that is 12 weeks in length. Preceptor education classes offered at PRMCE are optional and can reach over 8 hours in length, resulting in an attendance rate of less than 10% on the step-down intensive care unit. This is a live course traditionally taught in-person, and nurses are paid their hourly wage to attend. While the organization encourages nurses to take this class before filling the role of preceptor, it is not a requirement. Nurses are paid an extra $1.25 per hour to serve as preceptors. The unit involved in this program evaluation is a step-down intensive care unit that sees a wide variety of acutely ill patients, as well as post-surgical thoracic and vascular patients. This unit sees a high volume of nurse residents; a total of 19 new graduates were precepted on this floor in the year 2020. At the time of observation, there

were 21 RNs on the unit with 12 or more months of nursing experience, making them eligible preceptors for the purposes of this research.

The organization does not keep track of registered nurse turnover at this time, though the step-down unit involved in this research unofficially tracks their statistics. The average turnover rate for new graduates on this floor leaving within their first year of practice was 30% from 2021-2022. The overall floor turnover rate from 2019 to 2022 was 54% (65 staff RNs on floor roster in 2019, and 35 in 2022).

Project Purposes and Aims

The purpose of this project was to bridge the gap in preceptor education by removing barriers to preceptor class attendance. This was done by providing potential preceptors with a one-hour educational presentation with the basic knowledge they need to excel as preceptors and create safe and strong RNs. By condensing the time required for preceptors to obtain vital skills regarding their new teaching role, we hope to see higher course attendance rates, leading to more nurses feeling prepared and supported to teach newly graduated nurses. The primary aims of this project are as follows; Aim #1: After the education, preceptors will report feeling more prepared for the preceptor role and more supported by their organization. Aim #2: Increase preceptor education attendance to at least 50% of eligible nurses.

Review of Literature

The purpose of this literature review was to determine the benefit of nurse residency programs, and how preceptor education, or lack thereof, may influence these programs. It was also important to review costs and benefits associated with residency programs to present to the various stakeholders. Search criteria including "preceptor education," “nurse residency,” “nurse

residency program," "nurse residency cost benefit," "new graduate nurse burnout," "nursing shortage," and "cost of nurse burnout" were used in databases CINHAL, PubMed, and Cochrane Library. A total of 19 articles were reviewed, the search was further refined by relevance to preceptor education and new graduate outcomes. To illuminate these specific issues, this literature review will focus on 12 relevant articles.

Residency programs have demonstrated their ability to ease the transition from student nurse to independently practicing registered nurse, promote new graduate resiliency (Kim & Choi, 2022), and decrease costs to healthcare facilities (Pillai et al., 2018). Current literature highlights the importance, as well as the many areas for improvement in modern nurse residency programs (Dwyer & Hunter Revell, 2016; Kim & Choi, 2022). There is currently a gap in practice in the lack of preceptor training, along with the simultaneous expectation that experienced nurses will automatically be efficient mentors and educators (Dwyer & Hunter Revell, 2016).

Formalized Preceptor Education

Having a preceptor education program that aligns with the standards set forth by the CCNE is essential for a successful residency program. Current literature suggests that the efficacy of these programs can be improved upon by implementing formalized a preceptor training curriculum. A literature review done by Dwyer and Hunter Revell (2016) argues that preceptor training programs should be formal and focus on creating authentic leadership styles, utilizing feedback and communication techniques (Dwyer & Hunter Revell, 2016). These preceptor traits and skills are necessary for the successful transition of the new nurse into practice, as they can influence that new nurse's interpersonal, intrapersonal, and organizational relationship security (Dwyer & Hunter Revell, 2016). These authors also state that "increased

attention to the development of authentic leadership behaviors in nurse leaders has the potential to positively affect transition experiences for new graduates" (Dwyer & Hunter Revell, 2016, p. 118). The motivation behind this research was to improve nurse residency programs with the long-term goal of addressing the nursing workforce shortage and reducing new graduate burnout. This research supports the idea that improving the residency program by first improving preceptor education and preparedness is an effective strategy and will benefit the nursing community on many levels.

Tanner's Model of Clinical Judgement

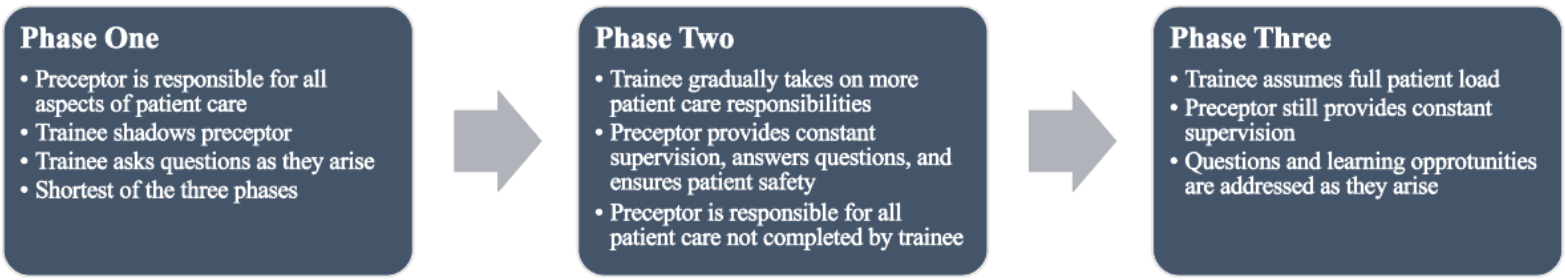
Tanner's Model of Clinical Judgement is a formalized education model that is quickly gaining popularity in the nursing profession. This model was developed after extensive evaluation of how nurses think and approach scenarios in patient care (Modic, 2013). The foundation of this model relies on "develop[ing] noticing, interpreting, responding, and reflection" skills that can then be applied to clinical scenarios (Providence St. Joseph Health, 2017; Tanner, 2006, p. 208; Yang, 2021). This provides a framework for nurses to assess a scenario and respond accordingly when providing patient care. This is a skill that must be practiced rather than taught, making this model a valuable tool for nurse residents to utilize in their training period. The education department at PRMCE developed a handout to help preceptors develop questions that will develop their trainee's "develop[ing] noticing, interpreting, responding, and reflection" (Tanner, 2006, p. 208) skills (see Appendix B). The handout is shared in the traditional preceptor class, and permission was granted for it to be shared in this one-hour presentation as well.

Married State Preceptor Model

Another model that lends itself to formalized preceptor education is the Married State Preceptor Model (Figueroa et al., 2013; Shinners et al., 2018). This model consists of three phases and guides preceptor/preceptee pairs through their designated training period. Phase one is the shortest phase and involves the new graduate shadowing the preceptor and asking questions as they arise. In phase two, the resident gradually takes on more responsibility in patient care while being watched by the preceptor. Finally, in phase 3, the resident is responsible for all patient care activities of a full patient load, while being supervised by the preceptor (Figueroa et al., 2013). Throughout all three phases, the preceptor is present with the resident while providing all care. This allows for the preceptor to identify the resident's strengths and weaknesses and catch potential practice errors before they occur (Figueroa et al., 2013; Shinners et al., 2018).

Figure 1

The three phases of the Married State Preceptor Model in training new graduate registered nurses.



Reducing New Graduate Burnout

Nurses that have been provided with preceptor education will become efficient teachers of technical skills, but they also hold the important responsibility in supporting their trainees on a psychosocial level as well. Besides providing the technical training of providing nursing care, a good preceptor also supports the new graduate's transition into the profession and the organization and serves as a supportive role model (Kim & Choi, 2022). In a descriptive research study conducted by Kim and Choi in early 2022, 167 new graduate nurses were followed for several months and the impact that preceptors with intentional teaching behaviors had on them were evaluated. A strong correlation was found between preceptors intentional teaching behaviors and the new graduate's intentions to stay employed at the organization. In other words, intentional teaching behaviors resulted in higher employee satisfaction and intent to stay employed at the organization. These findings can guide current practice by encouraging new graduate residency programs to ensure that their preceptors have had some form of formal preceptor education (Kim & Choi, 2022).

Residency Investments

The most significant barrier to implementation and optimalization of NGRPs is upfront costs to the hosting healthcare facility. These programs involve hiring a new graduate and paying them a full RN salary plus benefits, which can cost the organization over $90,000 per year based on a recent Seattle-area market analysis (Gaines, 2022). On top of this expense, these new nurses are paired with an experienced nurse for the first few months of the program. Residency programs typically last 12 months in length, with 12-16 weeks of partnered practice with a preceptor, and the remaining time consisting of educational classes and check-ins with leadership or mentors (Commission on Collegiate Nursing Education, 2021). This means that the

organization is paying two nurses to do the job of one for the duration of this training period. A cost-benefit analysis was performed by Trepanier et al. in 2012 to evaluate if this "non-productive time" that is the extended training period was worth the financial investment. They found that this non-productive time can cost an organization anywhere from $21,571 to $36,960, depending on residency program length and location (Carman et al., 2021; Trepanier et al., 2012). When taking into consideration that new graduate turnover rates are around 13% in the first year of practice (Kovner et al., 2007), this investment can be alarming, and facilities may not be willing to invest the extra dollars into preceptor education.

Creating a positive experience for newly graduated RNs is crucial for many reasons, one of which being the dramatic financial cost left to healthcare facilities if the new RN leaves before their two-year mark. Pillai et al. (2018) published a systematic review that found the monetary investment into a new graduate nurse's training is equivalent to one whole year's worth of work. In other words, after completing a nursing residency, that new graduate must then work at least 12 full months for the hospital to recoup the funds that they have invested. This is up to five times more expensive than hiring an experienced nurse that does not need a residency program (Pillai et al., 2018). Nurse retention is a crucial factor for nurse managers to consider because while the implementation of education for preceptors will incur an initial cost, the long-term retention of newly hired graduates will far make up for those expenses (Pillai et al., 2018).

Research has repeatedly demonstrated that the implementation of nurse residency programs enhances the transition from student nurse to staff nurse to the benefit of both the employee and the employing organization (Carman et al., 2021; Kovner et al., 2007; Trepanier et al., 2012). A cornerstone to the success of a nurse residency program and its graduates are experienced preceptors that have been educated in their role and oriented to their responsibilities

(Commission on Collegiate Nursing Education, 2021; Dwyer & Hunter Revell, 2016; Kim & Choi, 2022). Experienced nurse preceptors that are oriented to their roles and responsibilities through structured education can result in higher new graduate success and satisfaction rates (Kim & Choi, 2022) and reduced burnout-related costs to healthcare facilities (Pillai et al., 2018). Readily accessible preceptor education is a necessity in optimizing crucial nurse residency programs, and barriers to attendance must be addressed.

Nursing Shortage

By the year of 2060, the number of American citizens over the age of 85 is projected to increase from 6 million, to as many as 20 million (Mather et al., 2015). This means that a sizable portion of the current workforce will be retiring, while the number of people requiring healthcare will simultaneously increase. One major benefit of successful residency programs that seek to reduce RN burnout is their contribution to combating the current nursing workforce shortage. This nursing shortage has been festering for many years and has been influenced by many contributing factors. Nurses reaching retirement, a rapidly aging population, and the coronavirus pandemic, are just three of the various challenges that have lent to the shortage (American Association of Colleges of Nursing, n.d.). Utilizing current evidence-based research to optimize new graduate nurses' experiences as they transition into their professional roles will reduce nurse burnout and work to rebuild the nursing workforce (Kim & Choi, 2022).

Conceptual Framework

Influencing change in a large medical system, such as Providence Regional Medical Center, can be a challenge. During this time of COVID-19, the hospital was very short-staffed and had attentions focused on frequent policy revision and maintaining patient and staff safety, leaving little time for discussion of revising the preceptor education class. To overcome these

barriers, this project was informed by Kotter's Theory of Organizational Change. This framework was chosen for its purpose of providing a roadmap to influence change that is simple enough that even novice researchers can utilize. Kotter reviews eight steps to leading organization-wide change: creating a sense of urgency, building a coalition, forming a strategic vision, recruiting others to volunteer support, removing foreseen barriers to action, generating small wins, sustaining momentum, and finally, initiating change (Kotter, 2012). Utilizing this framework helped to highlight a gap in current practice and present a solution in a direct and succinct way that could be thoroughly reviewed in a timely manner. A compelling issue and corrective plan of action was presented to leadership, a pilot floor was able to be identified, and the program evaluation was able to take place.

Methods and Procedures

A one-hour educational presentation was developed, covering the basic knowledge that would typically be taught in the traditional eight-hour preceptor class. This education (see Appendix A) was presented over a live video conferencing program, as well as recorded and distributed to nurses on the unit to be viewed at their convenience, if preferred. The education department at PRMCE closely reviewed the content presented in the educational presentation content to ensure that criteria required for CCNE accreditation were met, and facility-specific precepting styles were addressed.

IRB Review and Informed Consent

This project was deemed by the Seattle University Institutional Review Board (IRB) as "Not Human Participant Research" and was exempt from further review. This research was completely voluntary and anonymous, and participants were informed of their right to withdraw

participation at any time. Each survey contained a disclaimer that submission of a completed survey serves as informed consent to participating in the research.

Protection of Human Subjects

No personal identifying information was obtained from participants at any point during this program evaluation. Pre- and Post-surveys were linked using a unique numerical identifier as chosen by each participant. While the educational presentation was conducted over live video conference due to the ongoing COVID-19 pandemic, options to view the broadcast anonymously or to view the recording at a later time were offered to maintain anonymity.

Intervention

A one-hour educational presentation was developed and presented by this author to nurses on the step-down intensive care unit at PRMCE. This presentation was an adaptation of the traditional preceptor class offered by the PRMCE education department that can run up to eight hours in length. The content from the traditional eight-hour class was evaluated by this researcher, and an outline of the essential teaching techniques and styles utilized by Providence was developed. Content from the traditional preceptor class that was omitted for this presentation to conserve time included introductory team-building activities, case studies, and role-play exercises, leaving a concise summary of the most critical information.

The primary content of the educational presentation consisted of reviewing two models that PRMCE places great emphasis on: Tanner's Model of Clinical Judgement, and the Married State Preceptor Model. These models are reviewed in depth above (see review of literature). Clinical judgement is an essential nursing skill that is built from advanced critical thinking and clinical reasoning. When nurses use critical thinking and clinical reasoning to draw from past experiences and apply that knowledge to current scenarios, they are demonstrating clinical

judgement. Clinical judgement can be applied to simple clinical scenarios such as the best time to do a dressing change, and to more serious scenarios, such as responding to the rapid deterioration of a patient's condition. Tanner's Model of Clinical Judgement is the tool used by PRMCE to foster development of this essential skill.

The Married-State Preceptor Model was also discussed during the education. This is the three-phased model that PRMCE relies on to maintain patient safety during the resident's training period. This model ensures that the preceptor is supervising the resident at all times throughout all phases of the residency period to assess the trainee's strengths and weaknesses, as well as maintain patient safety.

To conclude the presentation, resources that exist to support nurse preceptors were shared. This included the intranet page for the PRMCE education department and the Quality and Safety Education for Nurses Institute website, where simulations, case studies, and other learning materials are available (Quality and Safety Education for Nurses, 2020).

Design

This was a program evaluation with a pre-/post-test design. Data was collected via two five-question surveys: one pre-education (see Appendix C) and one post-education (see Appendix D). The purpose of each survey was to evaluate the nurse preceptors' feelings of preparedness and support from their organization in their role as an educator. Each of the three questions ranked the nurse's feelings using a Likert scale from 1-5, with 1 being "completely disagree" and 5 being "completely agree". Each survey had a total possible score of 15, with a higher score indicating higher feelings of support and preparedness.

Population and Recruitment

Based on the guideline set by the PRMCE education department, to be eligible to participate in this program evaluation, preceptors must have a minimum of one year (12 months) of relevant nursing experience practicing independently (outside of a nurse residency program) and be willing to teach new nurses. They were recruited through an in-person floor-wide announcement and unit-wide email (see Appendix E). Pre-education surveys (see Appendix C) were made available to all nurses via hard copy in the unit's communal area.

Data Collection Procedures

The pre-education survey and the post-education survey were both distributed as a hard copy to registered nurses on the unit. All completed surveys were submitted to a drop box anonymously, and each participant was asked for a unique four-digit unique identifier to link pre- and post-surveys. Pre-education surveys were distributed to the floor 14 days before the education to allow for plenty of time to complete before attending, as well as to spread awareness of the upcoming event. Due to the educational presentation's virtual format, post-education surveys were made available in the unit's communal area the day after the presentation, with a 14-day collection period. This time frame allowed for all nurses to have at least one shift on the unit to submit their responses, and allotted time for any nurses that chose to watch the recording of the educational presentation to do so and submit responses as well.

Data Analysis

Data were analyzed using descriptive statistics via Microsoft Excel. A paired sample *t*-test was then utilized to compare the mean difference between scores from the pre-education and post-education surveys. This allowed the two score groups to be analyzed for statistically significant differences. A total of 17 pre-surveys and 11 post-surveys were submitted, however,

one respondent had less than twelve months of nursing experience, thus disqualifying their responses for the purposes of this research. This resulted in a total of 10 linked surveys that met inclusion criteria for this program evaluation.

Results

Attendance Rate

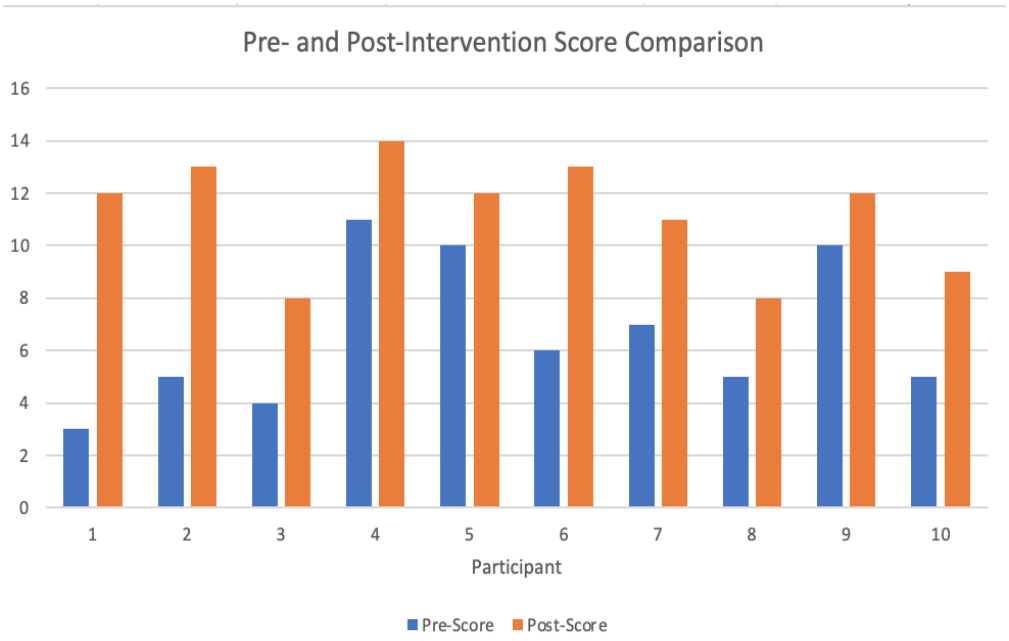
At the conclusion of the program evaluation, a total of 10 linked surveys that met inclusion criteria were obtained. There were 21 eligible preceptor RNs on the unit roster at the time of the final survey collection. This means that the final attendance rate for the educational presentation was 47.6%.

Survey Scores

There was a statistically significant increase in post-education scores (M=11.2, SD=2.15) when compared to pre-education scores (M=6.6, SD=2.8); $t(9) = -5.81$, p=0.00025597. Furthermore, 100% of respondents had a higher total score on the post-survey than the pre-survey with a mean difference of +4.6 points +/-2.5 (SD), indicating that they felt more supported and prepared to act as preceptors after the education (Figure 2).

Figure 2

Comparison of overall pre- and post-education scores



Note. This figure compares the total combined scores from all three questions on the pre-education survey (represented in blue) and the post-education survey (represented in orange). Each participant is represented on the x-axis, while scores are represented on the y-axis, with a total possible score of 15.

The mean response to pre-education question number one, "*I feel that my organization adequately prepared me to be a preceptor"* was 2 +/- 0.89 (*SD*). The mean response to this question post-education was 3.4 +/- 0.84 (*SD*), an average score improvement of 28% after the education (Table 1). The mean response to pre-education question number two, "*I feel that I have the support from my organization that I need to be a sufficient preceptor"* was 2.3 +/- 1.16 (*SD*). The mean response to this question post-education was 3.8 +/- 0.92 (*SD*), showing an average score improvement of 30% after the education (Table 2). The mean response to pre-education question number three, *"I know where to seek precepting resources within my organization should I need them"* was 2.4 +/- 1.07(*SD*). The mean response to this question post-

education was 3.9 +/- 0.88 (*SD*), showing an average score improvement of 30% after the education (Table 3).

Table 1

Comparison of pre- and post-education survey scores from question 1

Participant	**Pre-Score**	**Post-Score**	**% Difference in Score**
1	1	4	60%
2	2	4	40%
3	1	2	20%
4	4	4	0%
5	2	4	40%
6	2	4	40%
7	2	3	20%
8	1	2	20%
9	3	4	20%
10	1	3	20%

Note. This table represents the difference in scores for question one, *"I feel that my organization adequately prepared me to be a preceptor,"* before and after the educational presentation. Respondents were asked to rank how strongly they agree with this statement on a scale from one to five, with "one" being completely disagree, and "five" being completely agree.

Table 2

Comparison of pre- and post-education survey scores from question 2

Participant	**Pre-Score**	**Post-Score**	**% Difference in Score**
1	1	4	60%
2	2	4	40%
3	1	2	20%
4	4	5	20%
5	4	4	0%

6	2	5	60%
7	2	3	20%
8	3	4	20%
9	3	4	20%
10	1	3	40%

Note. This table represents the difference in scores for question two, *"I feel that I have the support from my organization that I need to be a sufficient preceptor,"* before and after the educational presentation. Respondents were asked to rank how strongly they agree with this statement on a scale from one to five, with "one" being completely disagree, and "five" being completely agree.

Table 3

Comparison of pre- and post-education survey scores from question 3

Participant	**Pre-Score**	**Post-Score**	**% Difference in Score**
1	1	4	60%
2	2	4	40%
3	2	4	40%
4	3	5	40%
5	4	4	0%
6	2	4	40%
7	3	5	40%
8	1	2	20%
9	4	4	0%
10	2	3	20%

Note. This table represents the difference in scores for question three, *"I know where to seek precepting resources within my organization should I need them,"* before and after the educational presentation. Respondents were asked to rank how strongly they agree with this statement on a scale from one to five, with "one" being completely disagree, and "five" being completely agree.

Discussion

Current literature repeatedly reflects the importance of a strong new graduate nurse residency program for the success and longevity of new nurses (Kim & Choi, 2022; Quek & Shorey, 2018). One major component to the success of these programs is adequately educated nursing preceptors. These preceptors are tasked with guiding their trainees through learning clinical skills while simultaneously developing a supportive mentor-mentee relationship (Dwyer & Hunter Revell, 2016).

The results of this research support the notion that nurse preceptors who have been provided with structured, relevant preceptor education report stronger feelings of support and preparedness for their role as preceptors. This program evaluation had two initial aims; Aim #1: After the education, preceptors will report feeling more prepared for the preceptor role and more supported by their organization. Aim #2: Increase preceptor education attendance to at least 50% of eligible nurses. To address the perceived barriers to preceptor education attendance, the traditional eight-hour class was condensed into a one-hour educational presentation, and attendance rates increased from 10% to 47.6%, which was just slightly below the initial aim of a 50% attendance rate. Accompanying the increased attendance rate, higher feelings of preparedness for the preceptor role and support from the organization were reported by 100% of preceptors that participated in the education. The aims of this program evaluation were met, and closely aligned with the current literature suggesting emphasis be placed on formal preceptor education.

To revisit the current literature, Dwyer and Hunter Revell (2016) argue that preceptor training programs should be formal and focus on creating authentic leadership styles, utilizing feedback and communication techniques (Dwyer & Hunter Revell, 2016). The intervention

applied in this program evaluation was an educational preceptor training that focused on feedback and communication techniques. The primary communication tool presented in this education was Tanner's model of clinical judgment, teaching preceptors how to formulate questions that help their trainees "develop noticing, interpreting, responding, and reflection" (Providence St. Joseph Health, 2017; Tanner, 2006; Yang, 2021). Providing preceptors with this model allows them to have a tool to both communicate with and teach their trainees more efficiently, contributing to higher feelings of preparedness for their teaching role.

In addition to communication tools, sharing the Married State Preceptor Model, which is the only precepting model accepted by PRMCE, was an essential part of the education presented. This precepting model relies on preceptors being always side-by-side with their trainees during their 12-week residency period, even when the trainee is nearing independence. This model ensures patient safety and that trainees get the most out of their training period. Though the Married State Preceptor Model is the only accepted precepting model at PRMCE, it procured many questions from preceptors during the educational presentation, indicating minimal knowledge regarding this style of teaching. If this research were to be continued in the future, evaluating preceptor baseline knowledge of this model may be beneficial to further demonstrate the necessity of preceptor education and promotion of attendance.

Though the sample size was small, this program evaluation saw improvement in post-education scores from 100% of participants, and successfully increased preceptor education attendance by 37.6% on the unit. The results of this research were shared with the PRMCE education department at their request for potential use in the future. The results from these literature-based interventions should be taken into consideration by nurse residency programs moving forward in their educational offerings for preceptors.

Limitations

Two major limitations were faced during this program evaluation were capacity restrictions and limited sample size. Due to the ongoing COVID-19 pandemic, capacity restrictions were imposed for in-person gatherings. The original intent was to conduct this presentation in-person on the unit to distribute and collect surveys, monitor attendance, and promote active participation more efficiently and reliably. To remain in compliance with capacity limitations at the time, the presentation was converted into a virtual format and presented over a live video conferencing program. The 14-day grace period for returning surveys and distribution of the recorded content were both implemented to account for these barriers, and no further issues were identified in relation to the conversion of the presentation format.

Limited sample size and population posed another barrier to this program evaluation. Rapid staff turnover resulted in a dramatic decrease in the number of nurses eligible to act as a preceptor for the purposes of this research. The unit began with 34 eligible nurses in September of 2021 and ended with only 21 eligible preceptors at the time that the post-education surveys were distributed in March of 2022. This resulted in a smaller number of nurses attending the educational presentation and completing surveys, leaving the program evaluation with a total number of 10 valid and linked pre- and post-education surveys to analyze (N=10). In addition, participation in this research was self-selective, meaning that participation was based purely on a volunteer basis. These limitations must be considered when reviewing the results, as the sample population may not be a reliable reflection of the population as a whole and generalizations should not be drawn from samples of this size (Lobiondo-Wood & Haber, 2018).

Implications and Recommendations for Practice

The results obtained from this research are statistically significant, suggesting that accessible preceptor education improves preceptor feelings of support from their organization and readiness to teach. While this program evaluation's small and limited sample size may not accurately reflect the population, the results still suggest that further research should be done on a larger scale to see if the same results are procured. To evaluate a larger sample size, these interventions could be implemented on multiple units at one hospital, or throughout multiple hospitals in the area. If comparable results are reflected in a larger sample size, that would indicate that the nursing profession should push for practical changes in RN preceptor education to create a more holistic and robust nursing residency program. Longitudinal studies to assess preceptor education retention may contribute valuable information to the sustainability and long-term success of these interventions as well. In addition to evaluating a larger sample size, future researchers may observe the impact that preceptor education has on new graduates directly, by having these new nurses evaluate their preceptors. It would be valuable to learn if the educated preceptors procure better evaluation scores than their counterparts who have not attended any formal preceptor education.

It is recommended that the facility begin to track their staff turnover rates. The unofficial turnover statistics reported by the step-down unit are significantly higher than national averages (Haddad et al., 2022). Tracking turnover rates will provide the facility with hard numbers to assess staff retention and identify when intervention may be necessary to generate improvement.

The ideas presented in this research should be of interest to advanced practice nurses holding positions in education and healthcare administration. Advanced practice nurses can support improvement in preceptor education at their facilities by reviewing curriculum to verify

that it is compliant with CCNE standards. Attendance rates to preceptor education classes should be reviewed and tracked, and barriers to decreasing attendance rates should be addressed.

Conclusion

Preceptor education is a powerful tool that can be utilized to optimize new graduate nurse residency programs, but there is a gap in practice in the implementation of successful education curriculum. Effective nurse residency programs hold the potential to build a solid foundation for new nurses and set them up for a long and healthy career that is free from burnout, thereby improving worker satisfaction and moving to address the nation's current nursing shortage.

Healthcare administrators should consider preceptor education and reduction of attendance barriers as top priority for the success of their nurse residency programs. This will improve employee satisfaction rates, decrease practice errors, and decrease costs to their healthcare facilities. By offering a preceptor education curriculum that is easily accessible, organizations will see increased attendance rates and therefore higher feelings of support and preparedness from nurse preceptors. These preceptors will then be able to teach and empower new RNs on their journey to practice, offering a smoother and safer transition to professional independence, and decreasing burnout rates and turnover costs to the healthcare (Dwyer & Hunter Revell, 2016; Kim & Choi, 2022; Trepanier et al., 2012).

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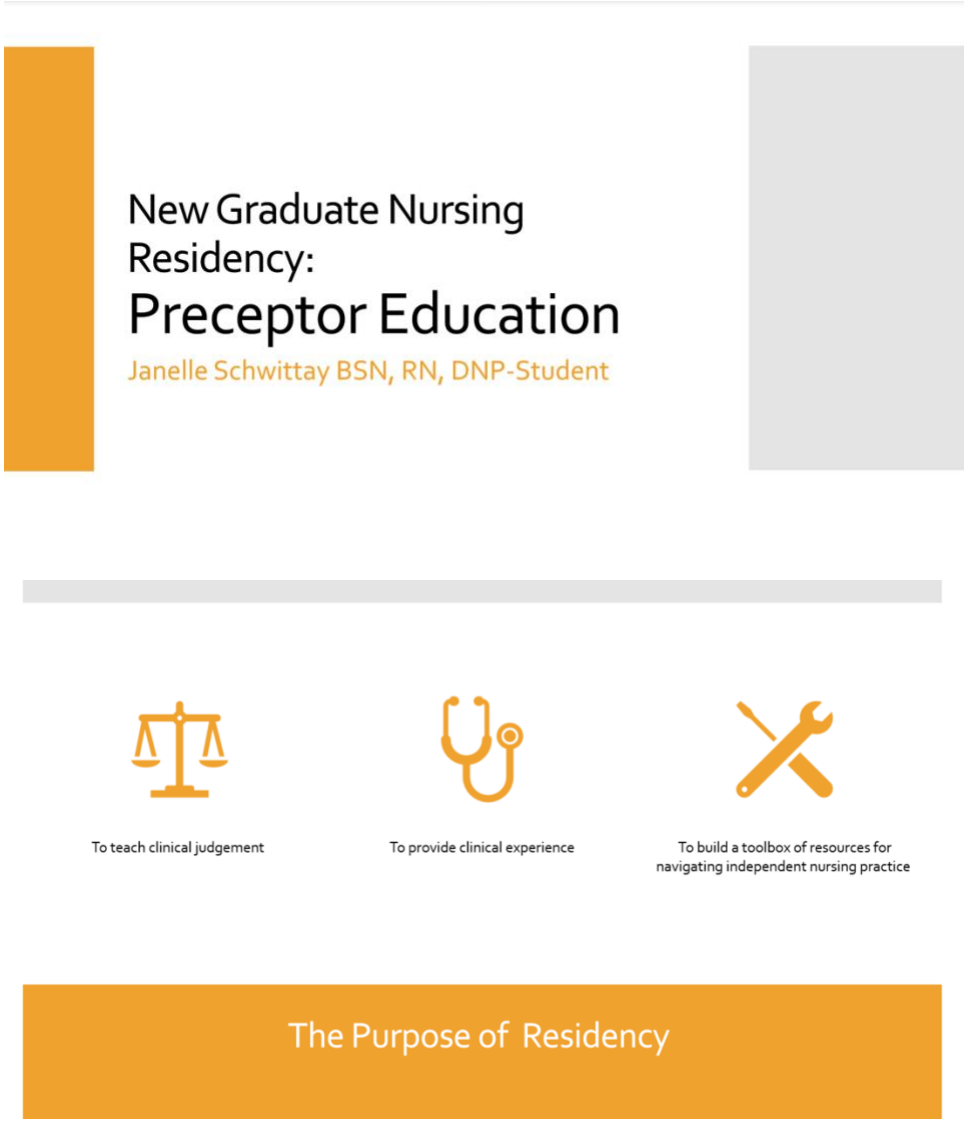
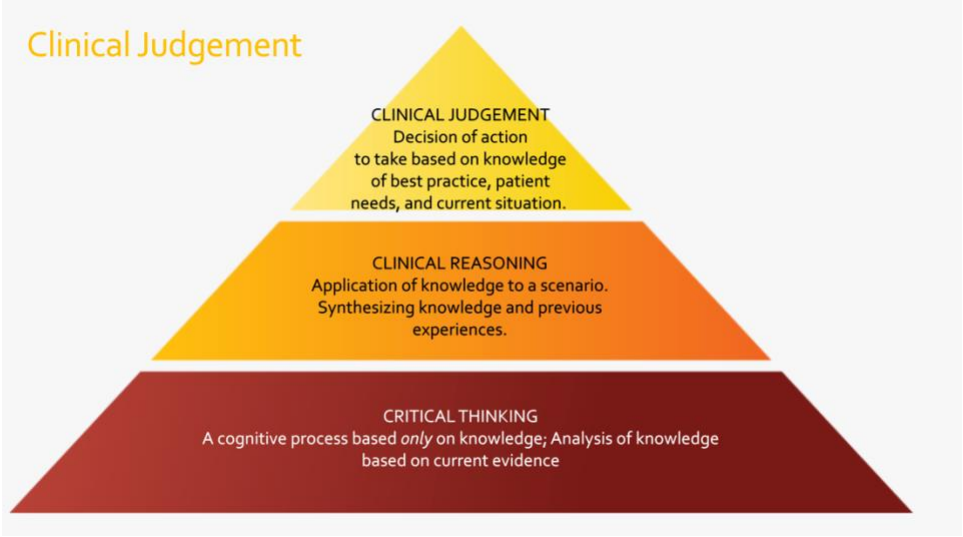
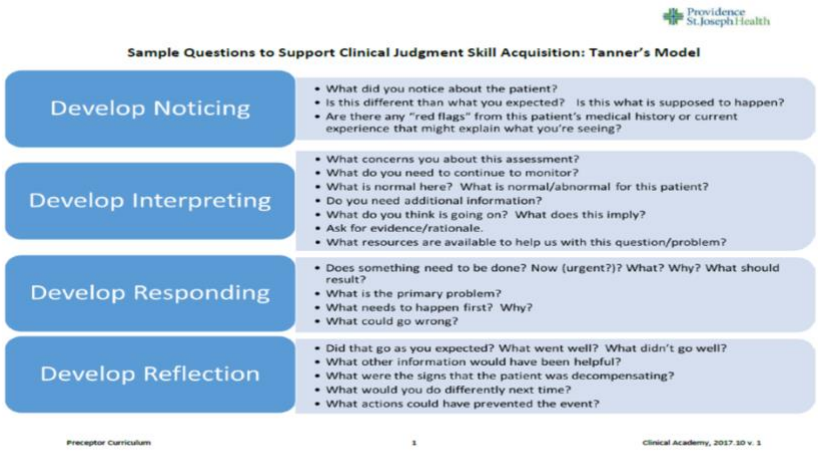
Appendix A

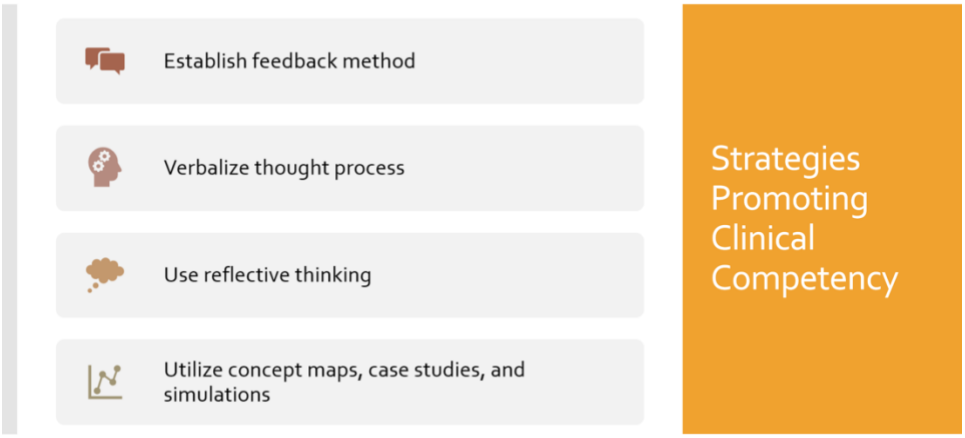
Educational presentation slides







Sample questions to support clinical judgment skill acquisition: tanner's model. (2017).



Married State Model

- The only accepted preceptor model at Providence Regional Medical Center- Everett
- The preceptor and new graduate are "married"; all things are done together
- Focus is on the quality of care and level of safety for both patient *and* the new graduate registered nurse (RN)
- Objectives
  - Welcome new graduates to the organization
  - Transition from "knowledge" to "knowing"
  - Prepare the new RN to provide safe and independent care

(Figueroa et al., 2013)

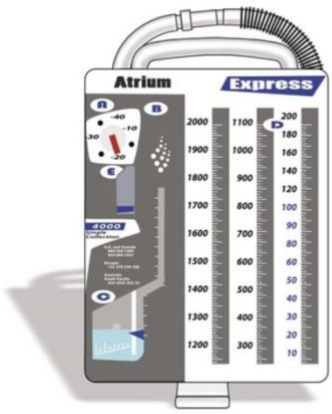
Married State Model

Throughout all phases, preceptor is in the room with new graduate RN.

(Streiff, 2017)

Why is a married-state approach so important?

Scenario #1



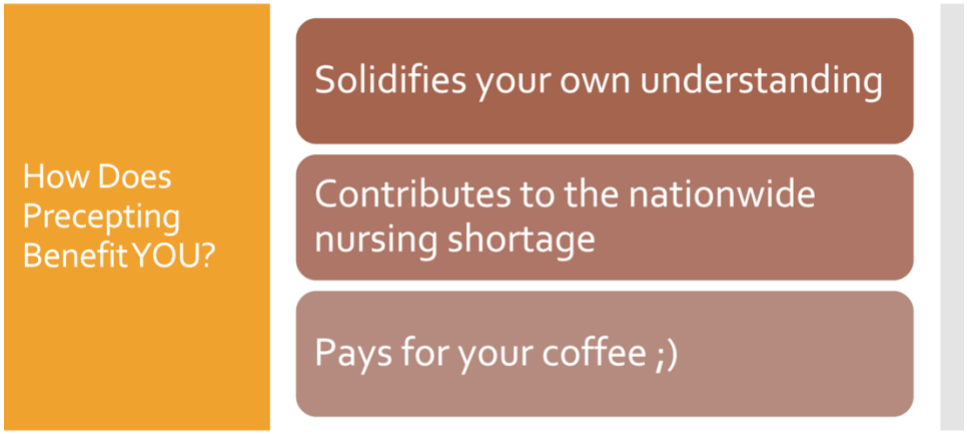
Scenario #2

Why Married State Model?

Traditional teaching model does not meet the needs of new graduates due to reduced 1-on-1 teaching

Top new graduate needs:

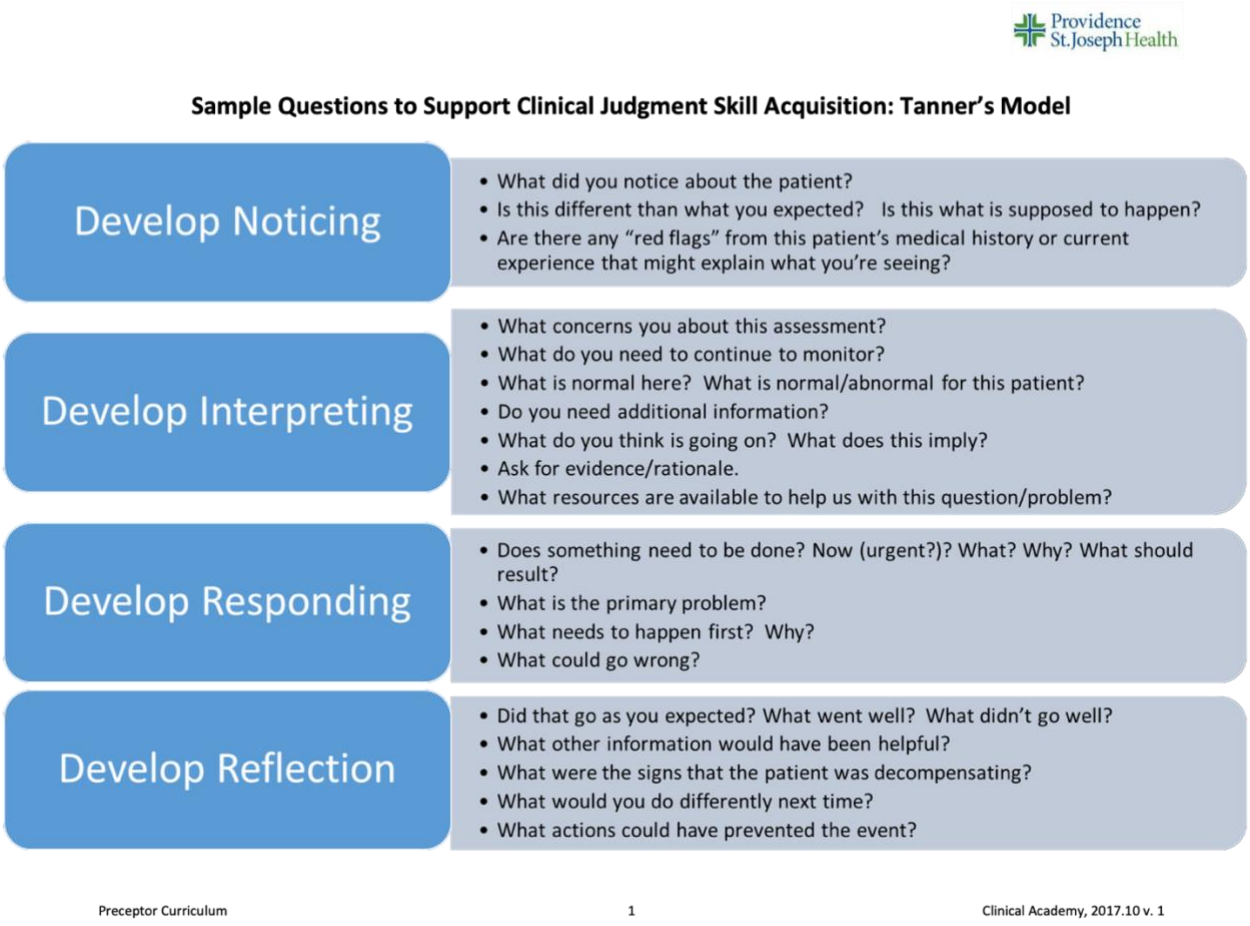
Development of critical thinking and application	Techniques to provide safe patient care	Support in transition to the RN role


How Does Precepting Benefit YOU?
Solidifies your own understanding
Contributes to the nationwide nursing shortage
Pays for your coffee ;)


Resources
Quality and Safety Education for Nurses Institute (QSEN)
Case studies, simulations, teaching modules
Teamwork exercises
Specialty specific
PRMCE Education Department "Teams" page
Facility specific information, policies, and offerings
Contact information for education department leaders
Floor management

Appendix B

Handout developed by PRMCE outlining sample questions derived from Tanner's Model of Clinical Judgement



Appendix C

Pre-Education Survey

Please rate how strongly you agree with the statements below, with 1 being completely disagree and 5 being completely agree.

- I feel that my organization adequately prepared me to be a preceptor.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I feel that I have the support from my organization that I need to be a sufficient preceptor.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I know where to seek precepting resources within my organization should I need them.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I have been a nurse operating independently (outside of a nursing residency program) for _____ years/months (circle one).
- Unique 4-digit PIN: _____ This will be used to link your pre- and post-education responses anonymously

***This survey is completely anonymous. By submitting this survey, you are providing informed consent that your anonymous answers will be included in a floor-wide research study on preceptor education. Please contact Janelle Schwittay if you have any questions or concerns. Jschwittay@seattleu.edu

Appendix D

Post-Education Survey

Please rate how strongly you agree with the statements below, with 1 being completely disagree and 5 being completely agree.

- I feel that my organization adequately prepared me to be a preceptor.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I feel that I have the support from my organization that I need to be a sufficient preceptor.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I know where to seek precepting resources within my organization should I need them.

1	2	3	4	5
Completely Disagree		Neither Agree or Disagree		Completely Agree

- I have been a nurse operating independently (outside of a nursing residency program) for _____ years/months (circle one).
- Unique 4-digit PIN: _____ This will be used to link your pre- and post-education responses anonymously

***This survey is completely anonymous. By submitting this survey, you are providing informed consent that your anonymous answers will be included in a floor-wide research study on preceptor education. Please contact Janelle Schwittay if you have any questions or concerns. Jschwittay@seattleu.edu

Appendix E

Recruitment e-mail

PROVIDENCE
Medical Group

Hello Thoracic and Vascular Care Unit Nurses,

I am conducting my DNP project on improving preceptor education and hope to provide you with knowledge and resources to increase your confidence as a preceptor, as well as improve the floor's preceptor class attendance rate. Please consider attending a one-hour educational presentation containing highlights from the PRMCE preceptor course, best-practice precepting strategies, resources available to you, and more.

This presentation will be presented via Zoom on Tuesday March 8, at 1930. It will take less than 60 minutes of your time. The Zoom recording will be shared in a follow up email as well, and follow-up surveys will be available in the Zen Den from March 9th-23rd.

Please reach out if you have any questions.

Password: 6N
Zoom link:
https://seattleu.zoom.us/j/92580392396?pwd=WVlzK0h3ck1YZTVDVC9KVkJOL25pdz09

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