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QSEN Competency Confidence Levels in Two Groups of New Registered Nurses

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
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MSN, University of Phoenix, 2007

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Doctoral Study Submitted in Partial Fulfillment

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Abstract

Healthcare agencies and stakeholders expect registered nurses to be competent at all times. When nurses are not confident in competencies, negative patient outcomes can occur. The purpose of this quantitative quasiexperimental with posttest only study was to investigate Quality and Safety Education for Nurses (QSEN) competency confidence levels of 2 groups of new nurses who had 5-6 months of clinical experience. Framed by the Duchscher theory and the QSEN framework, the research question was developed to examine the differences between QSEN competency confidence levels of new nurses who participated in a prelicensure program plus a residency program and nurses who only attended the residency program. Sixty-eight new nurses from 1 health facility answered the Nursing Quality and Safety Self-Inventory (NQSSI). An independent *t* test was used to compare each knowledge, skills, and attitudes (KSA) QSEN competency confidence levels for two groups. The results of this study demonstrated a difference between QSEN competency confidence levels between the 2 groups, but not all 18 NQSSI items reached a statistically significant difference. The 7 items that reached a statistically significant difference included the QSEN competency confidence level in knowledge and skills in evidence-based practice, quality improvement, and informatics. A statistically significant difference was also noted in the QSEN competency confidence level for patient-centered care skills. A 3-day professional development (PD) workshop was developed based on the results. Participating in the PD workshop could further increase the new nurses' QSEN competency confidence levels which can enhance patient outcomes resulting in positive social change.

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Dedication

I dedicate my project study to my husband, children, parents and God. Thank you God for giving me the strength and patience throughout my doctoral journey. I felt Your comfort as I encountered challenges and felt the many blessings You have given me to complete this journey.

To my wonderful husband Dan. You are an awesome husband and dad. I could not have done this without you. You supported me through this difficult process, and I appreciate you, and love you so much!

To my awesome children, Kendall, Krystal and Kyle: Thank you for your love and encouragement. I always looked forward to you checking on me and encouraging me to complete my journey. I love you, my children, so much!!

To my parents in Heaven, Jessie and Dolores Arias. Thank you for being my parents and role models. Dad: You were the first and only member of your family of eight to obtain a college degree. You taught me to pursue my dreams. Mom: Thank you for believing in me when I didn't believe in myself. With your encouragement and support, I became a hospital volunteer, fell in love for the healthcare field, and became a nurse and nurse educator. I learned so much from both of you. I love you both!

To my parents on Earth, my in-laws, Daniel and Emma Davila. Thank you for checking on me every week. Your Sunday dinner visits meant so much to me. I love you both!

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I would like to extend sincere gratitude to my university colleagues and friends. Thank you for listening to me when I needed to talk. Thank you for motivating me to complete my study and project. Thank you for being there for me. Your company meant so much to me.

Lastly, I would like to thank all the new nurses who completed my study. You helped me, but most importantly your survey ratings will make a difference for the future new nurses and the nursing profession overall. Thank you!

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Section 1: The Problem

The Local Problem

Quality and patient safety have been issues in health care locally and nationally. Nationally, over 400,000 patients die each year from preventable adverse events that are linked to errors of commission, omission, communication, context and diagnostic errors (James, 2013). The local health care system has eight inpatient hospital facilities (Methodist Healthcare, 2017a) and even though the health care system is currently rated above the national average in safety of care, the facility is below the national average in timeliness of care (Medicare.gov, 2017). The mortality, patient experience and effectiveness of care are ranked the same as the national average with the average death rate being 14% for stroke, 14% for heart attack and over 16% of pneumonia patients (Medicare.gov, 2017).

The local health care facility is committed to quality and safety, and is proactive in implementing safety initiatives (Vice President of Education, personal communication, May 22, 2017). In 2008, the local health care facility joined 4000 hospitals and committed themselves to the Institute for Healthcare Improvement 5 Million Lives Campaign (Berwick, 2014; Institute for Healthcare Improvement [IHI], 2017). Currently, the local health care facility incorporates regulatory quality and safety standards into the care of the patients (Methodist Healthcare, 2017b), but does not currently measure the Quality and Safety Education for Nurses (QSEN) competency confidence levels (Vice President of Education, personal communication, May 22, 2017).

The local hospital was interested in the new registered nurse (RN) confidence level related to the QSEN competencies (Vice President of Education, personal communication, May 22, 2017). QSEN competencies is a global safety initiative (Melnky, Gallagher-Ford, Long, & Finerout-Overholt, 2014) which includes the knowledge, skills and attitudes (KSAs) from the Institute of Medicine nursing competencies of patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and informatics (Cronenwett et al., 2007). QSEN competencies were added in baccalaureate, associate or diploma nursing programs in the late 2000, and each student completes QSEN competencies during school (Cronenwett et al., 2007). Although nursing schools incorporate the QSEN competencies into the curriculum to help prepare the students for nursing practice (Barnsteiner et al., 2013; Piscotty, Grobbel, & Abele, 2013), the nurses' confidence level performing the QSEN competencies after graduation has not been defined in the current literature.

The problem is that QSEN competency confidence levels have not been measured in new nurses. Piscotty et al. (2013) studied senior nursing students' confidence level of QSEN competencies, but no research is available on new RNs' self-confidence level related to these competencies. Olds and Dolansky (2017) indicated that there was no QSEN competency research on nurses and recommend integrating QSEN competency research into practice settings. The gap in practice is not knowing the QSEN competency confidence level of the new nurses. The local health care facility is interested in comparing the QSEN competency confidence level of the new nurses who only attend the

residency and nurses who attend the residency plus a prelicensure program (Vice President of Education, personal communication, May 22, 2017).

Rationale

Health care stakeholders expect new RNs to provide patient safety and quality of care at all times for all patients (American Association of Colleges of Nursing [AACN] 2014b; Crayaon et al., 2013). Hospitals with confident and competent nurses have fewer adverse outcomes that affect the stakeholders such as patient, nurse, hospital, and community (AACN, 2014a; Laschinger & Fida, 2014; Laschinger, Borgogni, Consiglio, & Read, 2015). With confidence and competence, the nurse tends to stay working in the hospital system which provides continuity in care, consistency in nursing care and better patient outcomes (Laschinger & Fida, 2014).

The local health care facility is proactive in implementing safety initiatives related to quality and safety (Vice President of Education, personal communication, May 22, 2017). The purpose of this quantitative quasiexperimental study with posttest only was to investigate the difference between QSEN competency confidence levels of new nurses who participated in a prelicensure program plus a residency program and nurses who only attended the residency program. In this study, the new RN was defined as having 5 to 6 months of RN experience. Studying the two groups helped identify whether the new nurses who participated in the prelicensure program and residency program had a higher QSEN competency confidence levels than the nurses who only participated in the residency program. Identifying the difference determined if one group had a benefit over

the other and if one group had a higher QSEN competency confidence level. The difference also provided information to help nurse educators with hospital administrators provide additional innovated prelicensure programs with residency programs for nursing students and new nurses.

The study had an independent variable with two levels. The independent variable was the completion of a residency or prelicensure program plus residency. The two levels were the residency program and the prelicensure program plus residency program. The dependent variable was the QSEN competency confidence levels.

Definition of Terms

The four terms defined for this study include new nurse, prelicensure programs, QSEN competencies, and residency program.

New nurse: A new nurses is a registered nurse with less than twelve months of clinical practice (Duchscher, 2008; Pfaff, Baxter, Jack, & Ploeg, 2014; Rush, Adamack, Gordon, & Janke, 2014).

Prelicensure programs: Prelicensure programs are paid or unpaid programs offered to nursing students before they graduate from nursing school (Friday, Zoller, Hollerback, Jones, & Knofczynski, 2015; Trepanier, Mainous, Africa, Shinners, 2017). Examples of prelicensure programs include dedicated education units (DEU), transition to practice programs, nurse externships, paid internships and nursing student patient care assistant. A DEU is a unit that partners with a local BSN university and trains designated experienced nurses to be clinical educational support nurses for the nursing students

(Masters, 2018). A transition to practice program onboards senior nursing students during the final semester of nursing school (Trepanier et al., 2017). A nurse externship is an unlicensed paid position for the nursing student who is partnered with an experience RN (Friday et al., 2015). A paid internship is a program for BSN nursing senior students to complete school and additional hospital internship hours at a healthcare facility (Stout, Short, Aldrich, Cinron & Provencio-Vasquez, 2015).

QSEN competencies: QSEN competencies are KSAs competencies of patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and informatics (Cronenwett et al., 2007). Nursing students from baccalaureate, associate and diploma nursing programs complete QSEN competencies during school (Cronenwett et al., 2007).

Residency programs: Residency programs are programs to help the new RN transition to the nursing profession and nurse specialty of choice (Letoumeau & Fater, 2015).

Significance of the Study

The competence and confidence level of a new nurse is vital for taking care of patients. The significance of this study was to determine the difference of QSEN competency confidence level between the two groups of new nurses. All new nurses at the local health care facility attend a residency program, but some also participate in a prelicensure program in addition to the residency program. Understanding the difference between the two groups regarding the RN QSEN competency confidence levels may help

hospital administrators and educators provide additional hospital resources for nursing students and the new nurses. Research has indicated that health care facility resources such as prelicensure innovative programs can impact the nurse confidence and motivation (Commission on Collegiate Nursing Education [CCNE], 2015; Masters, 2016; Moscato, Nishioka & Coe, 2013; Parker & Smith, 2012). The patient may then have a shorter hospital stay with a positive patient outcome (AACN, 2014b). Patients will then be satisfied with their hospital stay and report a higher satisfaction to hospital surveys and regulatory agencies (Kovner et al., 2016). Also, the community will be affected because positive patient outcomes are more cost effective since the patient will spend less time in the hospital (Kovner et al., 2016).

Research Question and Hypotheses

The overall problem in this quantitative quasiexperimental study with posttest only was that QSEN competency confidence levels had not been measured in new nurses. The study had one research question.

Research Question 1: What is the difference between QSEN competency confidence levels of new registered nurses who only attend the residency program and registered nurses who attend the residency program plus a prelicensure program?

Null Hypothesis ($H_0$1): There is no difference between QSEN competency confidence levels of new registered nurses who only attend the residency program

and registered nurses who attend the residency program plus a prelicensure program at the local health care facility.

Alternative Hypothesis (H_a1): There is a difference between QSEN competency confidence levels of new registered nurses who only attend the residency program and registered nurses who attend the residency program plus a prelicensure program at the local health care facility.

The research question had an independent variable with two levels. The independent variable was the completion of a residency or prelicensure program plus residency. The two levels were the residency program and the prelicensure program plus residency program. The dependent variable was the QSEN competency confidence levels. The plan was to measure the two variables using an independent sample *t* test.

Review of the Literature

The research study aligned with the Duchscher theory and the QSEN framework. The Duchscher (2008) theory centers on the new nurses' confidence and competence during the first 12 months of RN practice which aligned with the purpose of the study to investigate QSEN competency confidence levels of two groups of new nurses. The QSEN framework centers on KSAs of safety and quality competencies (Cronenwett et al., 2007; QSEN Institute, 2014). The theory, framework, and study focused on competence and confidence of new nurses that have less than 12 months of RN practice.

Duchscher Transition Theory

Duchscher transition theory (2009) originated from Kramer's (1974) reality shock theory for nurses. Kramer studied new graduate nurses and defined reality shock in four stages; honeymoon, shock, recovery, and finality. Kramer explained that a new nurse is elated at first, but then shock sets in and then the new nurse becomes anxious and apprehensive. Kramer noticed that the errors occur and nurses resign or even leave the nursing profession at this stage. After successfully going through the shock phase, the new graduate nurse enters the recovery and then final stage.

Duchscher's (2008, 2009) theory was built from the Kramer's reality shock theory. Duchscher (2008) theory includes three stages of doing, being, and knowing. Duchscher's initial transition stage of doing occurs the first 4 months of new RN orientation. The new RN is learning, performing skills and adjusting to the new environment during this stage. Also, the RN's stress and confidence level fluctuate during this time (Duchscher, 2008). The second transition stage of being occurs from 5 to 9 months after new RN orientation (Duchscher, 2008). At the beginning of the second stage, the new RN has a decrease in confidence and insecurities with competence. Duchscher explained that during the second stage, the new RN searches, examines, and questions decisions and nursing actions. At the end of the second stage, the nurse becomes comfortable with the role of the nurse and confidence increases (Duchscher, 2008). Duchscher's last stage of knowing occurs from 9 to 12 months after new RN orientation. The new nurse starts to separate, recover, explore, critique and accept the

transition. At the end of the transition, the new nurse has a steady confidence and comfort level in the role and responsibilities of a nurse (Duchscher, 2008).

Based on Duchscher (2008) and Pfaff et al. (2014), the nurses' confidence level fluctuates during the first 12 months of RN practice. Duchscher indicated the new nurses' struggle most with confidence and competence between 5 to 7 months of RN practice. The plan was to select RNs who had 5 to 7 months of RN experience to participate in this study. This meant that the RNs were at the peak of struggle in confidence and competence according to the Duchscher's transition theory. Completing the questionnaire during the second transition stage helped determine if the RNs who participated in a prelicensure program plus a residency program have a higher confidence level than the RNs who only participated in a residency program.

QSEN Framework

The QSEN framework originated from the Institute of Medicine nursing competencies of patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics (Barnsteiner et al., 2013; Cronenwett et al., 2007; QSEN Institute, 2014a). Cronenwett et al. received input from nurse experts and leaders before including KSAs to each of the six QSEN competencies. The QSEN Institute provided eight QSEN train the trainer workshops for nursing faculty from the United States with the expectation for nursing schools to incorporate the competencies in curricula starting 2008-2012 (Barnsteiner et al., 2013). Other global communities followed, the Swedish Society of Nursing integrated the QSEN

competencies in the Swedish nursing curriculum (Nygardh, Sherwood, Sandberg, Rehn, & Knutsson, 2017).

The first QSEN competency is patient-centered care. QSEN defined patient-centered care as to "recognize the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences, values, and needs" (QSEN Institute, 2014, p.1). The key elements included in this competency comprise of tailoring the patient-centered care on the patients' values, culture, and background. Percy and Richardson (2018) introduced patient-centered care to nursing students by focusing on compassion and empathy through role playing. Blazeck et al. (2016) used vignettes to demonstrate good and bad practices of patient-centered care. The intention is for the graduate nursing student to have the knowledge, skills, and attitude to understand the individual needs of patients and the barriers that they encounter.

The second QSEN competency is related to teamwork and collaboration. The QSEN Institute (2014) defined the competency as "function effectively within nursing and interprofessional teams (p.3)." Collaborating and interacting with other health care students help the nursing students understand the health care team's role (Cranford &Bates, 2015). Morphet et al. (2014) and Thorn et al. (2016) studied interprofessional teams of nursing, medical and other healthcare students and concluded the students had a better understanding of the each other's role. Upon graduation, the nursing student is expected to have the knowledge, skills, and attitudes of not only the nurse's role but also

the health care team's role including the barriers and facilitators of team function (QSEN Institute, 2014).

The QSEN Institute (2014) defined the third competency as the evidence-based practice competency. The competency is to "integrate best current evidence with clinical expertise and patient/family preferences, and values for delivery of optimal health care" (QSEN Institute, 2014, p.4). Mo-Kyung and Bliquez (2017) incorporated hypothetical clinical scenarios to engage nursing students in the evidence-based process. The expectation is for the new nurse to have the knowledge, skills, and attitudes of integrating evidence-based practice into the patient's care such as data collection, clinical practice guidelines, questioning if needed and consulting with experienced nurses (Balakas & Smith, 2016; QSEN Institute, 2014).

The fourth QSEN competency focused on quality improvement. The definition of the fourth competency is to "use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve quality and safety of health care systems" (QSEN Institute, 2014, p.5). The new nurse learned that quality improvement is necessary to assess quality of care and change system's processes. Nurse instructors incorporate quality improvement exercises during the nursing students' didactic and clinical experiences (Balakas & Smith, 2016; QSEN Institute, 2014). Also, the Institute for Healthcare Improvement (IHI) Open School provides free quality improvement courses for student learning (Maxwell &Wright, 2016).

Safety is the fifth QSEN competency. Safety is defined as to "minimize risk of harm to patients and providers through both system effectiveness and individual performance" (QSEN Institute, 2014, p.7). Knowledge, skills and attitude elements include but not limited to preventing errors, participating in root cause analysis and using national patient safety materials. Nurse faculty incorporates patient safety simulations, case studies and other flipped classroom strategies into the classroom (Maxwell & Wright, 2016).

The last QSEN competency is informatics. QSEN Institute (2014) defined informatics to "use information and technology to communicate, manage knowledge, mitigate error, and support decision making" (p.8). The new nurse learned in nursing school the knowledge skills and values of technology communication, and technology equipment for the safety and quality of patient care. However, Bryant, Whitehead, and Kelier (2016) noted that more than half of the nursing students they surveyed did not have an informatics course in the curriculum.

The QSEN Institute (2014), AACN (2017) and the National League of Nursing (2016) expect nursing schools to incorporate QSEN competencies in nursing curricula. Barnsteiner et al. (2013) indicated that 76.9% of the nursing schools surveyed had QSEN objectives in the nursing curriculum. Researchers have labeled QSEN competencies as a global safety initiative (Melnky et al., 2014) and accreditation organizations expect nursing schools to include QSEN objectives into the curriculum. Researchers have studied QSEN competency confidence levels in nursing students, but not in new nurses.

Old and Dolansky (2017) urged researchers to study QSEN competency confidence levels in nurses in practice settings.

Confidence and Competence

Both, the Duchscher theory and the QSEN framework embedded confidence and competence in their work. Nurses who are confident and competent impact the health care facility by having more positive outcomes that affect the patients, nurses, hospitals, and communities (AACN, 2014a; Laschinger & Fida, 2014; Laschinger et al., 2015). Mistakes and negative outcomes likely occur when a nurse has a lack of confidence and competence (Ortiz, 2016).

Confidence. New nurses struggle with confidence during the first year of practice. Pfaff et al. (2014) indicated that RNs report confidence in collaboration and communication with other health care professionals upon hiring; however, a decrease in confidence occurs after working a couple of months, and then nurses gain back the self-confidence after a year of working. Ortiz (2016) performed a qualitative study on new nurses, and all the participants stated they lacked professional confidence during the first year of practice (Ortiz, 2016). Franklin, Burns, and Lee (2014) indicated simulations help build confidence in nursing students, but Ortiz discussed how caring for real patients is different than school simulations.

Competence. A new nurse is expected to be competent in core nursing essentials. Nursing schools incorporate the standards from the regulatory accreditation agencies into the curriculum (AACN, 2017; NLN, 2016). Kajander-Unkuri et al. (2014) conducted a

cross-sectional survey of 154 Finnish graduating nursing students to determine self-assessment on competence development. The researchers noted that 87% of the nursing students rated their competence as good or very good. Spector, Blegen, Silvestre, Barnsteiner, and Lynn (2015) performed a longitudinal study of new graduate nurse competence level as determined by the new nurse and the preceptor. The researchers noted that the competency level of new nurses who were employed at health care facilities that had preceptor support and resources had higher competency levels than the new nurses from health care facilities who had minimal resources (Spector et al., 2015).

Prelicensure Programs

Prelicensure programs can be paid or nonpaid programs that are offered by the hospital alone or with the hospital partnering with a nursing school. Adding a dedication education unit is a collaborative prelicensure program set by hospital and a nursing school which provides partnership opportunities between experienced nurse and nursing student (Dapremont & Shirleatha, 2013; Masters, 2016; Moscato et al., 2013). Nurse extern programs are paid positions for nursing students to partner with experience nurses and to gain additional experiences at the health care facility (Friday et al., 2015). Nursing students have opportunity to complete core competencies in prelicensure transition to practice programs (Trepanier et al., 2017). Overall, the researchers indicated that prelicensure programs help enhance professional satisfaction, confidence, and competence (Dapremont & Shirleatha, 2013; Friday et al., 2015; Masters, 2016).

Residencies

Residency programs are geared for new nurses; however, not all hospitals offer residency programs. Pittman, Herrera, Bass, and Thompson (2013) surveyed 353 nurse executives and noted that only 36.9% of hospitals surveyed offered nurse residency programs. The researchers also noted that the length of the nurse residency programs differs between the hospitals (Pittman et al., 2013). Goode, Reid Ponte, and Sullivan Havens (2016) noted that residency programs could build competence and confidence in the new nurse.

Implications

Understanding the differences between QSEN competency confidence levels of new registered nurses who only attended the residency program and registered nurses who attended the residency program plus a prelicensure program will not only help the health care facility but will also help other health care agencies and nursing schools. The differences can help health care agencies determine if additional resources such as prelicensure programs and residency programs should be offered at hospitals. Hospitals with multiple of resources such as prelicensure programs and new nurse residency programs have been found to boost new nurses' confidence and competence (CCNE, 2015; Moscato et al., 2013; Parker & Smith, 2012).

Nursing schools, hospital administrators, stakeholders and patients want a new nurse who is competent and confident. Understanding the QSEN competency confidence differences between new nurses who only attended a residency and new nurses who attended a residency plus a prelicensure programs can lead to possible new programs and

resources. If the differences of one group are higher than the other group, hospital administrators and nurse educators can consider offering additional prelicensure and residency programs or extended residencies. Adding the new programs may enhance the new nurses QSEN competency confidence levels.

Summary

Providing patient safety and quality of care at all times for all patients is an expectation for all new nurses (AACN, 2014b; Crayaon et al., 2013). Implementing the QSEN competencies global safety initiative is a focus for multiple nursing schools, accreditation agencies and nursing organizations (AACN, 2017; Forneris et al., 2012; Melnky et al., 2014). QSEN competency confidence research has been measured in senior nursing students but has not been measured in new nurses (Piscotty et al., (2013); Olds & Dolansky, 2017). Olds and Dolansky (2017) indicated the need to integrate QSEN competency research into practice settings. Investigating the difference between QSEN competency confidence levels of new nurses who participated in a prelicensure program plus a residency program and nurses who only attended the residency program can provide information for the hospitals and nursing schools to help determine if additional resources are needed for the new nurses.

Section 2: The Methodology

Research Design and Approach

This quantitative study used a quasiexperimental with posttest only design to compare two convenience sample educational groups at one point in time (Creswell, 2012). One convenience sample group included the nurses who only attended the nurse residency program, and the other convenience sample group included the nurses who participated in a prelicensure program in addition to the nurse residency program. The research question had an independent variable with two levels. The independent variable was the completion of a residency or prelicensure program plus residency. The two levels were the residency program and the prelicensure program plus residency program. The dependent variable was the QSEN competency confidence levels. The quantitative analysis determined if a higher QSEN competency confidence level was related to the prelicensure program.

Setting and Sample

The local health care system includes eight inpatient hospitals, three ambulatory surgery hospitals, and two emergency centers (Methodist Healthcare, 2017a). Four of the inpatient hospitals are located in city's medical center area, two hospitals in the center of town, and the other two hospitals are located on the outskirts of the city (Methodist Healthcare, 2017a). The health care facility employs over 10,000 people and has over 5000 nurses and hires approximately 360 new RNs per year (Methodist Healthcare,

2017c; Methodist Healthcare Vice President of Education, personal communication, May 22, 2017).

The local health care system has one central education office that has the responsibility to orient the new nurses. The education department offers three nurse residency sessions per year; one in the winter, one in the summer and one in the fall. The new nurses were hired for one of the seven residency programs which include Medical-Surgical Nursing, Telemetry/Intermediate Care Nursing, Critical Care & Monitored Care Nursing, Newborn Intensive Care, Pediatric & Pediatric Intensive Care Nursing, Labor & Delivery, and Perioperative (Methodist Healthcare, 2017d).

The local health care system offers five paid and nonpaid prelicensure programs for nursing students. The health care system partnered with two local nursing universities and created five DEUs. The hospital also offers nurse externships and patient care assistant positions for nursing students who have completed a fundamental nursing course. A dedicated transition to practice program (DETPP) is offered to senior nursing students who spend their nursing internship and leadership & management courses on the same unit. The student spends 108 hours with an experienced, trained RN preceptor for the internship and 96 hours with the unit nurse leader such as nurse director, nurse educator. A paid internship is offered to local BSN senior students which is similar to the DETPP. The senior student completes the nursing internship/immersion course plus the leadership & management course on the same unit with a trained RN preceptor and nurse

leader. However, in this program, the student is expected to work an additional 240 hours for the hospital on the same unit.

Population and Sampling Strategy

The target population consisted of new RNs from the health care system's eight inpatient hospitals. The sampling technique was convenience sampling. The plan was to select the new RNs who participated in one of the seven residency programs and had at least 5 to 7 months of RN experience. The time frame of 5 to 7 months of experience was selected because Duchscher (2008) indicated the new nurses' struggle most with confidence and competence between 5 to 7 months of RN practice. Pfaff et al. (2014) also indicated that new RNs had a decrease in confidence after working a couple of months. According to this time frame, the plan was to the select winter nurse residency cohort. The winter nurse residency cohort began the nurse residency program in January 2018 (Methodist Healthcare, 2017d) meaning the best time to complete the study was in June and July. The start of the study depended on proposal and IRB approval. Methodist Healthcare and Walden University approved my IRB on April 11, 2018 (Appendix B; Appendix C).

Sample Size

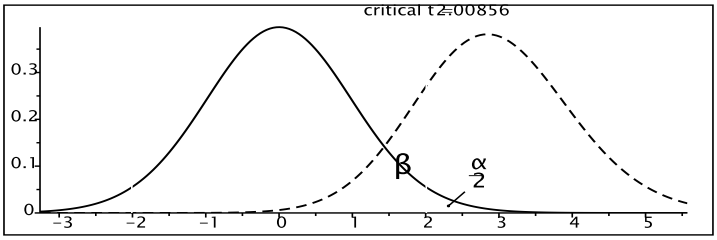
The sample size received was 28 participants in one group and 40 individuals in the second group. An appropriate sample size for each group according to the priori power analysis was 26 participants for the study (Heine, 2014). However, the plan was to obtain at least 30 participants for each group. This met the recommended sample size as

determined by the priori power analysis. Initially, the facility restricted my study to a maximum of 60 participants, but a total of 68 participants responded to the survey. IRB was notified immediately and an amendment was submitted (Appendix D; Appendix E).

Table 1

Power Analysis Calculation

t tests – Means	Difference between two independent means
Analysis: A priori	Compute required sample size
Input: Tail(s) =	Two
Effect size |ρ| =	0.80
α err prob =	0.05
Power (1-β err prob) =	0.80
Allocation Ratio	1
Output: Noncentrality parameter δ	2.8844410
Critical t =	2.0085591
Df =	50
Sample size group 1	26
Sample size group 2	26
Total sample size =	21
Actual power =	0.8074866



Eligibility Criteria

Inclusion criteria. The participants must be new RNs that participated in one of the seven local health care system's residency programs. The new nurses must have 5 to 7 months of RN experience. The inclusion criteria for the RNs who participated in a prelicensure program included the local healthcare facility prelicensure programs only and did not include prelicensure programs from other health care facilities.

Exclusion criteria. Nurses with less than five months of RN clinical experience or with more than seven months of RN clinical experience were excluded. Nurses from the three ambulatory surgery hospitals and two emergency centers were also excluded due not having new nurses. The participants who participated in other health care systems or hospitals prelicensure programs were excluded.

Recruitment Process

First, a letter of cooperation from Methodist Healthcare was obtained (Appendix F). The next step was a meeting with the local health care facility's VP of Education to determine the selected nurse residency cohort as my convenience sample. The plan included sending a recruitment email to the convenience sample via the local health facility's emails (Appendix G). The informed consent and directions on how to complete the study was included in the email and the survey monkey link. The informed consent asked the new nurse to complete the Nursing Quality and Safety Self-Inventory (NQSSI) and answer if they participated in one of the local health care system's prelicensure programs. Reminder emails were sent to the new nurse every week for three weeks.

Sample Characteristics

The future participants of the study were new nurses with 5 to 6 months of RN clinical experience. Each participant completed one of the seven residency programs and currently working as a new RN in one of the health care system's inpatient hospitals. Collecting the type of residency and type of prelicensure program was not included in the plan. The participants answered a yes and no question if they participated in a prelicensure program.

Instrumentation and Materials

Nursing Quality and Safety Self-Inventory (NQSSI) was the selected instrument for this study. Piscotty et al. (2013) developed the Nursing Quality and Safety Self-Inventory tool. The tool was based on the Quality and Safety Education for Nurses (QSEN) competencies which aligned with the study. The valid and reliable tool with a Cronbach's alpha of 0.93 measured the individual's confidence level related to knowledge, skills, and attitudes of the QSEN competencies (Piscotty et al., 2013). Piscotty granted permission to use the NQSSI tool for the study (Appendix H).

The NQSSI measured the KSAs QSEN competency confidence levels (Appendix I). Examples included: "I feel confident that I have the necessary knowledge to practice patient-centered nursing care," I feel confident that I have the necessary skills to practice patient-centered nursing care," and "I feel confident that I have the necessary attitudes to practice patient-centered nursing care" (Piscotty et al., 2013, p. 270). The NQSSI tool had a 7-point Likert scale with the higher rating indicating more confidence. The tool was

one of six instrument tools that the QSEN Institute recommended to use for research studies (QSEN Institute, 2014b). Researchers have used the tool to study senior nursing students (Piscotty et al., 2013) and other researchers encouraged researchers to study the nurses in the practice settings (Olds & Dolansky, 2017).

Data Collection and Analysis

The plan was to use descriptive and inferential statistics to help answer the research question by testing the hypothesis. The data collected from the independent variables and NQSSI tool was inserted in SPSS. The independent variables, the two groups of new nurses, were nominal and the dependent variables, QSEN competency confidence levels were ordinal variables due to the Likert 7-point ranking scale. The Likert 7-point ranking scale includes 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5= somewhat agree, 6 = agree, and 7 = strongly agree. The NQSSI tool measured the individual's confidence level related to knowledge, skills, and attitudes of the six QSEN competency components of patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and informatics (Cronenwett et al., 2007; Piscotty et al., 2013). The NQSSI tool had a 7-point Likert scale with the higher rating indicating more confidence.

The plan for analysis was equivalent to the original NQSSI study which included calculating the overall mean inventory score, a mean score for each of the six QSEN competency components, and a mean score for the knowledge, skills and attitudes questions (Piscotty et al., 2013). The raw numbers, standard deviations as well as the

range was included. The NQSSI ordinal data was analyzed as interval data so an independent *t* test was used to test the hypothesis statement and to determined differences in the six QSEN KSAs components.

A *t* test was used to test the comparisons of QSEN competency levels which included the KSAs between the two groups of nurses. The two groups of nurses included the nurses who only participated in the residency program and the nurses who participated in the residency plus a prelicensure program. Calculating and comparing the overall mean inventory score, mean score for each of the six QSEN competency components, and a mean score for the knowledge, skills and attitudes questions for each group was the plan.

The data was summarized in tables. The independent *t*-test data was illustrated in a table format. The *t* value, degree of freedom, significance, mean difference and the 95% confidence interval of the difference was included in the *t*-test data table. The table illustrated if the null hypothesis statement was rejected or not rejected.

Assumptions

Believing that the participants will answer the questions truthfully was an assumption. Also, the assumption was that all new RNs hired have both an associate degree in nursing or bachelor of science in nursing, and not a diploma degree. Diploma degrees in nursing are very rare, and there was only one accredited diploma nursing degree in Texas (Texas Board of Nursing, 2017). A third assumption was that the individual perspectives were reported rather than shared or group perspectives. Another

assumption was that the group who participated in the prelicensure program had more experience than the group who only participated in the residency. The final assumption for this study was that participants were competent using technology and computers to open the survey link.

Limitations

The sample population was a limitation because the participants were from only one healthcare system located in the central region of the state. Another limitation of the sample population limited to only one cohort of new nurses in the healthcare facility. The quantitative research design could also be limitation due to not allowing a more comprehensive study that included qualitative data such as their perception of being a new nurse and not knowing what prelicensure program they participated in.

Scope and Delimitations

The quantitative study sample consisted of a group of new nurses from the health care system's eight inpatient hospitals and who participated in one of the seven nurse residency programs. Even though each residency was represented, the number of new nurses in each residency may be different. The independent variable under study was the specific type of program that the new nurse attended. They attended either the new nurse residency program or the nurse residency program plus a prelicensure program. The dependent variables under study included the QSEN competency confidence levels. The time frame of 5 to 6 months of clinical experience was a boundary of the study.

Protection of Participants' Rights

The risk to the participants was minimal. An informed consent statement was included in the email. Participants provided informed consent by clicking on the link to participate in the study. The informed consent included the directions on how to complete the study. The informed consent asked the new nurse to complete the NQSSI, answer if they participated in one of the local health care system's prelicensure programs. The data was kept confidential and secured in survey monkey.

Data Analysis Results

This quantitative quasi-experimental with posttest only study was conducted to compare two convenience sample educational groups at one point in time. Results from the NQSSI were used to determine the difference between QSEN competency confidence levels of new registered nurses who only attended the residency program and registered nurses who attended the residency program plus a prelicensure program. Sixty-eight participants answered the NQSSI survey and the data was entered in SPSS 24.0 for analysis. Twenty-eight of the participants only attended the residency program, and 40 participants attended the residency program plus a prelicensure program. The data from the NQSSI survey were analyzed using descriptive and inferential statistics to help determine if one group has a higher QSEN competency confidence level.

Descriptive Statistics

Descriptive statistics were used to calculate the overall mean inventory score, a mean score for each of the six QSEN competency components, and a mean score for the

knowledge, skills and attitudes questions which were equivalent to the original NQSSI study (Piscotty et al., 2013). The raw numbers, standard deviations as well as the range were also included.

Table 2

Overall NQSSI Data for New Registered Nurses

n = 68

QSEN Competency	Range	Minimum	Maximum	M	SD
PCC Knowledge	4.00	3.00	7.00	5.91	.89
PCC Skills	4.00	3.00	7.00	5.74	.94
PCC Attitudes	4.00	3.00	7.00	6.19	.92
TWC Knowledge	4.00	3.00	7.00	6.07	.83
TWC Skills	4.00	3.00	7.00	5.93	.85
TWC Attitudes	4.00	3.00	7.00	6.12	.82
EBP Knowledge	5.00	2.00	7.00	5.53	1.09
EBP Skills	5.00	2.00	7.00	5.68	1.01
EBP Attitudes	4.00	3.00	7.00	5.93	.94
QI Knowledge	5.00	2.00	7.00	5.41	1.10
QI Skills	5.00	2.00	7.00	5.46	1.07
QI Attitudes	4.00	3.00	7.00	5.69	1.05
SAF Knowledge	3.00	4.00	7.00	6.16	.77
SAF Skills	4.00	3.00	7.00	6.01	.91
SAF Attitudes	4.00	3.00	7.00	6.24	.88
INF Knowledge	4.00	3.00	7.00	5.91	.94
INF Skills	4.00	3.00	7.00	5.90	.92
INF Attitudes	4.00	3.00	7.00	6.12	.78

Note: PCC = patient-centered care; TWC = team work and collaboration; EBP = evidence-based practice; QI = quality improvement; SAF = safety; INF = informatics.

The overall mean score for the NQSSI for the new registered nurses was 5.89 on the 7-point scale. EBP Knowledge, EBP Skills, QI Knowledge and QI Skills scored the

lowest of all 18 items with a 2.00 on the 7-point scale (Table 2); and the SAF Knowledge scored the highest with a 4.00. A score of 7.00 was noted as the highest of all 18 items. Out of the seven items that had a mean score greater than 6.00, three of the items were related to the safety competency, and two of the items were related to the teamwork and collaboration competency. The overall mean score of attitudes was higher than skills and knowledge (Table 3) which is similar to previous research using the NQSSI (Piscotty et al., 2013).

Table 3

Overall Mean Score for Knowledge, Skills, and Attitudes

n = 68

QSEN Competency	Knowledge	Skills	Attitudes
	M	M	M
PCC	5.91	5.74	6.19
TWC	6.07	5.93	6.12
EBP	5.53	5.68	5.93
QI	5.41	5.46	5.69
SAF	6.16	6.01	6.24
INF	5.91	5.90	6.12
Total Mean Score	5.83	5.79	6.05

Note: PCC = patient-centered care; TWC = team work and collaboration; EBP = evidence-based practice; QI = quality improvement; SAF = safety; INF = informatics.

Patient-centered care. The new registered nurses who attended the residency program plus a pre-licensure program had higher competency confidence KSA mean scores in patient-centered care than the new registered nurses who only attended the

residency program (Table 4). Both groups rated their self-confidence lowest in patient-centered care skills.

Table 4

Patient-Centered Care Knowledge, Skills, and Attitudes

Group	N	M	SD	SEM
PCC Knowledge				
RES Only	28	5.68	.82	.15
RES PLUS	40	6.08	.92	.14
PCC Skills				
RES Only	28	5.46	1.04	.20
RES PLUS	40	5.93	.83	.13
PCC Attitudes				
RES Only	28	5.96	1.04	.20
RES PLUS	40	6.35	.80	.13

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; PCC = patient-centered care.

Teamwork and collaboration. The self-confidence mean scores for the teamwork and collaboration KSAs were the second highest scores out of the six QSEN competencies for both groups. The new registered nurses who attended the residency program plus a pre-licensure program rated their self-confidence 6.00 and above on a 7.00-point scale in all teamwork and collaboration KSAs (Table 5). A small standard deviation was noted in the teamwork and collaboration KSAs standard deviation for the new nurses who participated in a prelicensure program.

Table 5

Teamwork and Collaboration Knowledge, Skills and Attitudes

Group	n	M	SD	SEM
TWC Knowledge				
RES Only	28	5.89	.92	.17
RES PLUS	40	6.20	.76	.12
TWC Skills				
RES Only	28	5.82	.94	.18
RES PLUS	40	6.00	.78	.12
TWC Attitudes				
RES Only	28	5.96	.88	.17
RES PLUS	40	6.22	.77	.12

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; TWC = teamwork and collaboration.

Evidence-based practice. Both, new registered nurses who attended the residency program plus a pre-licensure program and the new registered nurses who only attended the residency program rated their self-confidence lowest (Table 6) in knowledge of evidence-based practice. However, the participants who participated in a pre-licensure program had higher KSA means in evidence-based practice. The evidence-based practice KSAs standard deviation for the residency only group was higher meaning that the values are farther away from the mean.

Table 6

Evidence-Based Practice Knowledge, Skills, and Attitudes

Group	n	M	SD	SEM
EBP Knowledge				
RES Only	28	5.18	1.06	.20
RES PLUS	40	5.78	1.05	.17
EBP Skills				
RES Only	28	5.25	1.08	.20

RES PLUS	40	5.98	.86	.14
EBP Attitudes				
RES Only	28	5.68	1.06	.20
RES PLUS	40	6.10	.81	.13

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; EBP= evidence-based practice.

Quality improvement. The quality improvement self-confidence KSA mean were the lowest scores out of the six QSEN competencies for both groups. This was the only competency where mean scores did not reach a 6.00 on a 7.00-point scale (Table 7). The knowledge and skills mean scores for the residency only group were .60 lower than the new nurses who participated in a pre-licensure program.

Table 7

Quality Improvement Knowledge, Skills, and Attitudes

Group	n	M	SD	SEM
QI Knowledge				
RES Only	28	5.04	1.04	.20
RES PLUS	40	5.68	1.07	.17
QI Skills				
RES Only	28	5.10	1.13	.21
RES PLUS	40	5.70	.97	.15
QI Attitudes				
RES Only	28	5.57	1.14	.21
RES PLUS	40	5.78	1.00	.16

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; QI= quality improvement.

Safety. The safety self-confidence KSA mean were the highest scores out of the six QSEN competencies for both groups. The new registered nurses who attended the residency program plus a pre-licensure program rated their self-confidence above 6.00 on a 7.00-point scale in all safety KSAs (Table 8). The safety knowledge standard deviation for the group who only participated in the residency was smaller than the standard deviation of safety skills and safety attitudes. The standard deviation for knowledge, skills, and attitudes for, the group who participated in the prelicensure program had only a .04 difference.

Table 8

Safety Knowledge, Skills and Attitudes

Group	n	M	SD	SEM
SAF Knowledge				
RES Only	28	5.96	.74	.14
RES PLUS	40	6.30	.76	.12
SAF Skills				.
RES Only	28	5.79	1.03	.19
RES PLUS	40	6.18	.78	.12
SAF Attitudes				
RES Only	28	6.00	1.02	.19
RES PLUS	40	6.40	.74	.12

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; SAF= safety.

Informatics. A mean above 6.00 on a 7.00-point scale (Table 9) was noted on all informatics KSAs for the new registered nurses who attended the residency program plus

a pre-licensure program. The informatics attitude mean score was higher than the knowledge and skills mean score for the residency only group.

Table 9

Informatics Knowledge, Skills, and Attitudes

Group	n	M	SD	SEM
INF Knowledge				
RES Only	28	5.61	1.03	.19
RES PLUS	40	6.13	.82	.13
INF Skills				
RES Only	28	5.61	.88	.17
RES PLUS	40	6.10	.90	.14
INF Attitudes				
RES Only	28	6.00	.82	.15
RES PLUS	40	6.20	.76	.12

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; INF = informatics.

The new registered nurses who attended the residency program plus a prelicensure program had higher KSA averages of self-confidence for the six QSEN competencies compared to the new registered nurses who only attended the residency (Table 10). The highest KSA mean scores for both groups were attitudes, then skills and the lowest was knowledge.

Table 10

Groups Mean Score for Knowledge, Skills, and Attitudes

Group	N	Knowledge	Skills	Attitudes

PCC				
RES Only	28	5.68	5.46	5.96
RES PLUS	40	6.08	5.93	6.35
TWC				
RES Only	28	5.89	5.82	5.96
RES PLUS	40	6.20	6.00	6.23
EBP				
RES Only	28	5.18	5.25	5.68
RES PLUS	40	5.78	5.98	6.10
QI				
RES Only	28	5.04	5.11	5.57
RES PLUS	40	5.68	5.70	5.78
SAF				
RES Only	28	5.96	5.79	6.00
RES PLUS	40	6.30	6.18	6.40
INF				
RES Only	28	5.61	5.61	6.00
RES PLUS	40	6.13	6.10	6.20
Total Mean Score				
RES Only	28	5.58	5.51	5.86
RES PLUS	40	6.03	5.98	6.18

Note: RES Only = new registered nurses who only attended the residency program; RES PLUS = new registered nurses who attended the residency program plus a pre-licensure program; PCC = patient-centered care; TWC = teamwork and collaboration; EBP = evidence-based practice; QI = quality improvement; SAF = safety; INF = informatics.

Inferential Statistics

NQSSI ordinal data were analyzed as interval data, so an independent *t* test was used to test the hypothesis statement and to determine differences in the six QSEN KSAs components. A *t* test was also used to check the comparisons of QSEN competency levels which included the KSAs between the two groups of nurses. The two groups of nurses

included the nurses who only participated in the residency program and the nurses who participated in the residency plus a prelicensure program. Calculating and comparing the overall mean inventory score, mean score for each of the six QSEN competency components, and a mean score for the knowledge, skills and attitudes questions for each group was included in the analysis.

An independent sample *t* test was conducted to compare the QSEN competency confidence levels of new registered nurses who only attended the residency program and registered nurses who attended the residency program plus a pre-licensure program. Equal variance assumed due to the significance level of Levene's test was larger than .05 (Table 11) in all 18 items, meaning that both groups had an appropriate sample size. Results from the independent sample *t* test revealed a statistically significant difference in the mean scores in seven of the 18 NQSSI items signifying the new registered nurses who attended the residency program plus a pre-licensure program were more confident in the seven QSEN competency NQSSI items than the new nurses who only attended the residency program.

Table 11

Independent Sample t test

	t test for Equality of Means			
Levene's Test for Equality of Variances	Sig	M	SE	95% Confidence Interval of the Difference

	F	Sig	*t*	*df*	(2 tailed)	Difference	Difference	Lower	Upper
PCC Knowledge Equal variances assumed	.02	.89	1.83	66	.07	.40	.22	-.04	.83
PCC Skills Equal variances assumed	2.23	.14	2.04	66	.05	.46	.23	.01	.91
PCC Attitudes Equal variances assumed	.70	.41	1.73	66	.09	.39	.22	-.06	.83
TWC Knowledge Equal variances assumed	.68	.41	1.51	66	.14	.31	.20	-.10	.71
TWC Skills Equal variances assumed	1.47	.23	.85	66	.40	.18	.21	-.24	.60
TWC Attitudes Equal variances assumed	.032	.86	1.30	66	.20	.26	.20	-.14	.66
EBP Knowledge Equal variances assumed	.24	.62	2.3	66	.03	.60	.26	.08	1.11
EBP Skills									

Equal variances assumed	.91	.34	3.08	66	.003	.73	.24	.26	1.19
EBP Attitudes									
Equal variances assumed	1.94	.17	1.86	66	.07	.42	.23	-.03	.87
QI Knowledge									
Equal variances assumed	1.53	.22	2.46	66	.02	.64	.26	.12	1.16
QI Skills									
Equal variances assumed	.05	.82	2.32	66	.02	.59	.26	.08	1.10
QI Attitudes									
Equal variances assumed	.22	.64	.78	66	.44	.20	.26	-.32	.72
SAF Knowledge									
Equal variances assumed	.80	.38	1.81	66	.08	.34	.19	-.03	.71
SAF Skills									
Equal variances assumed	.57	.45	1.77	66	.08	.39	.22	-.05	.83
SAF Attitudes									
Equal variances assumed	.09	.77	1.87	66	.07	.40	.21	-.03	.83
INF Knowledge									

Equal variances assumed	1.53	.22	2.30	66	.03	.52	.23	.07	.97
INF Skills									
Equal variances assumed	.10	.76	2.25	66	.03	.49	.22	.06	.93
INF Attitudes									
Equal variances assumed	1.53	.22	1.04	66	.30	.20	.19	-.18	.58

Note: PCC = patient-centered care; TWC = team work and collaboration; EBP = evidence-based practice; QI = quality improvement; SAF = safety; INF = informatics.

Patient-centered care. There was a statistical significant difference in the patient-centered care skill scores for the new nurses who participated in the residency program only (M = 5.46, SD = 1.04) and for the new nurses who participated in the residency plus a prelicensure program (M = 5.93, SD = .83); t (66) = 2.04, p =.05 (two-tailed). No significant difference noted in the patient-centered care knowledge, p = .07 (two-tailed) and attitudes scores, p = .09 (two-tailed).

Teamwork and collaboration. No significant differences noted in teamwork and collaboration scores. The p values for teamwork and collaboration knowledge, skills and attitudes were all above .05 (two-tailed).

Evidence-based practice. A statistical significant difference noted in evidence-based knowledge and skills scores for the new nurses who participated in the residency only (M = 5.18, SD = 1.06; M = 5.25, SD = 1.08) and for the new nurses who

participated in the residency plus a prelicensure program (M = 5.78, SD = 1.05; M = 5.98, SD = .86); p = .03 (two-tailed) for knowledge and p =.003 (two-tailed) for skills. No significant difference noted in evidence-based practice attitude score, p = .07 (two-tailed).

Quality improvement. Both, quality improvement knowledge and skills had statistical significant differences for the new nurses who participated in the residency only (M = 5.04, SD = 1.04; M = 5.10, SD = 1.13) and for the new nurses who participated in the residency plus a prelicensure program (M = 5.68, SD = 1.07; M = 5.70, SD = .97); p = .02 (two-tailed) for both quality improvement knowledge and skills. No significant differences in the scores for quality improvement attitudes, p = .44 (two-tailed).

Safety. No significant differences noted in the safety scores. The p values for safety knowledge, skills and attitudes were all above .05 (two-tailed).

Informatics. A statistical significant difference noted in informatics knowledge and skills scores for the new nurses who participated in the residency only (M = 5.61, SD = 1.03; M = 5.61, SD = .88) and for the new nurses who participated in the residency plus a prelicensure program (M = 6.13, SD = .82; M = 6.10, SD = .90); p = .03 (two-tailed) for both knowledge and for skills. No significant difference noted in informatics attitude score, p = .3 (two-tailed).

Summary

The participants completed this study at 5 to 6 months of RN practice which is designated as the peak of struggle in confidence and competence according to the Duchscher's transition theory (Duchscher, 2008). The NQSSI measured the KSAs QSEN competency confidence levels of new registered nurses who only attended the residency program and registered nurses who attended the residency program plus a pre-licensure program. The results of this study demonstrated a difference between QSEN competency confidence levels between the two groups, but not all 18 NQSSI items reached a statistically significant difference. Only seven of the 18 items reached a statistically significant difference, therefore the null hypothesis could not be rejected.

The NQSSI items that had a statistically significant difference include the QSEN competency confidence level in knowledge and skills in evidence-based practice, quality improvement and informatics. A statistically significant difference was also noted in the QSEN competency confidence level for patient-centered care skills. No statistically significant differences was noted for the QSEN competency confidence levels in safety and teamwork and collaboration. Also, there was no statistically significant differences in any of the six QSEN competency confidence levels related to the attitude scores.

The new nurses who participated in a hospital prelicensure program plus a residency had more confidence in all QSEN competencies than the new nurses who only attended the residency program. Prior research has indicated that health care facility resources such as prelicensure innovative programs and new nurse residency programs

can impact the nurse confidence and motivation (CCNE, 2015; Masters, 2016; Moscato et al., 2013; Parker & Smith, 2012). Also, prelicensure programs help enhance professional satisfaction, confidence, and competence (Dapremont & Shirleatha, 2013; Friday et al., 2015). Adding more hospital prelicensure programs can provide additional opportunities for local nursing students. However, the new nurses who only attended the residency had lower QSEN competencies confidence levels and require additional training.

A recommendation to provide additional professional development and training in patient-centered care skills, evidence-based practice, quality improvement and informatics for the new nurses who only attended the residency is proposed. Even though the new nurses who participated in the prelicensure program had higher QSEN competency confidence level mean scores in all items, their lowest mean scores were in evidence-based practice and quality improvement. The confidence level KSA mean in evidence-based practice and quality improvement were the lowest out of the six QSEN competencies for both groups. This struggle in confidence and competence connects to the Duchscher transition theory. A recommendation is proposed to send all new nurses to the evidence-based practice and quality improvement sessions.

Section 3: The Project

Introduction

Understanding the QSEN competency confidence differences between new nurses who only attended a residency and new nurses who attended a residency plus a prelicensure programs can lead to possible new programs and resources. Based on the findings, a professional development (PD) project is selected for the new nurses. The proposed project will include three full days of training and each day will have a different topic. Day 1 will focus on patient-centered care skills and the knowledge and skills related to informatics. Knowledge and skills in evidence-based practice and quality improvement will be the topic for Day 2. Day 3 will focus on simulations related to Day 1 and 2 topics. The project's goal was to increase the new nurses QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement.

Rationale

The proposed project was chosen based on the findings of the study. The results from the study showed a difference between QSEN competency confidence levels between the two groups of new nurses, but not all 18 NQSSI items reached a statistically significant difference. The seven items that reached a statistically significant difference included knowledge and skills in evidence-based practice, quality improvement and informatics. A statistically significant difference was also noted in the QSEN competency confidence level for patient-centered care skills.

The new nurses who attended only the residency had lower confidence means in all 18 NQSSI items; however, evidence-based practice and quality improvement were the lowest means for both group of new nurses. This is not unusual. Ehrenberg et al. (2016) performed a national longitudinal study on new nurses who had a low confidence level in evidence-based practice. Duchscher (2008) indicated the new nurses' struggle most with confidence and competence between 5 to 7 months of RN practice. Hosking (2016) recommended to wait after 6 months to invite new nurses to participate in the evidence-based process. Inviting both groups to the evidence-based practice and quality improvement sessions is the plan.

Because of the statistically significant difference and lower means, the new nurse who only attended the residency will be required to attend all three days of training. Due to the low mean scores, the nurse who attended the residency plus participated in a prelicensure program will be invited to attend the evidence-based practice and quality improvement sessions.

Review of the Literature

The PD project will address the new nurses' low confidence level related to patient-centered skills; and knowledge and skills related to informatics, evidence-based practice and quality improvement. The three-day training will include patient-centered care skills and informatics on Day 1, evidence-based practice and quality improvement on Day 2, and simulations on Day 3. Adult learning theory, Bandura social cognitive theory and constructivism were used to guide the development of the project.

The information for this literature review was obtained from the Walden Library databases, CINAHL Plus with Full Text, CINAHL & MEDLINE Combined Search, Education Source, ProQuest Nursing & Allied Health Source and Google Scholar. The search included peer-reviewed and other scholarly online sources related to specific learning strategies helpful for new nurses. Key words used included *adult learners, andragogy, constructivism, Bandura social cognitive theory, graduate nurses, new nurses, teaching/learning strategies, active learning, collaborative learning, student engagement, patient centered care, evidence-based practice, quality improvement, and informatics*. The review of literature contains a section on learning theories, learning strategies, patient-centered care, informatics, evidence-based practice and quality improvement.

Learning Theories

A combination of three learning theories: adult learning theory, constructivism, and Bandura social cognitive theory frames the PD project. Curran (2014) examined best nursing educational practices and concluded using adult learning theory with other theories such as Bandura social cognitive theory enhances the professional development of a new nurse. Lavoie et al. (2018) reviewed 182 nursing simulation studies and noted the Bandura social cognitive theory and constructivism were used more often than the Adult learning theory during simulation training. Using the three learning theories can provide a comprehensive strategy and help tailor the education for the new nurse attendees.

Adult learning theory. All future development/training curriculum project participants are adults. The adult learning theory is centered on the learner, and the educator is a facilitator for the adult learners (Knowles, Holton, & Swanson, 2015). Andragogy principles include the need to know, self-concept, using previous experiences, readiness, orientation to learning and motivation (Knowles et al., 2015). Embedding the adult learning principles in nursing education positively impacts the learner (Clipper & Cherry, 2015; Garwood, 2015; Leigh, Whitted & Hamilton, 2015). Leigh et al. designed a nursing preceptorship using andragogy as the framework and all learners met the learning outcomes. Clipper and Cherry studied two different groups of new nurses; one group who had preceptors complete a session with adult learning principles and the other group who did not have an adult learning principle session. The new nurses who had the preceptors complete the session with adult learning principles ranked their orientation and preceptor higher than the other group (Clipper & Cherry, 2015). Garwood studied millennial nursing students and noted the effectiveness in using Knowles principles to select design a psychiatric course.

Needing to know the why. Needing to know the reason why learning is taking place is the first andragogy assumption (Knowles et al., 2015). Learners tend to resist learning when not knowing the reason why they are learning (Curran, 2014). Including learning objectives help learners understand the purpose of the course and learning activity. Papastavrou, Dimitriadou, Tsangari, and Andreou (2016) developed a mentorship program with clear learning objectives which impacted student learning and

acceptance in learning. Learning objectives for the developmental/training program will be available for the future learners before the training day.

Self-concept and self-direction. The second assumption in andragogy is the belief that adult learners are self-directed learners (Knowles et al., 2015). Self-directed learners take time to self-assess learning needs and select strategies that best fit their needs (Hagen & Park, 2016; Gewurtz, Coman, Dhillon, Jung, Solomon, 2016). The new nurses in the study demonstrated self-direction by taking time to self-assess their QSEN competency confidence levels by completing the NQSSI.

Prior experience. The third andragogy assumption is incorporating previous experiences into education (Knowles et al., 2015). Hagen and Park (2016) used reflection exercises to help learners recall experiences to help build new knowledge. The future participants have 5-6 months of RN experience and participated in one of the seven residency programs.

Readiness to learn. The fourth andragogy assumption focuses on the readiness to learn (Knowles et al., 2015). Students are ready to learn when education is pertinent to the learner roles (Hagen & Park, 2016; Spies, Seale & Botma, 2015). One role as a nurse is being competent in QSEN competencies (Barnsteiner et al., 2013; Piscotty, Grobbel, & Abele, 2013). The future training will be pertinent for the new nurses due to their learning needs in knowledge and skills of evidence-based practice, quality improvement and informatics; and patient-centered care skills.

Orientation to learning. The fifth andragogy assumption focuses on an application in a life-centered, problem-centered or performance centered learning (Hagen & Park, 2016; Knowles et al., 2015).). Students learn new knowledge and skills to help them with current issues and problems (Hagen & Park, 2016; Spies, Seale & Botma, 2015). The current issues from this study are the statistically significant differences in the QSEN competency confidence level in knowledge and skills in evidence-based practice, quality improvement and informatics and in patient-centered care skills. The future training will include problem-centered and performance-centered learning strategies.

Motivation. The last andragogy assumption is motivation (Knowles et al., 2015). Selecting appropriate learning strategies and activity design can increase the individual's internal motivation (Nguyen, Miranda, Lapum, & Faith, 2016). Also, the quality of instruction plays an important role in the learner's motivation (Sogunro, 2017). Designing appropriate learning strategies, activity design and instruction will help match the learning needs of the learners.

Constructivism. Constructivism is a learning theory that is also centered on the learner. The educator is a facilitator to help students construct new knowledge from existing knowledge (Bada, 2015; Vygotsky, 1978). Learners retain knowledge when learning activities resemble real life situations (Bergman et al, 2013). Using a constructivism approach, Hsieh, Hsu, and Huang (2016) noted adding complicated nursing concepts after the students learned the basic nursing concepts helped improve evidence-based practice knowledge. Duane and Satre (2014) and Theobald, Windsor, and

Forster (2018) used collaborative learning activities, constructivist learning methods to enhance learning of nursing skills. Building knowledge from previous knowledge can increase the new nurse learning patient-centered care, evidence-based practice, quality improvement and informatics.

Bandura social cognitive theory. The Bandura social cognitive theory emphasizes observation, self-regulation, motivation and self-efficacy (Bandura, 1986). Nurse educators use the Bandura social cognitive theory to help student nurses and new nurses increase confidence and competence in clinical situations (Devi, Khandelwal, & Das, 2017; Van Horn & Christman, 2017). Devi et al. used the social cognitive theory as a framework for their study and noted that self-confidence increases when students are able to repeat behaviors. Van Horn and Christman noted self-efficacy and confidence increases after student obtains the knowledge and performing the skill.

The future participants rated their confidence low in knowledge and skills in evidence-based practice, quality improvement and informatics as well as skills in patient-centered care.

Learning Strategies

Incorporating innovative strategies into the curriculum engages the learner (Green, 2016; Hsieh, Hsu & Huang, 2016). Hagen and Park (2016) recommended to include various learning strategies for the self-directed learners. Also, providing learners an opportunity to select activities enhances self-direction and independence in learning

(Gewurtz et al., 2016). Green revamped nurse orientation with interactive activities and noted increase participation not only with the learner but also with the educators.

People learn differently so incorporating different strategies can meet the needs of the learner. Garwood (2015) used interactive strategies for nursing students and noted simulation as an effective strategy for adult learners (Garwood, 2015; Spies, Seale & Botma, 2015). Nguyen et al. (2016) incorporated art-based learning strategies, clinical situation role plays and drawings to teach three nursing concepts which enhanced student learning. Spector et al. (2015) included reflection journals into a new nursing orientation program. Collaborative learning activities such as group work and role playing enhances the participant's accountability and increase motivation (Duane & Satre, 2014; Sims, Hewitt & Harris, 2015). Using case studies has been found to enhance the learners' problem solving techniques (Theobald et al., 2018). The use of vignettes have also been shown to increase engagement and improve knowledge (Keen, Embree, Lancaster &Ellis, 2017). Including a various strategies in the developmental/training design for the new nurses is the plan.

Patient-Centered Care

The new nurses who participated in the residency program were confident in knowledge and attitudes, but not in skills related to patient-centered care (Table 4). Ehrenberg et al. (2016) noted confidence in patient-centered care skills increases over time. Previous researchers have also noticed that reflection and online compassionate modules help increase the compassion in patient-centered care (Percy & Richardson,

2018). Adam and Taylor (2014) used reflection exercises and classroom assignments to help students determine their own needs and challenges that prevented them to provide patient-centered care. With a tutor, the students developed an individual plan and focused on measurable goals when they encountered challenges (Adam & Taylor, 2014). Selecting appropriate patient-centered care skills for the new nurses will be included in the training program.

Evidence-Based Practice

Both, new registered nurses who attended the residency program plus a pre-licensure program and the new registered nurses who only attended the residency program rated self-confidence lowest (Table 6) in knowledge and skills for evidence-based practice. The low QSEN competency confidence level in knowledge and skills for evidence-based practice compares to previous studies that reported low nursing confidence and competence in graduating nursing students (Andre, Aune & Braend, 2016; Llasus, Angosta & Michele, 2014 & Ryan, 2016). Andre et al., Llasus et al., and Ryan noted low self-confidence in graduating nursing students when implementing evidence-based practice on clinical nursing units. Aglen (2016) noted nursing students struggle connecting evidence-based theory to clinical situations.

In previous research studies, educators used different strategies to help the learners understand evidence-based practice. Hsieh et al. (2016) used a constructive approach and innovative strategies to help students understand evidence-based practice. Aglen (2016) suggested to first focus and explain how evidence is used in practice

settings. Participating in an evidence-based projects help build knowledge and skills (Andre et al., 2016; Hsieh et al., 2016)). Hosking (2016) recommended to wait after 6 months to invite new nurses to participate in the evidence-based process. The new nurses had 5-6 months of RN experience at the time of study. The additional developmental training period for the future participants will occur after 6 months of RN experience.

Quality Improvement

The quality improvement self-confidence KSA mean were the lowest scores out of the six QSEN competencies for both groups. This was the only competency where mean scores did not reach a 6.00 on a 7.00-point scale (Table 7). Spiva et al (2013) interviewed new RNs who asked for more guidance and support in quality improvement. Suggestion to review quality improvement policies and procedures to prevent errors throughout the orientation period (Spiva et al., 2013). Maxwell and Wright (2016) studied the effectiveness of the IHI courses and IHI courses with a flipped classroom. The flipped classroom with the IHI courses were more effective than the IHI courses alone (Maxwell & Wright, 2016). Sullivan et al. (2015) used simulation exercises in a quality improvement project to enhance quality care in resuscitation. Selecting appropriate quality improvement knowledge and skill activities for the new nurses will be included in the training program.

Informatics

A statistical significant difference was noted in informatics knowledge and skills scores for the new nurses who participated in the residency only (Table 11). Bryant,

Whitehead, and Kelier (2016) noted that more than half of the nursing students they surveyed did not have an informatics course in the curriculum. Understanding how to integrate information sources in the healthcare setting helps provide quality care to patients (Forster, 2015; King, Patel, Jamoom & Furukawa, 2014; Wahoush & Banfield, 2014). Adding interactive informatics activities to the training is the plan.

The three theories, adult learning theory, constructivism and Bandura social cognitive theory, set the foundation of the PD project. Selecting innovative learning strategies correspond to the future PD participants who have a low confidence levels in the NQSSI skills in patient-centered care; and in knowledge and skills in evidence-based practice, quality improvement and informatics. Combining the three theories with learning strategies into the training project focuses on adult learning, building knowledge and building confidence to meet the learning needs of the future learners.

Project Description

The project, *Enhancing Knowledge and Skills, focusing on patient-centered care, quality improvement, evidence-based practice and informatics* includes three full days of training with different topics each day. The project is tailored to the new nurses who only attended the residency. The educator will be the facilitator throughout the three full days of training. The first hour of Day 1 includes introductions, reviewing the purpose, goal, agenda and learning outcomes of the program. Patient-centered care skills will be the topic for the rest of the morning and in the afternoon informatics will be the topic. The

topics for Day 2 include evidence-based practice in the morning and quality improvement in the afternoon. Day 3 will focus on simulations and evaluations.

The purpose of the training is to provide learning opportunities for the new nurses who only attended the residency to enhance their skills in patient-centered care; and to enhance their knowledge and skills in informatics, evidence-based practice and quality improvement. The project's goal is to increase the new nurses QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement. The learning outcomes will be measured in Day 3 during simulation and evaluations. The new nurse will have the knowledge and be able to provide appropriate patient-centered care skills to the simulated patient. The new nurse will have the knowledge and be able to provide the appropriate informatics, evidence-based practice and quality improvement skills in the simulated scenarios.

Needed Resources

Resources needed to implement the training plan on Day 1 and Day 2 include a classroom with movable chairs and tables for collaborative learning activities; and a computer classroom where learners can practice informatics and search for quality improvement and evidence-based protocols. Also, a lap top, projector and screen are resources needed to view power point presentations and case studies. Paper, pens and markers are also needed for reflection exercises and for art- based learning strategies. Day 3 resources include simulation rooms that mimic patient rooms with a manikin,

patient bed, bedside table, intravenous (IV) bag and IV pole, chest tube, and a computer. A simulation room with a camera to film interactions is preferred. A classroom is needed to prebrief and debrief each simulated scenario. Other resources needed for Day 3 include paper and pens to complete evaluations. Most importantly, additional nurse educators are needed to assist with collaborative learning and simulated activities.

Existing Supports

The main support is the local health care facility is committed to quality and safety; and is proactive in implementing safety initiatives (Vice President of Education, personal communication, May 22, 2017). In 2008, the local health care facility joined 4000 hospitals and committed themselves to the Institute for Healthcare Improvement 5 Million Lives Campaign (Berwick, 2014; Institute for Healthcare Improvement [IHI], 2017). Nursing administration, nurse directors and nurse educators are all supportive in safety initiatives and the 3 Day training incorporates safety through the QSEN competencies of patient-centered care, informatics, evidence-based practice and quality improvement. The healthcare facility has a central education department with classrooms and simulation rooms. Each new nurse has an assigned educator that follows-up on the nursing unit.

Potential Barriers

The main potential barrier is the new nurses' schedules. Currently, the new nurses work three 12 hour shifts during the day or during the night on weekdays and weekends. The schedule makes it hard to attend three days of training in one week. Another barrier

includes classroom availability. Even though the central education department has classrooms, the classrooms may not be available due to other scheduled classes and meetings.

Potential Solutions to Barriers

A potential solution to the nurses' schedules is to offer one class per week and not three days in a row. Also, notifying the nurse director and new nurses via email one month in advance so they can ensure the new nurse is off on the training days. Booking the classrooms and the simulation rooms in advance is another solution for classroom availability.

Implementation Process

The implementation plan corresponds to the selected learning theories and learning strategies as discussed in the literature review. The design includes multiple of learning strategies that fit self-directed adult learners. A detailed outline, components, activities, notes, and specific details are listed in each daily training section.

Day 1 training. The day 1 training plan (Appendix A) includes the specific details of the day. The first training day begins with a welcome and introductions including acknowledging the new nurses' experience and the reason why training is taking place. The participant will identify the purpose, goal and learning outcomes of the 3-day training and the agenda for the first day. The learners will participate in an icebreaker activity to interact with other participants and create learning groups. After the ice breaker, the educator will give the daily workbook to the participants.

Patient-centered care skills. Patient-centered care skills centers on the patient's values, culture and background (Blazeck et al., 2016; Ehrenberg et al., 2016). This section allows the learners to reflect, discuss scenarios with their learning group, and compares as well as contrasts patient-centered care clinical situations (Appendix A). The group selects one patient-centered care clinical situation to present to the class. The class will then formulate solutions on how to make the clinical situation more patient centered. The goal for this session is to have the new nurse gain confidence in at least two patient-centered care skills.

Informatics knowledge. Understanding the different types of information and technology used in clinical situations is necessary to provide quality care (Wahoush & Banfield, 2014: King, Patel, Jamoom & Furukawa, 2014). However, not all nursing schools have an informatics course (Bryant, Whitehead, & Kelier,2016). Informatics is used for healthcare communication and technology to support safe care. In this section, the learner defines the different types of information and technology used in a clinical situation such as the electronic health record, technology to communicate with other healthcare professionals, electronic medication record and patient care equipment (Appendix A). The learner will then list the different types of information and technology used on their patient care unit.

Informatics skills. Practicing the informatics skills is the focus of this section. The learner refers to the information and technology list from the previous section and ranks the confidence level for each information and technology skill. After, the

participants will practice the low ranking informatics skills in the lab areas with the learning group members critiquing technique. The goal of this section is to have the participant gain confidence in informatics knowledge and skills.

The first day ends with a wrap-up and evaluation. The participant will have the opportunity to ask questions and complete the daily evaluation (Appendix A). The daily evaluation contains evaluation questions related to the curriculum, learning strategies and instructors.

Day 2 training. The day 2 training plan (Appendix A) includes the specific details of the day. Day 2 focuses on evidence-based practice knowledge and skills in the morning. In the afternoon, informatics knowledge and skills is the focus.

Evidence-based practice knowledge. Evidence-based practice creates practice guidelines (Mackey & Bassendowski, 2017). In this section, the learners define how evidence-based practice is incorporated into clinical practice (Appendix A). After reflecting, the learners select three practice guidelines used in patient care. The learners will then add the importance of the selected practice guideline in the designated column of the workbook. Reflection, self- assessment, PowerPoint presentation and the workbook are strategies used to help the participant understand the evidence-based practice process.

Evidence-based practice skills. Searching for evidence-based literature that correlate with the nurse practice guidelines for clinical skills is the focus of this section (Appendix A). The learner with the learning group will use nursing databases, google

scholar and key words to search for the evidence-based literature. The group will present findings to the class and will discuss how the evidence-based findings can connect to other clinical situations. The goal of this section is to have each participant gain confidence in evidence-based practice knowledge and skills.

Quality improvement knowledge. Quality improvement is necessary to assess quality of care and change system's processes (Balakas & Smith, 2016). In this section, the learners define the quality improvement process in clinical practice and list quality improvement topics for the individual clinical units (Appendix A). The participants will rank their quality improvement process confidence level.

Quality improvement skills. Learning how to improve care by using the Plan-Do-Study-Act (PDSA) method is the focus of this section. First, the group members brainstorm on quality improvement topics related to clinical practice. The group members select one topic to work on to create a PDSA. The group will then present the PDSA to the class and discuss how the change process can be implemented on other clinical units. The goal of this section is to have each participant gain confidence in quality improvement knowledge and skills (Appendix A).

The second day ends the same as day one with a wrap-up and evaluation. The participant will have the opportunity to ask questions and complete the daily evaluation (Appendix A). The daily evaluation contains evaluation questions related to the curriculum, learning strategies and instructors.

Day 3 training. The day 3 training plan (Appendix A) includes the specific details of the day. Day 3 focuses on simulations based on patient-centered care, informatics, evidence-based practice and quality improvement. The four 1 hour and 30 minute simulations will run simultaneously. The goal is for the participant to integrate the learning from Day 1 and Day 2 to care for the simulated patient and simulated clinical situation.

Simulation is an interactive effective strategy for adult learners (Garwood, 2015; Spies, Seale & Botma, 2015). The plan is to have the learning group members work together and encounter the simulation at the same time. The learning group members will alternate the role of the lead nurse for the different simulations. If there are four learning group members in a group, each one will be assigned to be the lead nurse in one of the four simulations. The group members will have opportunity to prebrief to discuss a plan before entering the simulation and debrief to evaluate the simulation.

Patient-centered care simulation. The first simulation focuses on providing appropriate patient-centered care for a simulated patient (Appendix A). For the first 30 minutes, the learners will read the initial report, decide roles and review previous Day 1 workshop notes. One learner will be the lead nurse, and the other learners will be a staff nurse, patient and patient's daughter. The main setting of this simulation is in a patient room. During the simulation, one educator will be watching the video in live action. The educator will tag the video for questionable actions to discuss during the debriefing. During debriefing, the educator will ask the learners what went well and what did not go

so well. The learners will also review the videotape to critique the actions made during the simulation. The goal is to have the participant rate patient-centered care confidence higher after caring for simulated patient.

Informatics simulation. The second simulation focuses on providing appropriate informatics skills for the simulated situation (Appendix A). For the first 30 minutes, the learners will read the initial clinical situation report, decide roles and review previous Day 1 workshop notes. One learner will be the lead charge nurse, and the other learners will be staff nurses. The setting of this simulation is the nursing unit. During the simulation, one educator will be watching the video in live action. The educator will tag the video for questionable actions to discuss during the debriefing. During debriefing, the educator will ask the learners what went well and what did not go so well. The learners will also review the videotape to critique the actions made during the simulation. The goal is to have the participant rate informatics skills confidence higher after the participating in the simulated situation

Evidence-based simulation. The third simulation focuses on providing appropriate evidence-based practice for the simulated situation (Appendix A). For the first 30 minutes, the learners will read the initial clinical situation report, decide roles and review previous Day 2 workshop notes. One learner will be the lead nurse, and the other learners will be staff nurses from the same nursing unit. The simulation setting is at a hospital unit meeting. One educator will be watching the video in live time and will tag questionable actions to discuss during the debriefing. During debriefing, the educator will

ask the learners what went well and what did not go so well. The learners will also review the videotape to critique the actions made during the simulation. The goal is to have participant rate evidence-based practice confidence higher after the simulated situation

Quality improvement simulation. The fourth simulation focuses on providing appropriate quality improvement for the simulated situation (Appendix A). For the first 30 minutes, the learners will read the initial clinical situation report, decide roles and review previous Day 2 quality improvement notes. One learner will be the lead nurse, and the other learners will be staff nurses attending a quality improvement hospital meeting. An educator will be watching the video in live time and will tag questionable actions to discuss at the debriefing. During debriefing, the educator will ask the learners what went well and what did not go so well. The learners will also review the videotape to critique the actions made during the simulation.

The entire implementation process complements the adult learner. The learning strategies correspond to the adult learning theory, constructivism and Bandura social cognitive theory. Combining the three theories with multiple interactive learning strategies into the training project helps determine if the new nurse who only attended the residency increases knowledge, skills and confidence in patient-centered care, informatics, evidence-based practice and quality improvement.

Project Evaluation Plan

The 3-day project entails a learner-centered approach with formative, summative and outcome-based evaluation, Outcome-based evaluation emphasizes on a performance

based measurement which includes the knowledge, skills and attitudes of the learner (Cant & Cooper, 2017; Tan, Chong, Subramaniam & Wong, 2018). Cant and Cooper used this method to measure learners' confidence and competency using simulation. Tan et al. measured outcome-based education and noted the impact on the learners' competencies. The project outcomes are measured in Day 3 during simulation and evaluations (Appendix A) focusing on providing appropriate patient-centered care skills to the simulated patient and providing appropriate informatics, evidence-based practice and quality improvement skills in the simulated scenarios.

The training plan includes evaluation goals for each objective (Appendix A) which measures the formative evaluation. Measuring confidence before the class activity and after the class activity helps determine if the evaluation goal is met. Class activities include group work, role plays, workbook exercises, reflections and self-assessments. The overall summative evaluation determines if the new nurse increases confidence in patient-centered care skills; and increased confidence in knowledge and skills relating to evidence-based practice, quality improvement and informatics at the end of the 3-day training (Appendix A) .

The training plan also includes an evaluation for the daily training and the overall training (Appendix A). The two main areas that are evaluated include the curriculum and the instructor which are measured by a likert scale. Also, two additional open-ended questions are asked to obtain information on what was the most beneficial and least beneficial for the learner.

The four main stakeholders that will be affected by the 3-day PD training include the new nurse, the patient, the hospital and the community. The new nurse is the learner and the aim is to affect their confidence level in patient-centered care skills; and confidence level in knowledge and skills relating to evidence-based practice, quality improvement and informatics. A confident and competent nurse tends to stay working in the hospital system which provides continuity in care, consistency in nursing care and better patient outcomes (Laschinger & Fida, 2014) which affects the patient, hospital and community. The patient is a stakeholder who expects quality of care at all times (AACN, 2014b; Crayaon et al., 2013). The confidence and competence that the learner gains from the 3-day training affects the quality of care provided to patients. Hospitals with confident and competent nurses have fewer adverse outcomes (AACN, 2014a; Laschinger & Fida, 2014; Laschinger, Borgogni, Consiglio, & Read, 2015). The positive patient outcomes affect the community due to being more cost effective since the patient spends less time in the hospital (Kovner et al., 2016). Hospitals routinely measure patient satisfaction, adverse outcomes and cost effectiveness (Medicare.gov, 2017). The plan is to refer to the routine measures to determine the training impact on the stakeholders.

Project Implications

Hospitals with structured orientation programs have new nurses with higher competence levels (Spector et al., 2015; Silvestre, Ulrich, Johnson, Spector & Blegen, 2017) which impact nurse confidence and motivation (CCNE, 2015; Masters, 2016; Moscato et al., 2013). The 3-day PD program provides additional resources for the new

nurses. The new nurses attending the training will increase confidence in QSEN competencies. The new nurse confidence level will positively impact patient care by having shorter hospital stays (AACN, 2014b). Patients will then be satisfied with their hospital stay and report a higher satisfaction to hospital surveys and regulatory agencies (Kovner et al., 2016). The positive patient outcomes are cost effective for the community since the patient spends less time in the hospital (Kovner et al., 2016).

Together, the RN confidence level, QSEN competencies, and healthcare facility resources promote social change locally and globally. Focusing on the QSEN competencies has been labeled as a global initiative (Melnky et al., 2014). Providing safe quality care to all patients does not stop locally. Sherwood (2016) indicates that the QSEN global initiative extends to Sweden, Spain, United Kingdom, Finland, Japan, France, China, and Thailand. Also, researchers from around the world continue to study nurse self-confidence and self-efficacy (Hsu, Chang, & Hsieh, 2015; Kajander-Unkuri et al, 2014; Laschinger et al., 2015; Phillips, Esterman & Kenny, 2015). The 3-day training project is an additional resource to promote social change not only locally, but also globally.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The 3-day training project has both strengths and limitations. Project strengths include the learner centered approach and selected learning strategies. Project limitations include the time constraints, funding and instructor availability.

Project Strengths

Learner-centered approach. The learner-centered approach enhances the professional development of a new nurse (Curran, 2014). Incorporating the three theories: adult learning theory, Bandura social cognitive theory, and constructivism as the foundation for the PD project centers on the learner. The project embeds all of the andragory principles into the training and the learner uses existing knowledge to help construct new knowledge. The 3-day training tailors to the learners' needs which benefits the learner and healthcare organization. The learner-centered approach is a project strength.

Learning strategies. Multiple learning strategies engage learners (Green, 2016; Hagen & Park, 2016; Hsieh, Hsu & Huang, 2016). The training project includes self-assessments, reflection exercises, group work, and simulations. The self-assessments helps the learner to rate specific needs regarding patient-centered care, informatics, evidence-based practice, and quality improvement. Reflection exercises helps the learners remember experiences to help build new knowledge (Hagen & Park, 2016). Learners' accountability and motivation increase with group activities, role playing, and simulation

(Duane & Satre, 2014; Sims, Hewitt, & Harris, 2015). Having multiple learning strategies is a plus for the learners.

Project Limitations

Time constraints. Coventry, Maslin-Prothero, and Smith (2015) identified time constraints for nurses attending continuing development education. Time constraints include limited time, lack of time and unable to leave the hospital unit due to nurse shortage (Coventry et al., 2015). The new nurses work day shift or night shift and may have limited time for an 8-hour training session. Also, there may be not a sufficient number of nurses on hospital unit for the new nurse to leave for an education session.

Funding. Budget constraints can limit number of learners attending the training. D'Addona, Pinto, Oliver, Turcotte, and Lavoie-Tremblay (2015) noted that nurse leaders identified budget constraint as the biggest challenge to send nurses to training. Even though nurse directors have a hospital unit budget, the juggle is paying for productive hours versus nonproductive hours (Waxman & Massarweh, 2018). The learner may have limited training nonproductive hours.

Instructor availability. The 3-day training includes simulations which require additional nurse educators. Best practices for simulation include educators as facilitators during the prebriefing, simulation and during the debriefing (Sittner, Aebersold, Paige, Graham, & Schram, 2015). Four simulations will run simultaneously so four educators are needed at the same time. Also, nurse educators may not be available due to training on unit and teaching other classes.

Recommendations for Alternative Approaches

The planned PD program is limited to one time and for three days. Instead of a PD workshop, another option includes a 9-week curriculum plan. The 9-week plan could extend the current residency program. Extended residencies increase the confidence and competence of the nurse (Goode, 2016). There are different ways to provide learning opportunities for the new nurses who only attended the residency to enhance their skills in patient-centered care; and to enhance their knowledge and skills in informatics, evidence-based practice and quality improvement. Alternative approaches to the 3-day developmental training include online sessions, blended sessions, and monthly education sessions.

Online Sessions

Incorporating online sessions instead of the current training plan tailors to the adult learner. Online learning is an effective option to meet learning outcomes for professional development (Nguyen, 2015; Sinclair, Kable, Levett-Jones & Booth, 2016). Liaw et al. (2015) noted that online sessions, online quizzes and web based simulations were an effective method for acute care nurses. Lahti, Kontio, Pitkanen, and Valimaki (2014) e-learning course had positive results impacting the nurses' daily practice. Moorley and Chinn (2014) used informal online approaches such as twitter, Facebook, YouTube and blogs for professional development of nurses and nurse midwifes. Implementing formal and informal online approaches may be beneficial for the new nurse who only attended the residency.

The advantages using e-learning outweigh the disadvantages. Chang (2016) noted advantages for the student, instructor and organization. The student can self-pace a schedule and complete training in an area that is comfortable for the learner. The instructor does not have to travel to class and can teach in from different locations. Also, the organization can saves cost up to 40-60% (Chang, 2016). Savings include the cost of classrooms, supplies, materials and for the additional educators.

Blended Sessions

Another alternative solution to help the new nurses who only attended the residency program are blended or hybrid sessions which provides the learner both in-class and online education. Phoenix-Bittner, Gravlin, MacDonald, and Bourgeois (2017) implemented online activities and live simulation into a nursing orientation program and noted an increase in the nurses' confidence level and patient outcomes. However, other studies noted that blended courses did not positively impact the learner (River, Currie, Crawford, Betihavas, & Randall, 2016). Guzer and Caner (2014) suggested to carefully plan the face to face contact to enhance the communication, collaboration and social interaction of students (Guzer & Caner, 2014). Using a blended hybrid approach is an alternative solution for the 3-day training but must be used cautiously.

Monthly Education Sessions

Another alternative approach is offering monthly education sessions to the new nurses who only attended the residency. Instead of incorporating all the material during the 3-day training, the material would be separated by topic. Using monthly education

sessions with adult learning strategies help build professional development in knowledge and practice (Zepeda, Parylo, & Bengtson, 2014). The alternative solution is to have patient-centered care topics during one month, and then schedule informatics, evidence-based practice and quality improvement sessions during other months.

The online, blended, and monthly education sessions provide three alternative approaches to the 3-day developmental training. The alternative approaches help eliminate the problem in having only one training option for the new nurses who are unable to attend and participate in the training. The alternative solutions help the new nurses who only attended the residency program to gain skills in patient-centered care; and to enhance knowledge and skills in informatics, evidence-based practice and quality improvement.

Scholarship, Project Development and Evaluation, Leadership and Change

An abundance of learning occurred during the entire doctoral study project process. Throughout the process, I grew as an educator practitioner, scholar and project developer. Also, my leadership skills as well as focusing on change enhanced during this process.

Scholarship

Scholarship is a vital piece in research and in developing projects. During the research process and developing the project, I encountered two of Boyer's (1990) four scholarship categories of discovery, teaching, integration and application. Finding the gap in practice of not knowing the QSEN competency confidence level of the new nurses

initiated the scholarship of discovery. Once when the discovery was made, I felt challenged and committed to complete the study. My feelings were no different than other beginner researchers as Clearly, Sayers and Watson (2016) noted that the research process is challenging and requires a commitment. After I discovered a statistically significant difference in seven NQSSI items, I realized that my study could make a difference in the nursing profession.

The results of my study helped me develop the 3-day training program which initiated the scholarship of teaching. Scholarship of teaching includes, but not limited to, new training programs, innovative learning strategies, simulations and evaluation techniques (Oermann, 2017). The 3-day training program is original with measurable goals, interactive learning strategies, and evaluation methods. I did not specifically encounter the scholarship of integration and scholarship of application but I plan on sharing the 3-day training program and the alternative approaches with the healthcare facility.

Project Development and Evaluation

Developing the project took time and patience. At first I didn't understand why I needed a second review of literature, but then realized the second review of literature was needed to develop the professional development project. The second review of literature focused on learning theories, learning strategies, patient-centered care, informatics, evidence-based practice and quality improvement. I also learned that evaluation starts with the planning of the project. I selected outcome-based evaluation because it

emphasized on a performance based measurement which includes the knowledge, skills and attitudes of the learner (Cant & Cooper, 2017; Tan et al., 2018). I carefully planned the activities based on the plan. Also, I included interactive learning strategies into the project because innovative strategies engages the learner (Green, 2016; Hsieh, Hsu, & Huang, 2016).

I enjoyed developing the 3-day training program to help educate the new nurses who only attended the residency. I believe that my interactive workbook, learning strategies, and simulations will help the new nurse gain confidence in patient-centered care, informatics, evidence-based practice and quality improvement. I also hope to share my detailed training plan and power point speaker notes with nurse educators who teach new nurses. My self-growth as an educator and project developer exceeded my expectations. I did not realize how much I would learn by creating a project from my study results.

Leadership and Change

A leader is a catalyst for change and transformation (Nelson-Brantley & Ford, 2016). As a leader, I identified the gap in practice, met with the healthcare facility, contacted Dr. Piscotty to obtain permission to use the study instrument, implemented my study, analyzed the results and created a project. I understand the need to transform and educate the new nurses who only attended the residency on patient-centered care, informatics, evidence-based practice and quality improvement. I also learned that transforming the new nurses locally is only the beginning. Being a leader is extending

what you learn and expand your knowledge to others to promote social change locally and globally. Because the QSEN competencies has been labeled as a global initiative (Melnky et al., 2014), my plan is to present my study results to other nurse educators at local, national and global nurse education conferences.

Reflection on Importance of the Work

The work I accomplished studying QSEN competencies will not only help future nurses entering the field but will also benefit healthcare agencies and stakeholders. Studying the two groups of nurses helped identify that the new nurses who participated in the prelicensure program and residency program had a higher QSEN competency confidence levels than the nurses who only participated in the residency program. My work helped identify the difference that one group had a benefit over the other group in patient-centered care, informatics, evidence-based practice and quality improvement. Because of this difference, additional resources were created to help the new nurse who only attended the residency. Creating the 3-day training packet can help the healthcare agency educate the new nurses on patient-centered care, informatics, evidence-based practice and quality improvement. The hope is that the QSEN confidence level of the new nurses who only attended the residency will increase after participating in the 3-day training.

I learned that research does not end with the initial study results. The educator must analyze the results, create a project tailored to the specific group, and evaluate the project. In my case, the new nurses who only attended the residency required additional

training in patient-centered care, informatics, evidence-based practice and quality improvement. Evaluating the training project is necessary to determine the effectiveness of the training. In addition to the daily formative evaluation, the plan is to use summative and outcome-based evaluation emphasizing on performance-based measurement, knowledge, skills, and attitudes of the learner. If the nurses' QSEN competency confidence level does not increase, then I would reassess and adjust the training as needed.

Implications, Applications, and Directions for Future Research

The research study and 3-day developmental project has the potential to positively impact new nurses, patients, health care facility and community. Recognizing the differences in the level of QSEN competency confidence level between the two groups of nurses led to the creation of the 3-day PD program. The new registered nurses who only attended the residency program were less confident in the QSEN competencies than the new registered nurses who attended the residency program plus a prelicensure program. Nurses need to be confident in QSEN competencies to care for the patients effectively. Moscata et al. (2013) noted the confidence and competence levels of the new nurse increases when hospitals have multiple educational trainings and resources. Additional resources such as the 3-day training program can impact the new nurse confidence level to care for patients. The increase QSEN competency confidence level impact and affects a positive social change in the new nurse, patient, healthcare facility and community.

Local nursing schools and hospitals have a role in cultivating social change by offering additional educational resources and programs to enhance the confidence of the new nurse. This can be applied to other healthcare agencies, nursing schools, new nurses and senior nursing students by adding extended residencies and academic-practice partnerships. Goode (2016) noted that most hospitals develop their own residency programs instead of having a 12-month accredited residency program from the ANCC or the National League of Nursing. Even though structured orientation programs impact new nurses' competence, confidence and motivation levels (CCNE, 2015; Moscato et al., 2013; Spector et al., 2015; Silvestre et al., 2017), extended accredited residencies increase the confidence and competence of the nurse (Goode, 2016).

Academic-practice partnerships are another option that could be considered by other healthcare facilities and nursing schools to impact social change. The new registered nurses who attended the residency program plus a prelicensure program had greater QSEN confidence level than the new nurses who only attended the residency. The prelicensure programs were paid or nonpaid programs that are offered by the hospital alone or with the hospital partnering with a nursing school. Prelicensure programs help enhance professional satisfaction, confidence, and competence (Dapremont & Shirleatha, 2013; Friday et al., 2015). Stout et al. (2015) partnered with a local nursing university and created a nursing student internship that positively impacted new nurse competencies, employee satisfaction and healthcare organization cost. Academic-practice

partnerships are not only effective for nursing student and new nurse, but also for patient and hospital (Trepanier et al., 2017).

The current quasiexperimental quantitative study with posttest study was limited to one cohort with 68 participants. Including additional new nurse cohorts from other healthcare facilities could increase the sample size and impact the accuracy of the study. Also, adding variables such as the type of residency, type of prelicensure program and type of nursing program (Bachelors or Associate degrees), could help increase the reliability and validity of the results.

Future research related to QSEN competency confidence levels should be considered. The current project study was limited to one cohort so additional quasi-experimental quantitative studies with posttest only design should be conducted on other new nurse cohorts. Also, longitudinal studies can determine the new nurse QSEN competency confidence levels over a period of time such as a two-year period. Qualitative studies can receive the new nurse perceptions on confidence levels related to QSEN competencies. Analyzing the effectiveness of new developed training and how it impacts the new nurse QSEN competency confidence level should also be considered.

Conclusion

Nursing schools, hospital administrators, stakeholders and patients strive for a new nurse who is confident and competent. The results of the project study demonstrated that new nurses who attended a residency program plus a paid or nonpaid hospital prelicensure program had higher QSEN competency confidence levels than new nurses

who only attended a residency. Finding the right educational resource to enhance the QSEN competency confidence level of the new nurse is a necessity. The educational resources may include professional development training and additional hospital prelicensure programs. Not all new nurses have the opportunity to participate in a hospital prelicensure program and a residency so offering additional professional development training may increase the new nurse QSEN confidence level. Also, tailoring the training to the specific needs of the new nurses and using interactive strategies is essential to enhance learning. In addition to professional development training, offering additional hospital prelicensure programs may be beneficial for all stakeholders. In this study, new nurses who participated in the prelicensure program plus the residency showed more confidence signifying that the prelicensure programs created by the local hospital or hospital and local nursing schools are helping senior nursing students become new nurses with confidence. Both nursing schools and healthcare agencies are committed to safe quality care. However, hospitals and nursing schools need to make a choice, and the essential decision is to determine the best educational resources for senior nursing students and new nurses.

References

Adam, D. & Taylor, R. (2014). Compassionate care: Empowering students through nurse education. *Nurse Education Today 34*, 1242-1245. doi:10.1016/j.nedt.2013.07.011

Aglen, B. (2016). Pedagogical strategies to teach bachelor students evidence-based practice: A systematic review. *Nurse Education Today 36*, 255-263. doi: https://doi.org/10.1016/j.nedt.2015.08.025

American Association of Colleges of Nursing. (2014a). *Nursing shortage: Current and projected shortage indicators.* Retrieved from http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage

American Association of Colleges of Nursing. (2014b). *The essentials of baccalaureate education for professional nursing practice.* Retrieved from http://www.aacn.nche.edu/education-resources/essential-series

American Association of Colleges of Nursing. (2017). Quality & Safety Education for Nurses (QSEN). Retrieved from www.aacn.nche.edu/qsen/home

Andre, B., Aune, A. G., & Braend, J. A. (2016). Embedding evidence-based practice among nursing undergraduates: Results from a pilot study. *Nurse Education in Practice 18*, 30-35. doi:10.1016/j.nepr.2016.03.004

Awaisi, H. A., Cooke, H., & Pryjmachuk, S. (2015). The experiences of newly graduated Nurses during their first year of practice in the Sultanate of Oman- A case study. I

International Journal of Nursing Studies, 52, 1723-1734. doi:10.1016/j.ijnurstu.2015.06.009

Bada, S. O. (2015). Constructivism learning theory: A paradigm for teaching and learning. *IOSR Journal of Research & Method in Education 5*(6) 66-70. doi: 10.9790/7388-05616670

Balakas, K, & Smith. J. (2016). Evidence-based practice and quality improvement in nursing education. *Journal of Perinatal & Neonatal Nursing 30*(3), 191-194. doi:10-1097/JPN.0000000000000197

Bandura, A. (1986). *Social foundations of thought and action: A social cognitivist theory*. Needham Heights, MA: Allyn & Bacon.

Barnsteiner, J., Disch, J., Johnson, J, McGuinn, K., Chappell, K., & Swartwout, E.(2013). Diffusing QSEN competencies across schools of nursing: The AACN/RWJF faculty development institutes. *Journal of Profession Nursing 29*(2) 68-74. doi:10.1016/j.profnurs.2012.12.003

Bergman, E. M., Sieben, J. M., Smailbegovic, L., De Bruin, A. B., Scherpbier, A. J., & Van Der Vleuten, C. P. (2013). Constructive, collaborative, contextual, and self-directed learning in surface anatomy education. *Anatomical Sciences Education 6*(2) 114-124. doi:10.1002/ase.1306

Berwick, D. M. (2014). Some is not a number, soon is not a time. *Promising care: how we can rescue health care by improving it* (pp. 25-45) San Francisco, CA: Jossey-Bass.

Blazeck, A. M., Katrancha, E., Drahnak, D., Sowko, L. A., & Faett, B. (2016). Using interactive video-based teaching to improve nursing students' ability to provide patient-centered discharge teaching. *Journal of Nursing Education 55*(5), 296-299. doi:10.3928/01484834-20160414-11

Bryant, L., Whitehead, D., & Kelier, J. (2016). Development and testing an instrument to measure informatics knowledge, skills, and attitudes among entry-level nursing students. *Online Journal of Nursing Informatics 20*(2). Retrieved from https://search.proquest.com/openview/b9ae228095f2799e4b3269cd4962d56d/1?pq-origsite=gscholar&cbl=2034896

Boyer, E. L. (1990). *Scholarship reconsidered: priorities of the professionals.* John Wiley & Sons, New York, NY

Cant, R. P. & Cooper, S. J. (2017). Use of simulation-based learning in undergraduate nurse education: An umbrella systematic review. *Nurse Education Today 49*, 63-71. doi: 10.1016/j.nedt.2016.11.015

Chang, V. (2016). Review and discussion: e-learning for academia and industry. *International Journal of Information Management 36,* 476-485. doi:10.1016/j.ijinfomgt.2015.12.007

Clipper, B. & Cherry, B. (2015). Preceptors to support new nurse transition. *Thorofare 46*(10) 448-454. doi: 10.3928/00220124-20150918-02

Crayaon, P., Wetterneck,T. B., Rivera-Rodriguez, A. J., Hundt A. S., Hoonakker, P., Holden, R. & Gurses, A. P. (2013). Human factors system approach to healthcare

quality and patient safety. *Applied Eronomics 45*(1) 14-25. doi: 10.1016/j. apergo.2013.04.023

Commission on Collegiate Nursing Education. (2015). *Standards for accreditation of entry-to-practice nurse residency programs.* Retrieved from http://www.aacn .nche.edu/ccne-accreditation/CCNE-Entry-to-Practice-Residency-Standards-2015.pdf

Coventry, T. H., Maslin-Prothero, S. E. & Smith, G. (2015). Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: an integrative review. *Journal of Advanced Nursing 71*(12), 2715-2727. doi:10.1111/jan.12724

Cranford, J. S. & Bates, T. (2015). Infusing interprofessional education into the nursing curriculum. Nurse Educator 40(1) 16-20. doi: 10.1097/NNE.0000000000000077

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education, Inc.

Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook 55*(3) 122-131. doi:10.1016/j.outlook.2007.02.006

Curran, M. K. (2014). Examination of the teaching styles of nursing professional development specialists, part I: Best practices in adult learning theory, curriculum

development, and knowledge transfer. *Journal of Continuing Education in Nursing 45*(5) 233-240. doi: 10.3928/00220124-20140417-04

D'Addona, M., Pinto, J., Oliver, C, Turcotte, S. & Lavoie-Tremblay, M. (2015). Nursing leaders' perceptions of a transition support program for new nurse graduates. *The Health Care Manager 34*(1) 14-22. doi: 10.1097/HCM.0000000000000043

Dapremont, J. & Shirleatha, L. (2013). Partnering to educate: Dedicated education units. *Nurse Education in Practice* 13. 335-337. doi:10.1016/j.nepr 2013.02.015

Devi, B., Khandelwal, B. & Das, M. (2017). Application of bandura's social cognitive theory tin the technology enhanced, blended learning. *International Journal of Applied Research 3*(1) 721-724. doi: http://www.allresearchjournal.com/ archives/2017/vol3issue1/PartJ/3-1-145-668.pdf

Duane, B. T. & Satre, M. E. (2014). Utilizing constructivism learning theory in collaborative testing as a creative strategy to promote essential nursing skills. *Nurse Education Today 34*, 31-34. doi: 10.1016/j.nedt.2013.03.005

Duchscher, J.B. (2008). A process of becoming: the stages of new nursing graduate professional role transition. *Journal of Continuing Education in Nursing 39*(10) 441-452. doi: 10.3928/00330124-20081001-03

Duchscher, J. E. (2009).Transition shock: the initial stage of role adaptation for newly graduated registered nurses. *Journal of Advanced Nursing 65*(5) 1103-1113. doi: 10.1111/j.1365-2648.2008.04898.x

Edwards, D., Hawker, C., Carrier, J. & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies 52*(7) 1254-1268. doi: 10.1016/j.ijnurstu.2015.03.007

Ehrenberg, A., Gustavsson, P., Wallen, L.M., Bostrom, A. & Rudman, A. (2016). New graduate nurses' developmental trajectories for capability beliefs concerning core competencies for healthcare professionals: A national cohort study on patient-centered care, teamwork and evidence-based practice. *Worldviews on Evidence Based Nursing 13*(6) 454-462. doi: 10.1111/wvn.12178

Forster, M. (2015). Six ways of experiencing information literacy in nursing: The findings of a phenomenographic study. *Nurse Education 35,* 195-200. doi:10.1016/j.nedt.2014.06.005

Forneris, S. G., Crownover, J, Dorsey, L., Leahy, N, Mass, N…Zavertnik, J. (2012) Supplemental materials for integrating QSEN and ACES: An NLN simulation leader initiative. *Nursing Education Perspectives 33*(3) 1-46.

Franklin, A. E., Burns P., & Lee, C. S. (2014). Psychometric testing on NLN student satisfaction and self-confidence in learning, simulation design scale, and educational practices questionnaire using a sample of pre-licensure novice nurses. *Nurse Education Today 34*, 1298-1304. doi: 10.1016/j.nedt.2014.06.011

Friday, L., Zoller, J. S., Hollerback, A. D., Jones, K. & Knofczynski, G. (2015). The

effects of a prelicensure extern program and nurse residency program on new graduate outcomes and retention. *Journal of Nurses in Professional Development 31(*3) 151-157. doi: 10.1097/NND.0000000000000158

Garwood, J. K. (2015). Millennial students preferred methods for learning concepts in psychiatric nursing. *Journal of Psychosocial Nursing 53*(9) 38-43. doi: 10.3928/02793695-20150728-06

Goode, C. J., Ponte, P. R., & Havens, D. S. (2016). Residency for transition into practice: An essential requirement for new graduates from basic RN programs. *The Journal of Nursing Administration 46*(2) 82-86. doi:10.1097/NNA.000 0000000000.300

Greene, V. B. (2016). ENGAGE: A different new nurse orientation program. *The Journal of Continuing Education in Nursing 47*(1) 32-36. doi: 10.3928/00220124-20151230-09

Guzer, B. & Caner, H. (2014). The past, present and future of blended learning: an in depth analysis of literature. *Procedia-Social and Behavioral Sciences* 116, 4596-4603. doi: 10.1016/j.sbspro.2014.01.992

Hagen, M. & Park, S. (2016). We knew it all along! Using cognitive science to explain how andragogy works. *European Journal of Training and Development 40*(3) 171-190. doi: 10.1108/EJTD-10-2015-0081

Heine, H. (2014). G*Power: Statistical power analyses for Windows and Mac. Retrieved from htpp://www.gpower.hhu.de/en.htm

Hosking, J., Knox, K., Forman, J., Montgomery, L. A., Valde, J. G., & Cullen, L. (2016). Evidence into practice: leading new graduate nurses to evidence-based practice through a nurse residency program. *Journal of PeriAnesthesia Nursing 31*(3) 260-265. doi: 10.1016/j.jopan.2016.02.006

Hsieh, S. Hsu, L, & Huang, T. (2016). The effect of integrating constructivist and evidence-based practice on baccalaureate nursing students' cognitive load and learning performance in a research course. *Nursing Education Today 42*, 1-8. doi: 10.1016/j.nedt.2016.03.025

Hsu, L., Chang, W. & Hsieh, S. (2015). The effects of scenario-based simulation course training on nurses' communication competence and self-efficacy: A randomized controlled trail. *Journal of Professional Nursing 31*(1) 37-49. doi:10.1016/j.profnurs.2014.05.007

Institute of Healthcare Improvement (2017). Protecting 5 million lives from harm. Retrieved from www.ihi.org/engage/initiatives/completed/5MillionLives Campaign/Pages/defaulty.aspx

James, D., Patricia, P. & Miltner, R (2017). Testing for quality and safety education for nurses (QSEN) reflections from using QSEN as a framework for RN orientation. *Journal for Nurses in Professional Development 33*(4) 180-184. doi:10.1097/NND.0000000000000365

James, J. T. (2013). A new evidence-based estimate of patient harms associated with

hospital care. *Journal of Patient Safety 9*(3) 122-128. doi: 10.1097/PTS.0b013e3182948a69

Kajander-Unkuri, S., Meretoja, R., Katajisto, J., Saarikoski, M, Salminen, L, Suhonen, R & Leino-Kilpi, H. (2014). Self-assessed level competence of graduating nursing students and factors related to it. *Nurse Education Today 34*(5) 795-801. doi: 10.1016/j.nedt.2013.08.009

Keen, A., Embree, J., Lancaster, S, Bartlett Ellis, R. (2017). Feasibility of using mixed-media vignettes to enhance nursing knowledge and attitudes about pain management. *The Journal of Continuing Education in Nursing 48*(6) 282-288. doi: 10.3928/00220124-20170517-10

King, J., Patel V., Jamoom, E. W. & Furukawa, M. F. (2014). Clinical benefits of electronic health record use: national findings. *Health Services Research 49*(1) 392-404. doi: 10.1111/1475-6773.12135

Kovner, C. T., Djukic, M., Fatehi, F., Fletcher, J., Jun, J., Brewer, C., & Chacko, T. (2016). Estimating and preventing hospital internal turnover of newly licensed nurses: A panel survey. *International Journal of Nursing Studies 60,* 251-262. doi:10.1016/j.ijnurstu.2016.05.003

Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2015). The adult learner: The definitive classic in adult education and human resource development (8th ed.). New York, NY: Routledge

Kramer, M. (1974). Reality shock: *Why nurses leave nursing.* St.Louis, MO: Mosby

Lahti, M, Kontio, R, Pitkanen, A. & Valimaki, M. (2014). Knowledge transfer from an e-learning course to clinical practice. *Nurse Education Today* 34, 842-847. doi: 10.1016/j.nedt.2013.09.003

Laschinger, H. K., Borgogni, L. Consiglio, C, & Read, E. (2015). The effects of authentic leadership, six areas of worklife, and occupational coping self-efficacy on new graduates nurses' burnout and mental health: A cross-sectional study. *International Journal of Nursing Studies 52*(6) 1080-1089. doi: 10.1016/j.ijnurstu.2015.03.002

Laschinger, H.K. & Fida, R. (2014). New nurse burnout and workplace wellbeing: the influence of authentic leadership and psychological capital. *Burnout Research 1*(1) 19-28. doi: 10.1016/j.burn.2014.03.002

Lavoie et al. (2018). Learning theories and tools for the assessment of core nursing competencies in simulation: A theoretical review. *Journal Advance Nursing 74*, 239-250. doi: 10.1111/jan.13416

Leigh, K., Whitted, K. & Hamilton, B. (2015). Integration of andragogy into preceptorship. *Journal of Adult Education 42*(1) 9-17. Retrieved from https://web-a-ebscohost-com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?vid=2&sid=d994b214-f505-4df4-a1dd-68a0626a8a7c%40sessionmgr4008

Letourneau, R. M. & Fater, K. H. (2015). Nurse residency programs: an integrative review of the literature. Nursing Education Perspectives 38(2) 96-101. doi: 10.5480/13-1229

Liaw, S. Y., Wong, L. F., Chan, S. W., Ho, J. T., Mordiffi, S. Z., Ang, S. B….Ang, E. N. (2015). Designing and evaluating an interactive multimedia web-based simulation for developing nurses' competencies in acute nursing care: randomized controlled trail. *Journal of Medical Internet Research 17*(1) 1-5. doi: 10.2196/jmir.3853

Llasus, L., Angosta, A. D. & Clark, M. (2014). Graduating baccalaureate students' evidence-based practice knowledge, readiness and implementation. *Journal of Nursing Education 53*(9) 82-89. doi: 10.3928/01484834-20140806-05

Mackey, A. & Bassendowski, S. (2017) The history of evidence-based practice in nursing education and practice. *Journal of Professional Nursing 33*(1) 51-55. doi: 10.1016/j.profnurs.2016.05.009

Masters, K. (2016). Integrating quality and safety education into clinical nursing education through a dedicated education unit. *Nurse Education in Practice 17,* 153-160. doi: 10.1016/j.nepr.2015.12.002

Maxwell, K. L. & Wright, V. H. (2016).Evaluating the effectiveness of two teaching strategies to improve nursing students' knowledge, skills, and attitudes about quality improvement and patient safety. *Nursing Education Perspectives 37*(5) 291-292. doi: 10.1097/01.NEP.0000000000000043

Medicare.gov (2017). *Hospital compare view rating-details.* Retrieved from https://www.medicare.gov/hospitalcompare/detail.html??msrCd=prn9grp1&ID=450388.450697.453315

Melnky,B. M., Gallagher-Ford, L., Long, L. E., & Finerout-Overholt, E. (2014). The establishment of evidence-based practice competencies for practicing registered nurses and advanced practice nurses in real-world clinical settings: Proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. *Worldviews on Evidence-Based Nursing 11*(1) 5-15. doi: 10.1111/wvn.12021

Methodist Healthcare (2017a). *Locations.* Retrieved from http://sahealth.com/locations/

Methodist Healthcare (2017b). Awards & recognition. Retrieved from http://sahealth.com/about/mission-values/awards-recognition.dot

Methodist Healthcare (2017c). *About us.* Retrieved from http://sahealth.com/about/

Methodist Healthcare (2017d). *Graduate nurse residency program.* Retrieved from http://joinmethodist.com/jobs-methodist-clinical-nurse-residency/

Mo-Kyung, S. & Bliquez, R. (2017). Teaching evidence based practice to undergraduate nursing students. *Journal of Professional Nursing 33*, 447-451. doi: 10.1016/j.profnurs.2017.06.003

Moorley, C. & Chinn. T. (2015). Using social media for continuous professional development. *Journal of Advanced Nursing 71*(4) 713-717. doi: 10.1111/jan.12504

Morphet, J., Hood, K., Cant, R., Baulch, J., Gillbee, A. & Sandry, K. (2014). Teaching teamwork: an evaluation of an interprofessional training ward placement for health care students. *Advances in Medical Education and Practice 5* 197-204. doi: 10.2147/AMEP.S61189

Moscato, S., Nishioka, V. M. & Coe, M. T. (2013). Dedicated education unit: Implementing as innovation in replication sites. *Journal of Nursing Education 52*(5) 259-267. doi:10.3928/01484834-20130328-01

National League for Nursing (2016). Accreditation standards for nursing education programs. Retrieved from http://www.nln.org/docs/default-source/accreditation-services/cnea-standards-final-february-201613f2bf5c78366c709642ff00005f0421.pdf

Nelson, H. V. & Ford, D. J. (2017). Leading change: a concept analysis. Leading Global *Nursing Research 73*(4) 834-846. doi: 10.1111/jan.13223

Nguyen, M. Miranda, J., Lapum, J. & Donald, F. (2016). Arts-based learning: a new approach to nursing education using andragogy. *Journal of Nursing Education 55*(7) 407-410. doi: 10.3928/01484834-20160615-10

Nguyen, T. (2015). The effectiveness of online learning: beyond no significant difference and future horizons. MERLOT Journal of Online Learning and Teaching 11(2) 309-319. Retrieved from http://jolt.merlot.org/Vol11no2/Nguyen_0615.pdf

Nygardh, A., Sherwood, G., Sandberg, T., Rehn, J. & Knutsson, S. (2017). The visibility of QSEN competencies in clinical assessment tools in Swedish nurse education. *Nurse Education Today 59*, 110-117. doi: 10.1016/j.nedt.2017.09.003

Oermann, M. (2017). Building your scholarship from your teaching: plan now. Nurse Educator 42(5) 217. doi: 10.1097/NNE.0000000000000417

Olds, D. & Dolansky, M. A. (2017). Quality and safety research: Recommendations from the quality and safety education for nursing (QSEN) institute. *Applied Nursing Research 35*, 126-127. doi:10.1016/j.apnr.2017.04.001

Ortiz, J. (2016). New graduate nurses' experiences about lack of professional confidence. Nurse *Education in Practice 19,* 19-24. doi: 10.1016/j.nepr.2016.04.001

Papstavrou, E., Dimitriadou, M., Tsangari, H. & Andreou, C. (2016). Nursing students' satisfaction of the clinical learning environment: a research study. *BMC Nursing 15*(44) 1-10. doi: 10.1186/s12912-016-0164-4

Parker, K.M. & Smith, M. S. (2012). Assessment and planning for a dedicated education unit. *Journal for Nurses in Staff Development, 28* 1-6. doi:10.1097/NND .0b013e31825515da

Percy, M. & Richardson C. (2018). Introducing nursing practice to student nurses: How can we promote care compassion and empathy. *Nurse Education in Practice 29* 200-205. doi: 10.1016/j.nepr.2018.01.008

Pfaff, K. A., Baxter, P. E., Jack, S. M., & Ploeg, J. (2014). Exploring new graduate confidence in interprofessional collaboration: A mixed methods study.

International Journal of Nursing Studies 51(8) 1142-1152. doi:10.1016/j.ijnurstu.2014.01.001

Phillips, C., Esterman, A. & Kenny, A. (2015). The theory of organizational socialization and its potential for improving transition experiences for new graduate nurses. *Nurse Education Today 35*(1) 118-124. doi: 10.1016/j.nedt.2014.07.011

Phoenix-Bittner, N., Gravlin, G., MacDonald, C & Bourgeois, D. (2017). A newly licensed nurse orientation program evaluation: focus on outcomes. *The Journal of Continuing Education in Nursing 48*(1) 22-28. doi: 10.3928/00220124-20170110-07

Piscotty, R., Grobbel, C., & Abele C. (2013). Initial psychometric evaluation of the nursing quality and safety self-inventory. *Journal of Nursing Education 52*(5) 269-274. doi:10.3928/01484834-20130412-03

Pittman, P., Herrera, C., Bass, E., & Thompson, P. (2013). Residency programs for new nurse graduates. *The Journal of Nursing Administration 43*(11) 597-602. doi: 10.1097/01.NNA.0000434507.59126.78

Porter, M., Larsson, S. & Lee, T. (2016). Standardizing patient outcomes measurement. *The New England Journal of Medicine 374*(6) 504-506. doi: 10.1056/NEJMp1511701

QSEN Institute. (2014a) *Competencies*. Retrieved from http://qsen.org/competencies/

QSEN Institute. (2014b) *Evaluation tools*. Retrieved from http://qsen.org/faculty-resources/evaluation-tools/

River, J., Currie, J., Crawford, T., Betihavas, V. & Randall, S. (2016) A systematic review examining the effectiveness of blending technology with team-based learning. *Nurse Education Today 45*, 185-192. doi: 10.1016/j.nedt.2016.08.012

Rush, K. L., Adamack, M., Gordon, J., & Janke, R. (2014) New graduate nurse transition programs: Relationships with bullying and access to support. *Contemporary Nurse 48*(2) 219-228. Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/1641646999/fulltextPDF/BCB847127C2944A0PQ/1?accountid=14872

Silvestre, J. H., Ulrich, B. T., Johnson, T., Spector, N. & Blegen, M. A. (2017). A multisite study on a new graduate registered nurse transition to practice program: return on investment. *Nursing Economic 35*(3) 110-118. Retrieved from https://search-proquest-com.ezp.waldenulibrary.org/docview/1907286428/fulltextPDF/A00AD31BB2114042PQ/1?accountid=14872

Sims, S., Hewitt, G. & Harris, R. (2015). Evidence of collaboration, pooling of resources, learning and role blurring in interprofessional healthcare teams: a realist synthesis. *Journal of Interprofessional Care 29*(1) 20-25. doi:10.3109/13561820.2014.939745

Sinclair, P. M., Kable, A., Levett-Jones, T. & Booth, D. (2016). The effectiveness of internet-based e-learning on clinician behavior and patient outcomes: a systemic

reviewe. *International Journal of Nursing Studies 57,* 70-81. doi: 10.1016/j.ijnurstu.2016.01.011

Sittner, B. J., Aebersold, M. L., Paige, J. B., Graham, L. M. & Schram, A. P. (2015) INACSL standards of best practice for simulation: past, present and future. *Nursing Education Perspectives 36*(5) 294-298. doi: 10.5480/15-1670

Spector, N., Blegen, M. A., Silvestre, J., Barnsteiner, J., & Lynn, M. R. (2015). Transition to practice study in hospital settings. *Journal of Nursing Regulation 5*(4) 24-38. doi: 10.1016/S2155-8256(15)30031-4

Spies, C., Seale, I. & Botma, Y. (2015) Adult learning: What nurse educators need to know about mature students. *Curationis Pretoria 38*(2) 1-7. doi: 10.4102/curationis.v38i2.1494

Spiva, et al. (2013). Hearing the voices of newly licensed RNs: The transition to practice. *Advanced Journal of Nursing 113*(11) 24—32.

Stout, C., Short, N., Aldrich, K., Cintron, R. J. & Provencio-Vasquez, E. (2015). Meeting the future of nursing report (TM) recommendations: a successful practice-academic partnership. Nursing Economics 33(3) 161-166.

Sullivan, N. et al. (2015). Simulation exercise to improve retention of cardiopulmonary resuscitation priorities for in-hospital cardiac arrests: A random controlled trial. *Resuscitation 86,* 6-13. doi: 10.1016/j.resuscitation.2014.10.021

Tan, K., Chong, M. C., Subramanian, P. & Wong, L P. (2018). The effectiveness of outcome based education on the competencies of nursing students: A systematic review. *Nurse Education Today 64,* 180-189. doi: 10.1016/j..nedt.2017.12.030

Taylor, M., McNicholas, C., Nicolay, C., Darzi, A., Bell, D. & Reed, J. (2014). Systematic review of the application of the plan-do-study-act method to improve quality healthcare. *BMJ Quality and Safety 23,* 290-298. doi: 10.1136/bmjqs-2013-002703

Texas Board of Nursing. (2017). Texas approved professional nursing education programs-2017. Retrieved from https://www.bon.texas.gov/pdfs/education_pdfs/education_programs/ApprovedRNschools.pdf

Theobald, K. A., Windsor, C. A. & Forster, E. M. 92018). Engaging students in a community of learning: renegotiating the learning environment. *Nurse Education in Practice 29,* 137-142. doi: 10.1016/j.nepr.2017.12.008

Thom, K. A., Heil, E. L., Croft, L. D., Duffy, A., Morgan, D. J., & Johantgen, M. (2016). Advancing interprofessional patient safety education for medical, nursing, and pharmacy learners during clinical rotations. *Journal of Interprofessional Care 30*(6) 819-822. doi: 10.1080/13561820.2016.1215972

Trepanier, S., Mainous, R., Africa. L & Shinner, J. (2017). Nursing academic-practice partnership: the effectiveness of implementing an early residency program for nursing students. *Nurse Leader 15*(1) 35-39. doi:10.1016/j.mnl.2016.07.010

Van Horn, E. & Christman, J. (2017). Assessment of nursing student confidence using the skills self-efficacy scale. *Nursing Education Perspectives 38*(6) 344-346. doi: 10.1097/01.NEP 0000000000000169

Vygotsky, L. S. (1978). *Mind in Society*. Harvard University Press, Cambridge.MA

Wahoush, O. & Banfield, L. (2014). Information literacy during entry to practice: information-seeking behaviors in student nurses and recent nurse graduates. *Nurse Education Today 34*(2) 208-213. doi: 10.1016/j.nedt.2013.04.009

Waxmann, K.T. & Massarweh, L. J. (2018) Talking the talk: financial skills for nurse leaders. Nurse Leader 16(2) 101-106. doi: 10.1016/j.mnl.2017.12.008

Zepeda, S. J., Parylo, O. & Bengtson, E. (2014). Analyzing principal professional development practices through the lens of adult learning theory. Professional Development in Education 40(2) 295-315. doi: 10.1080/19415257.2013.821667

Appendix A: Project

Day 1 Training Plan- Welcome, Patient-Centered Care and Informatics

Purpose of the 3-Day Training: To provide learning opportunities for the new nurses who only attended the residency to enhance their skills in patient-centered care; and to enhance their knowledge and skills in informatics, evidence-based practice and quality improvement.

Project Goal: To increase the new nurse's QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement.

Overall Learning Outcome:

- The new nurse will have the knowledge and be able to provide appropriate patient-centered care skills to the simulated patient.
- The new nurse will have the knowledge and be able to provide the appropriate informatics, evidence-based practice, and quality improvement skills in the simulated scenarios.

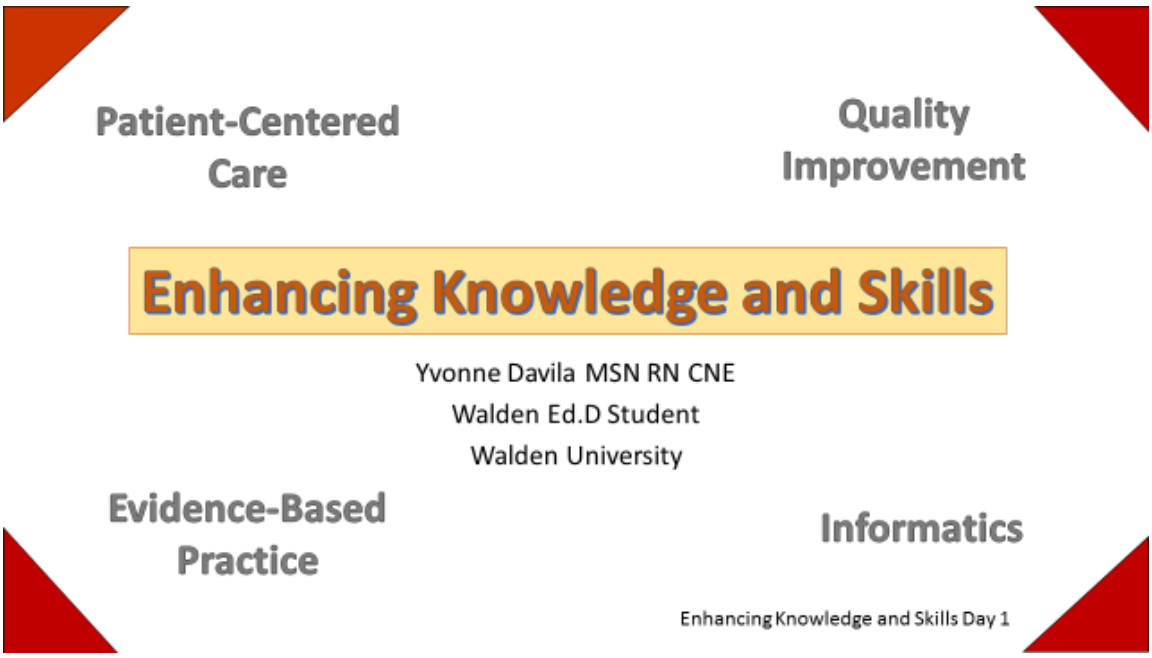
Target Audience: New registered nurses who only attended the residency

Day 1 Training Plan- Welcome, Patient-Centered Care and Informatics

Time and Topic	Objectives	Content	Strategy	Evaluation
0900-0915 Welcome	The participant will identify the purpose, goal, and learning outcomes of the 3-Day Training	Review Purpose, Goal and Learning Outcomes Agenda	PowerPoint Discussion	The participant will attend and complete the learning activities during the 3-Day Training
0915-0945 Ice Breaker	The participant will interact with other participants to create a learning group for the 3-Day Training	Ice Breaker Questions	Ice Breaker Questions Naming their group	The participant will be a member of a learning group with four to five members during the 3-Day Training
0945-1030 Patient-Centered Care Skills	The participant will discuss a patient-centered care clinical situation with learning group.	Reflect on a patient-centered care clinical experience	Reflection Exercise Group Discussion	The participant will gain at least two new patient-centered care skills after group discussion and comparison

	The learning group will compare and contrast patient-centered care clinical situations	Patient-Centered Care document in 3-Day Training Workbook	Group Comparison	
1030-1045	Break			
1045-1200 Patient Centered-Care Skills	The learning group will select one patient-centered care clinical situation to present to the class The class will formulate solutions on how to make the clinical situation more patient-centered	Patient-Centered Care document in 3-Day Training Workbook	Role Play Discussion	The participant will gain at least two new patient-centered care skills after group discussion and comparison
1200-1300	***Lunch***			
1300-1400 Informatics Knowledge	The participant will define the different types of information and technology used in a clinical situation	Communication ** electronic health record ** technology to communicate with other healthcare professionals Technology to Support Safe Care ** Electronic Medication Record	Power Point Group Discussion	The participant will list the different informatics (information and technology) used on their patient care unit

		** Patient Care Equipment		
1400-1430 Informatics Skills	The participant will examine confidence level using information and technology skills in clinical situations	Self-rating document Review sheet	Self-assessment Reflection	The participant will rank his/her confidence level for each information and technology skill used on clinical unit
1430-1445	***Break***			
1445-1615 Informatics Skills	Participants will practice their low ranking informatics skills in the lab area. The participant will critique other group members as they demonstrate the informatics skills.	Skills available to demonstrate include: ** electronic health record ** technology to communicate with other healthcare professionals ** Electronic Medication Record ** Patient Care Equipment	Group Members partner together Demonstration Peer-to-peer feedback	The participant will rank their confidence higher after practicing the information and technology skills
1615-1630 Wrap-Up and Daily Evaluations	The participant will have opportunity to provide feedback of the Day 1 Training	Evaluation Sheet	Self-Reflection Discussion	The participant will complete the Day 1 Evaluation



Welcome to the three day training, "Enhancing Knowledge and Skills", focusing on patient-centered care, quality improvement, evidence-based practice and informatics. My name is Yvonne Davila and I am a Doctor of Education student from Walden University. In June 2018, I performed my study, QSEN Competency Confidence Levels in Two Groups of New Registered Nurses, and the results from this study demonstrated a difference between QSEN competency confidence levels between the two groups. QSEN stands for Quality and Safety Education for Nurses and nursing schools incorporate the QSEN competencies into the curriculum to help prepare the students for nursing practice (Barnsteiner et al., 2013; Piscotty, Grobbel, & Abele, 2013). I used the Nursing Quality and Safety Self-Inventory (NQSSI) as the selected instrument for this study. The NQSSI measured the knowledge, skills and attitudes of the QSEN competency confidence levels (Piscotty et al., 2013). The results had a statistically significant difference in seven out of the 18 items of the NQSSI which were noted in the QSEN competency confidence level in knowledge and skills in evidence-based practice, quality improvement and informatics. A statistically significant difference was also noted in the QSEN competency confidence level for patient-centered care skills. I tailored this 3-Day Training from the results from my study.

The purpose of this 3-day training is to provide learning opportunities to enhance skills in patient-centered care; and to enhance knowledge and skills in informatics, evidence-based practice and quality improvement. The goal is to increase QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement. The overall learning outcome is to have the knowledge and be able to provide appropriate patient-centered care skills for the simulated patient. Also, to have the knowledge and be able to provide the appropriate informatics, evidence-based practice and quality improvement skills in the simulated scenarios

Patient-centered care skills will be the topic for the rest of the morning and in the afternoon informatics is the topic. The topics for Day 2 include evidence-based practice in the morning and quality improvement in the afternoon. Day 3 will focus on simulations and evaluations. The activities will be interactive and tailored to your clinical experience.

Day 1 Agenda

- 0900-0915: Welcome
- 0915-0945: Ice Breaker
- 0945-1030: Patient-Centered Care Skills
- 1030-1045: Break
- 1045-1200: Patient-Centered Care Skills
- 1200-1300: Lunch

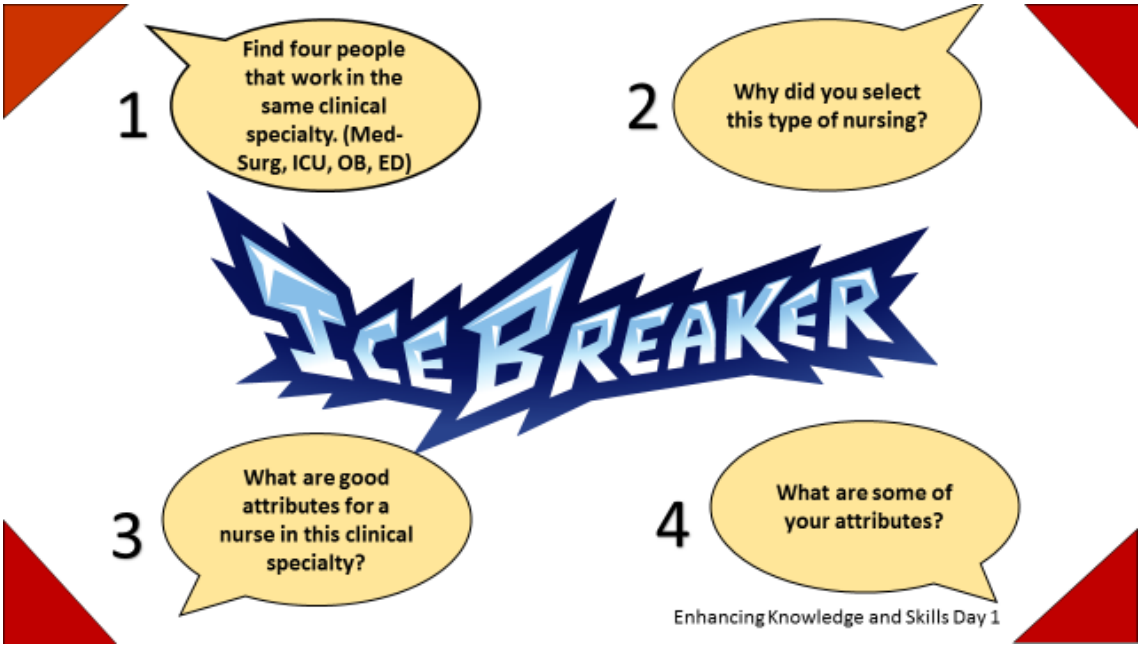
Enhancing Knowledge and Skills Day 1

Day 1 Agenda Continued

- 1300-1400: Informatics Knowledge
- 1400-1430: Informatics Skills
- 1430-1445: Break
- 1445-1615: Informatics Skills
- 1615-1630: Wrap-Up and Evaluations

Enhancing Knowledge and Skills Day 1

Day 1 includes focusing on patient-centered care skills and informatics knowledge and skills. There will be two breaks and a lunch on your own. Before we start with the topics, will have an ice breaker.



Find at least four nurses in this classroom who work in the same clinical specialty as you. For example, if you are a medical-surgical nurse, find other medical-surgical nurses or if you are an intensive care nurse, find other intensive care nurses. When you are in a group answer the following questions:

- Why did you select this type of nursing?
- What are good attributes for a nurse in this clinical specialty?
- What are some of your attributes?

The next step is to name your group and introduce your group to the class.
After the ice breaker, the educator will give the 3-Day Training workbook to the participants. Throughout the program, you and your group will participate in group activities throughout the training program.

Let's first talk about patient-centered care. Patient-centered care skills centers on the patient's values, culture and background (Blazeck et al., 2016; Ehrenberg et al., 2016). Based on the results from my study, the new nurses who participated in the residency program were confident in knowledge and attitudes, but not in skills related to patient-centered care. This compares to other research studies that noted confidence in patient-centered care skills increases over time (Ehrenberg et al., 2016). This section allows you to reflect, discuss scenarios with your learning group, and compare as well as contrast patient-centered care clinical situations. Your learning group will select one patient-centered care clinical situation to present to the class. The class will then formulate solutions on how to make the clinical situation more patient centered. The goal for this session is to have the new nurse gain confidence in at least two patient-centered care skills.

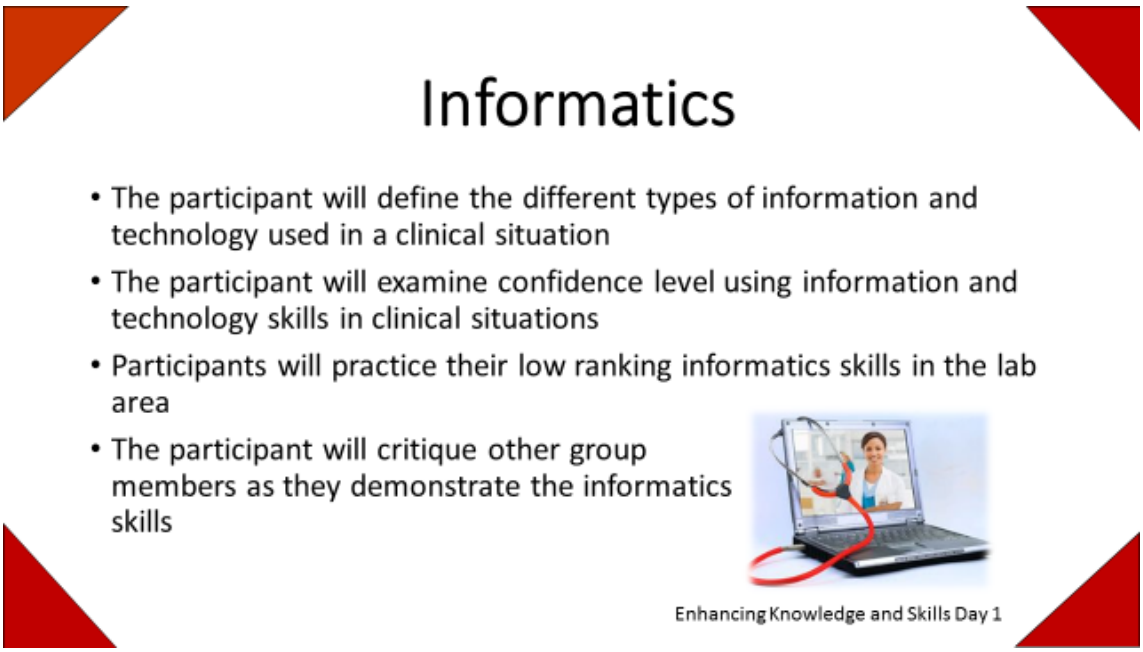
Now, for 15 minutes, reflect on one patient-centered care experience you had this week. Describe the experience in the section provided in the workbook. For the next 30 minutes, the learning group member will share their experiences and will provide input on how the situations were or were not patient-centered. Use the workbook to write down your input for each learning group member. As a group, select one situation that the group can role play in front of class

15 minute break

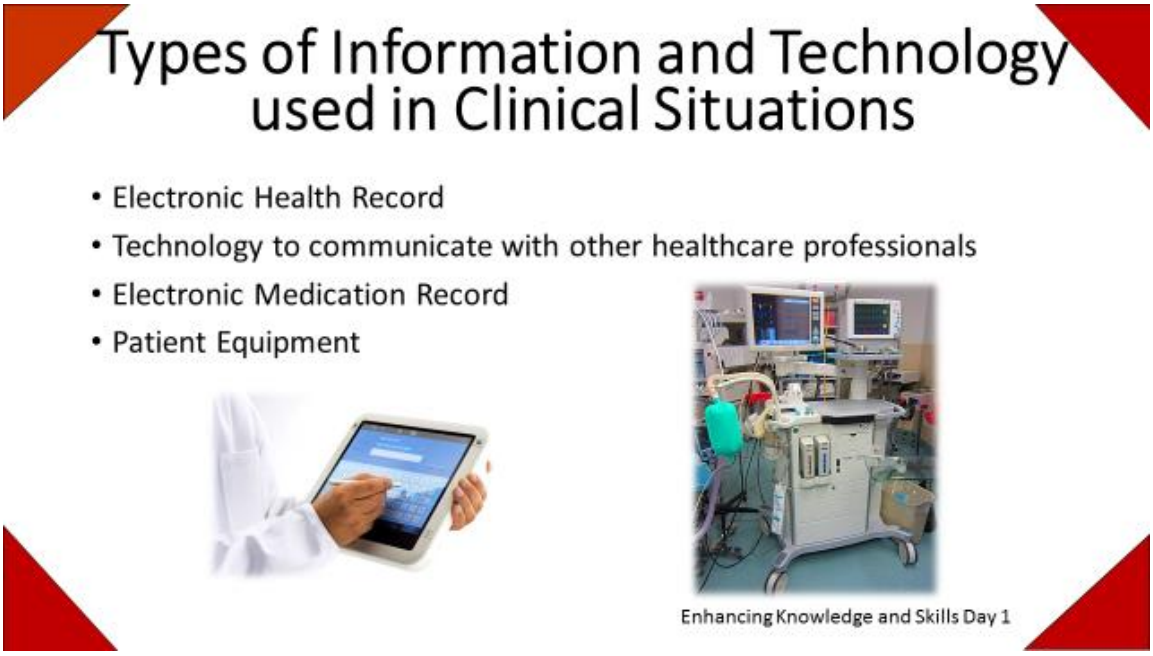
Practice with your group for 15 minutes then each group will role play the situation in front of class. After the role play, the educator will ask the class "What nursing skills made this patient-centered care" and "What nursing skills can make the situation more patient-centered? Together the class will formulate solutions on how to make the clinical situation more patient-centered.

Write at least two new patient-centered care skills you learned today.

Lunch time….



This next section is on informatics. Based on my study, a statistical significant difference was noted in informatics knowledge and skills scores for the new nurses who participated in the residency only. Understanding the different types of information and technology used in clinical situations is necessary to provide quality care (Wahoush & Banfield, 2014: King, Patel, Jamoom & Furukawa, 2014). However, not all nursing schools have an informatics course (Bryant, Whitehead, & Kelier,2016). Informatics is used for healthcare communication and technology to support safe care. For the first hour, we will define the different types of information and technology used in clinical situations and each participant will rate their confidence level using the information and technology skills in clinical situations. The second hour and 30 minutes will focus on practicing the informatics skills. The goal of this section is to have each participant gain confidence in informatics knowledge and skills.



The different types of information and technology used in clinical situations include but not limited to electronic health record, technology to communicate with other healthcare professionals, electronic medication record and patient care equipment (Forster, 2015).

The electronic health record is one type of information and technology that all nurses use. With your experience, how have you used the electronic health record on your unit and with your patients?

Please note: The participants may or may not include documentation, review of patient record, retrieving doctor orders and ordering labs, procedures and equipment in the discussion. The educator will facilitate the discussion by the following steps:

With your learning groups, discuss the following:

Documentation: What do you document? When do you document? Why do you document? How do you document?

Review of Patient Record: What type of information do you review for your patients? List the steps on how you get to the information.

Retrieving Doctors Orders: When do you have to retrieve the doctor orders? List the steps on how you see the order in the electronic health record.

Ordering labs, procedures and equipment: How do you order a new lab, x-ray or procedure? How do you order new equipment?

Communication technology is another type of information and technology that all nurses use. With your experience, how have others communicated with you and how have you communicated with others to benefit the patient you care for?

Please note: The educator will facilitate the discussion by the following steps:

With your learning groups, discuss the following:

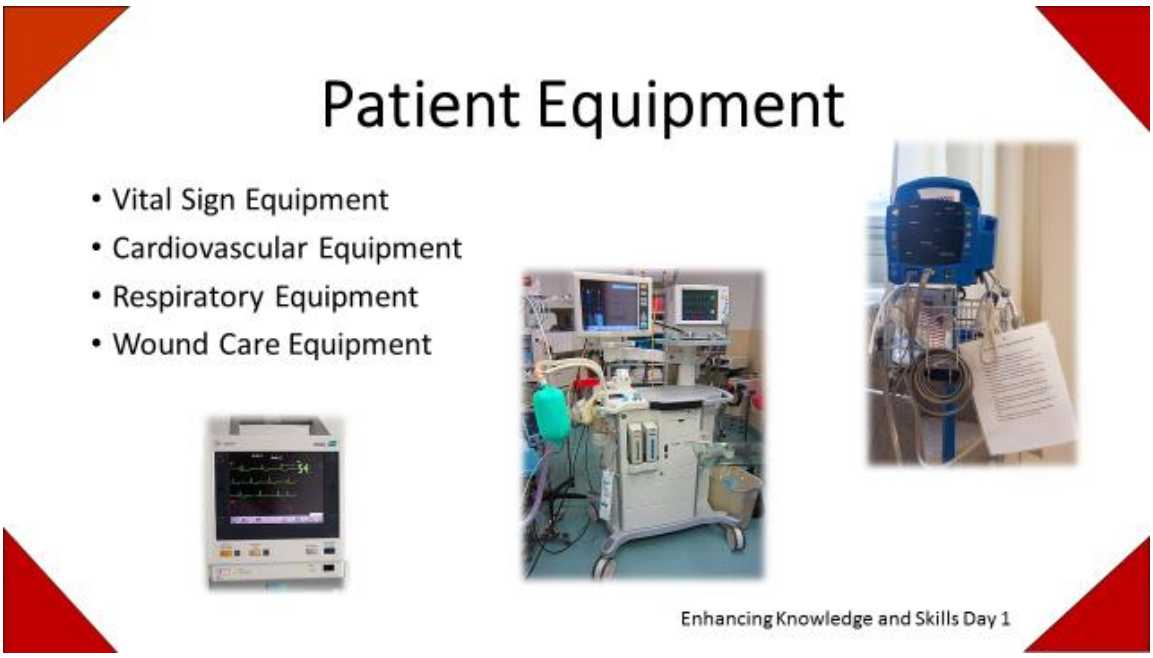
Hospital to Nurse Communication: How does the hospital communicate new policies and procedures with you? How do you look up policy and procedures? How does your nurse director or nurse educator contact you?

Nurse to Nurse Communication: What type of communication you use to talk to your nurse colleagues and nursing staff on your unit?

Nurse to Patient Communication: How do patients contact you if you are not in their room? How do you communicate with the patient?

Nurse to other Healthcare Professionals: How do communicate with a doctor who is not on the unit? How do you contact the physical therapist, respiratory therapist, pharmacist, or case worker?

Electronic medication record is another type of information and technology that all nurses use. With your experience, have you used the electronic medication record? ***Please note:*** The educator will facilitate the discussion by the following steps:
With your learning groups, discuss the following:
Acknowledging Medication Orders: How do you acknowledge new medication orders? What are some of the technology barriers of acknowledging medication orders?
Administration Process: Scanning the medication and scanning the patient are safety nets for medication errors. What are some reasons why scanning does not work? What steps would you take if scanning does not work?
Administering STAT medications: Sometimes medications are not listed in the patient's electronic medication record. What are the steps to administer a new or STAT medication?

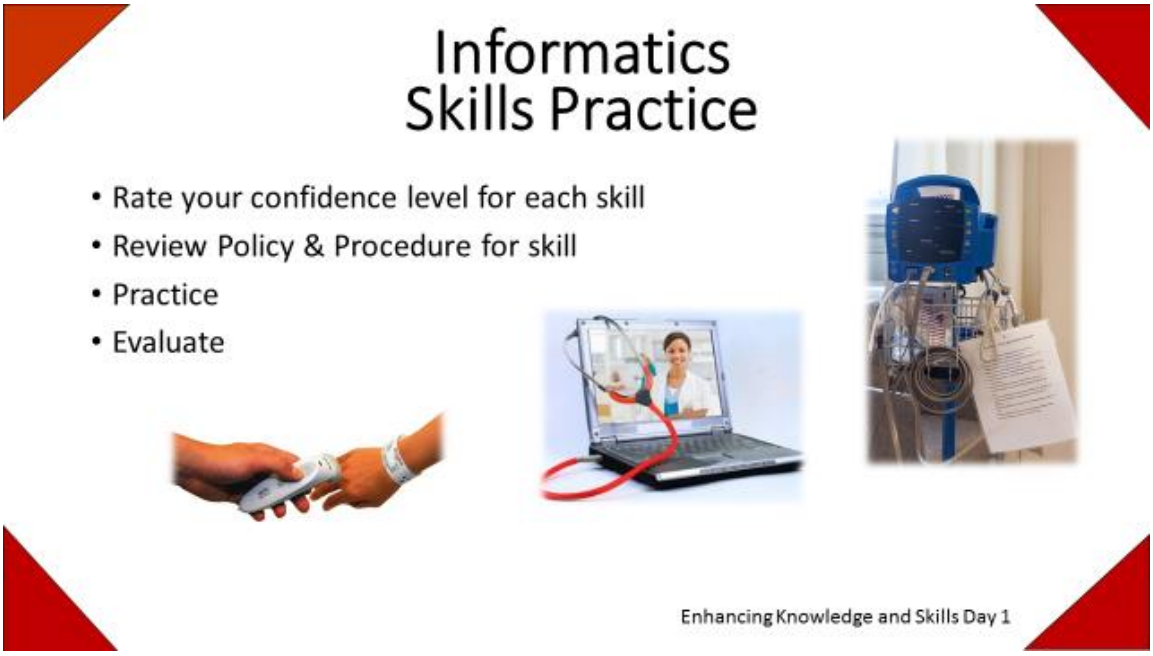


Patient equipment is another type of information and technology that all nurses use. With your experience, what equipment do you use to take care your patients?

Please note: The educator will facilitate the discussion by the following steps:

With your learning groups, discuss the following:

Equipment changes frequently with new technology. Do you know how to use all the patient equipment on your floor? How are you oriented to new equipment? What steps can you take to get oriented? Where are the policies and procedures for the equipment you have on your unit?



Now the second hour and 30 minutes will focus on practicing the informatics skills. The goal of this section is to have each participant gain confidence in informatics knowledge and skills. Rate your confidence level for each informatics and technology skill listed in your workbook. Look up policy and procedure for all skills with confidence levels 3 or lower. Review the skill's policy and procedure and then practice the skill in the lab area. Have one of your learning group members evaluate you based on the policy and procedure.

At the end of the hour and 30 minutes, the educator will ask:

Now that you have practice the skills, please rate your confidence level one more time and add it to the column labeled "Confidence Level After Practice."

This ends our first day of the 3 Day Training. Any questions related to what you learned today? Any patient-centered care or informatics questions? Please complete the daily evaluation. The daily evaluation contains evaluation questions related to the curriculum, learning strategies and instructors. Thank you and I will see you on Day 2.

References

Barnsteiner, J., Disch, J., Johnson, J, McGuinn, K., Chappell, K., & Swartwout, E.(2013). Diffusing QSEN competencies across schools of nursing: The AACN/RWJF faculty development institutes. *Journal of Profession Nursing 29*(2) 68-74. doi:10.1016/pronurs2012.12.003\

Blazeck, A. M., Katrancha, E., Drahnak, D., Sowko, L. A. & Faett, B. (2016). Using interactive video-based teaching to improve nursing students' ability to provide patient-centered discharge teaching. *Journal of Nursing Education 55(*5) 296-299. doi: 10.3928/01484834-20160414-11

Bryant, L., Whitehead, D & Kelier, J. (2016). Development and testing an instructment to measure informatics knowledge,skills, and attitudes among entry-level nursing students. *Online Journal of Nursing Informations 20*(2)

Ehrenberg, A., Gustavsson, P., Wallen, L.M., Bostrom, A. & Rudman, A. (2016). New graduate nurses' developmental trajectories for capability beliefs concerning core competencies for healthcare professionals: A national cohort study on patient-centered care, teamwork and evidence-based practice. *Worldviews on Evidence Based Nursing 13*(6) 454-462. doi: 10.111/wvn.12178

References

Forster, M. (2015). Six ways of experiencing information literacy in nursing: The findings of a phenomenographic study. *Nurse Education 35,* 195-200. doi:10.1016/j.nedt.2014.06.005

King, J., Patel V., Jamoom, E. W. & Furukawa, M. F. (2014). Clinical benefits of electronic health record use: national findings. *Health Services Research 49*(1) 392-404. doi: 10.111/1475-6773.12135

Piscotty, R., Grobbel, C., & Abele C. (2013). Initial psychometric evaluation of the nursing quality and safety self-inventory. *Journal of Nursing Education 52*(5) 269-274. doi:10.3928/01484834-20130412-03

Wahoush, O. & Banfield, L. (2014). Information literacy during entry to practice: information-seeking behaviors in student nurses and recent nurse graduates. *Nurse Education Today 34*(2) 208-213. doi: 10.1016/j.nedt.2013.04.009

Enhancing Knowledge and Skills
3 Day-Training Workbook

This workbook will be used throughout the 3-Day Training "Enhancing Knowledge and Skills."

Day 1 Agenda

0900-0915: Welcome
0915-0945: Ice Breaker
0945-1030: Patient-Centered Care Skills
1030-1045: Break
1045-1200: Patient-Centered Care Skills
1200-1300: Lunch
1300-1400: Informatics Knowledge
1400-1430: Informatics Skills
1430-1445: Break
1445-1615: Informatics Skills
1615-1630: Wrap-Up and Evaluations

Patient-Centered Care

Describe a patient-centered care experience you had this week:

Situation: How did you incorporate the patient's value, culture and background into the situation?

Share your experience with your learning group and answer the following questions:

Group Member Name	***Situation***	***Patient-centered Y or N***	***What made the situation patient-centered? What did not make the situation patient-centered?***
Learning Group Member 1:			
Learning Group Member 2:			
Learning Group Member 3:			
Learning Group Member 4:			

Patient-Centered Care Role Plays

Group Name	***What nursing skills made it patient centered?***	***What nursing skills can make the situation more patient-centered?***
Class Group 1		
Class Group 2		
Class Group 3		
Class Group 4		
Class Group 5		

The new patient-centered care skills I learned today were

_____

_____

_____

Enhancing Knowledge and Skills
3 Day-Training Workbook

Informatics:

Informatics

- The participant will define the different types of information and technology used in a clinical situation
- The participant will examine confidence level using information and technology skills in clinical situations
- Participants will practice their low ranking informatics skills in the lab area
- The participant will critique other group members as they demonstrate the informatics skills

Informatics and Technology Knowledge

Types of Information and Technology used in Clinical Situations

- Electronic Health Record
- Technology to communicate with other healthcare professionals
- Electronic Medication Record
- Patient Equipment

Electronic Health Record

- Documentation
- Review of Patient Record
- Retrieving Doctor Orders
- Ordering labs, procedures and equipment

Group Discussion

Communication Technology

- Hospital to Nurse Communication
- Nurse to Nurse Communication
- Nurse to Patient Communication
- Nurse to other Healthcare Professional Communication

Electronic Medication Record

- Acknowledging Medication Orders
- Administration Process – Scanning Medication and Patient ID
- Administering STAT Medications

Patient Equipment

- Vital Sign Equipment
- Cardio-vascular equipment
- Respiratory equipment
- Wound Care equipment

INFORMATIC SKILLS

Rate your confidence level for each skill.

- Skills with confidence levels 3 or lower
  - Look up policy and procedure for the skill in the available computer
  - Practice skills in Lab area
  - Have one of your learning group members evaluate you based on the policy and procedure

Rating Scale:

1 (not at all confident) 2 (unsure of confidence) 3 4 (somewhat confident) 5 (very confident)

Informatics and Technology Skill	**Confidence Level Before Practice**	**Confidence Level After Practice**
Electronic Health Record - Documentation		
Electronic Health Record – Review Patient Record		
Electronic Health Record – Retrieving Doctor Orders		
Electronic Health Record – Ordering Labs, Procedures and Equipment		
Electronic Health Record – Other _____		
Communication Technology – Nurse to Nurse Phone		
Communication Technology – Nurse to Patient Call System		
Communication Technology – Nurse to other Healthcare Professional		
Communication Technology – Other _____		

Electronic Medication Record – Acknowledging Medication Orders		
Electronic Medication Record – Administration Process (scanning medication and patient armband)		
Electronic Medication Record – Administrating STAT Medications		
Patient Equipment – Vital Sign and Pulse Ox Machine		
Patient Equipment – Cardio-vascular (EKG, defibrillator, cardiac monitors, intra-aortic balloon pumps and heart-lung bypass machines)		
Patient Equipment – Respiratory (Bi-PAP machines, CPAP, and ventilators)		
Patient Equipment – Wound VAC machines		

This ends Day 1 Training. Please provide feedback and complete the evaluation document.

Day 1 Training Evaluation Form

Training Date _____

Thank you for attending Enhancing Knowledge and Skills Day 1.

Please complete the evaluation by adding an "X" in the box that corresponds to your impression of the following items:

Enhancing Knowledge and Skills Day I –Patient-Centered Care and Informatics	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Curriculum					
The Day 1 training met my expectations					
I will be able to apply the knowledge and skills I learned					
The objectives for Patient-Centered Care were identified and followed					
I gained at least two new patient-centered care skills					
The objectives for Informatics were identified and followed					
My confidence is higher after practicing the information and technology skills					
The content was organized					
The materials distributed were pertinent and useful					
The learning strategies were pertinent and useful					
The patients I care for will benefit from the knowledge I gained					
Instructor					
The presenters were knowledgeable					
The presenters were well prepared					
The presenters encouraged active					

participation					
Comments					
What part of the Day 1 training was the most beneficial to you? Why?					
What part of the Day 1 training was the least beneficial to you? Why?					
Other Comments:					

Day 2 Training Plan- Evidence-Based Practice and Quality Improvement

Purpose of the 3-Day Training: To provide learning opportunities for the new nurses who only attended the residency to enhance their skills in patient-centered care; and to enhance their knowledge and skills in informatics, evidence-based practice and quality improvement.

Project Goal: To increase the new nurse's QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement.

Overall Learning Outcome:

- The new nurse will have the knowledge and be able to provide appropriate patient-centered care skills to the simulated patient.
- The new nurse will have the knowledge and be able to provide the appropriate informatics, evidence-based practice, and quality improvement skills in the simulated scenarios.

Target Audience: New registered nurses who only attended the residency

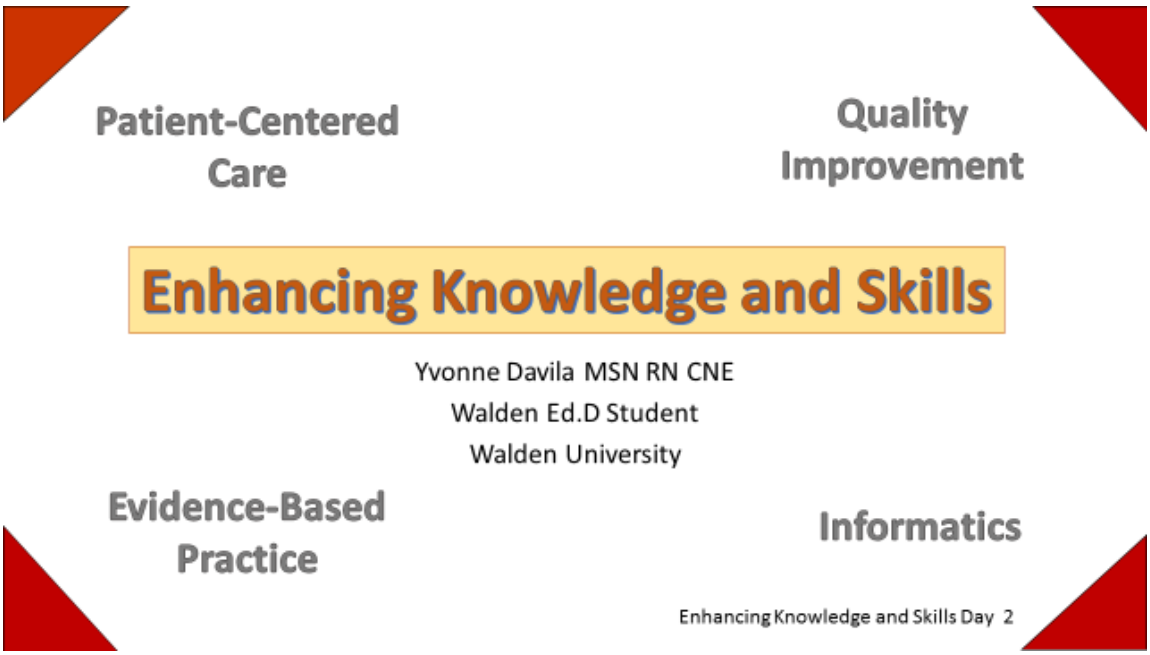
Day 2 Training Plan- Evidence-Based Practice and Quality Improvement

Time and Topic	Objectives	Content	Strategy	Evaluation
0900-0915 Welcome to Day 2	The participant will identify the purpose, goal and learning outcomes of the 3-Day Training	Review Purpose, Goal and Learning Outcomes Agenda	PowerPoint Discussion	The participant will attend and complete the learning activities during the 3-Day Training
0915-1015 Evidence-Based Practice Knowledge	The participant will define how evidence-based practice is incorporated into clinical practice The participant will examine their confidence level in using evidence-based practice in clinical practice	Patient care and evidence-based practice exemplars (turning patient every 2 hours) Locate evidence-based references related to nurse practice guidelines Self-rating document	Power Point Computer Examples Self-assessment Reflection Workbook	The participant will list how evidence-based practice is being implemented on their patient care unit The participant will rank their confidence level per each evidence-based practice criteria

1015-1030	Break			
10430-1200 Evidence-Based Practice Skills	The participant will demonstrate how to look up evidence-based literature for clinical skills The participant will examine how evidence-based practice findings can connect to other clinical situations	First, the group members will write practice skills performed on unit. The group members will compare nurse practice guidelines and select two guidelines to work on. They will then search new evidence-based literature for the selected guidelines The group will present findings to the class The class will discuss how the findings can be related to other units	Group Discussion Group Discussion Computer Search Workbook Group presentation Class Discussion	The learning group will locate new evidence-based literature for two practice skill to present to class The participant will rank their confidence level higher for each evidence-based practice skill
1200-1300	***Lunch***			
1300-1400 Quality Improvement Knowledge	The participant will define the quality improvement process in clinical practice	Define outcomes of care Use tools such as flow charts –audits monitors	Power Point Examples and Discussion	The participant will list quality improvement topics for individual clinical units.

		Identify quality improvement gaps in clinical practice Improve care by change process Plan-Do-Study-Act (PDSA)	Reflection	
1400-1430 Quality Improvement Knowledge	The participant will examine confidence level using quality improvement skills in clinical situations	Self-rating document	Self-assessment Reflection Workbook	The participant will rank their quality improvement process confidence level
1430-1445	***Break***			
1445-1615 Quality Improvement Skills	Participants will design a PDSA quality improvement chart for a selected topic The participant will examine how the selected PDSA quality improvement chart can connect to other clinical units	First, the group members will brainstorm on quality improvement topics related to clinical practice. The group members will select one topic to work on. They will then create a PDSA for the selected topic. The group will present the PDSA to the	Group discussion and workbook Demonstration Workbook	The participant will rank their quality improvement confidence higher after designing a PDSA quality improvement change process

		class The class will discuss how the change process can be implemented on other clinical units	Presentation	
1615-1630 Wrap-Up and Daily Evaluations	The participant will have opportunity to provide feedback of the Day 2 Training	Evaluation Sheet	Self-Reflection Discussion	The participant will complete the Day 2 Evaluation



Welcome to the second day of the 3-Day training, "Enhancing Knowledge and Skills", focusing on patient-centered care, quality improvement, evidence-based practice and informatics. My name is Yvonne Davila and I am a Doctor of Education student from Walden University. The purpose of this 3-day training is to provide learning opportunities to enhance skills in patient-centered care; and to enhance knowledge and skills in informatics, evidence-based practice and quality improvement. The goal is to increase QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement. The overall learning outcome is to have the knowledge and be able to provide appropriate patient-centered care skills for the simulated patient. Also, to have the knowledge and be able to provide the appropriate informatics, evidence-based practice and quality improvement skills in the simulated scenarios.

During Day 1 we reviewed patient-centered skills; and informatics knowledge and skills. The topics for Day 2 include evidence-based practice in the morning and quality improvement in the afternoon.

Day 2 Agenda

- 0900-0915: Welcome to Day 2
- 0915-1015: Evidence-Based Practice (Knowledge)
- 1015-1030: Break
- 1030-1200: Evidence-Based Practice (Skills)
- 1200-1300: Lunch

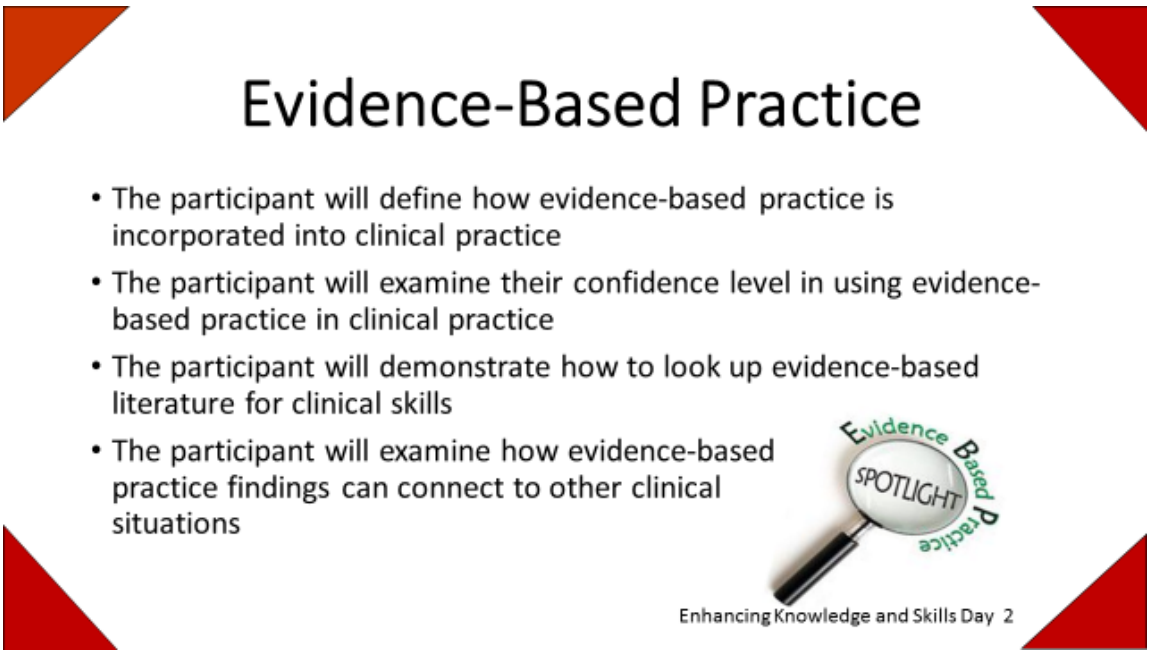
Enhancing Knowledge and Skills Day 2

Day 2 Agenda Continued

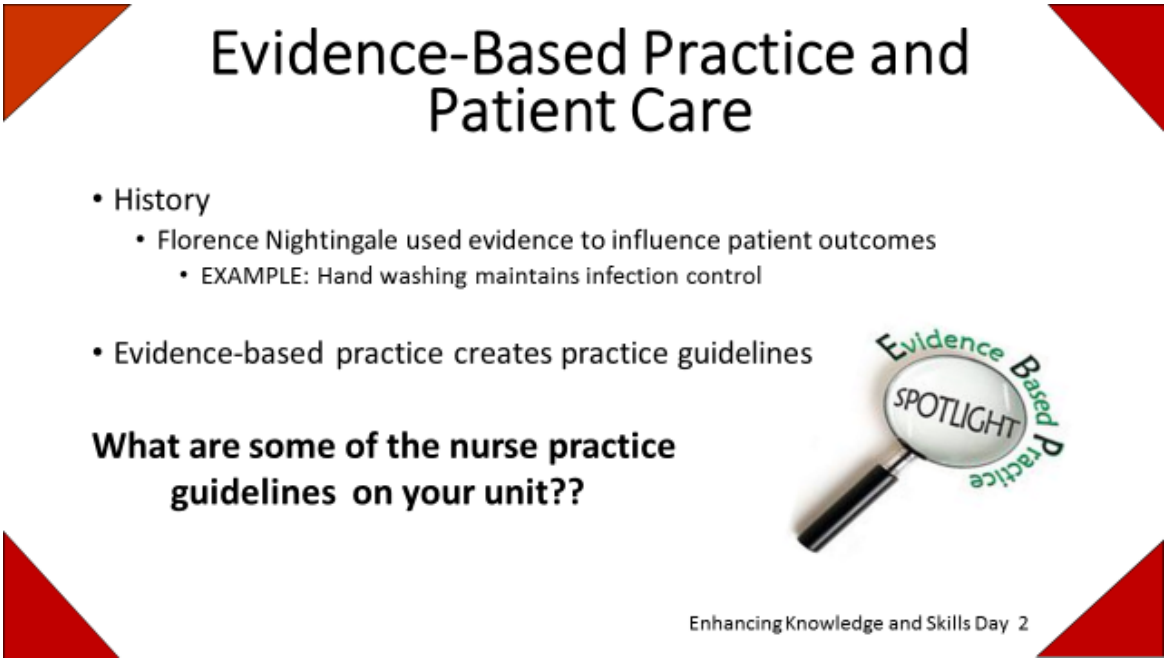
- 1300-1400: Quality Improvement (Knowledge)
- 1400-1430: Quality Improvement (Skills)
- 1430-1445: Break
- 1445-1615: Quality Improvement (Skills)
- 1615-1630: Wrap-Up and Evaluations

Enhancing Knowledge and Skills Day 2

Day 2 includes focusing on evidence-based practice knowledge and skills in the morning and informatics knowledge and skills in the afternoon. There will be two breaks and a lunch on your own. Before we start, let's get together with our learning groups.



The first section today is evidence-based practice. Based on my study, evidence-based practice self-confidence was rated the lowest in knowledge and skills for both, new registered nurses who attended the residency program plus a pre-licensure program and the new registered nurses who only attended the residency program. The low QSEN competency confidence level in knowledge and skills for evidence-based practice compares to previous studies that reported low nursing confidence and competence in graduating nursing students (Andre, Aune & Braend, 2016; Llasus, Angosta & Michele, 2014 & Ryan, 2016). For the first hour, we will define how evidence-based practice is incorporated into clinical practice and each participant will rate their confidence level using evidence-based practice in clinical practice. The second hour and 30 minutes will focus on practicing to look up evidence-based literature for clinical skills and how evidence-based findings can connect to other clinical situations. The goal of this section is to have each participant gain confidence in evidence-based practice knowledge and skills.



How is evidence-based practice incorporated into clinical practice? With your experience, have you seen evidence-based practice incorporated with the care you provide to your patients? Before we move on, open your workbooks to the evidence-based practice section and rate your confidence for each evidence-based practice knowledge and skill criteria.

Give them at least 10 minutes to complete the exercise.

Let's review history. Florence Nightingale is considered the first nurse researcher (Mackey & Bassendowski, 2017). She used evidence to influence patient outcomes. For example, she noticed that hand washing maintained infection control.

Lets reflect on the care you provide to your patients. What practice guidelines do you use? For example one practice guideline is turning a patient every 2 hours. Why is turning a patient every 2 hours important? ***Give them opportunity to answer questions***. Yes, turning every 2 hours helps prevent skin breakdown. Now, select three practice guidelines you routinely use. Write the practice guidelines with the reason why it is a practice guideline in your workbook under the designated columns.

Searching for Evidence-Based Practice References

- Use Nursing Databases
  - CINAHL Plus with Full Text
  - ProQuest Nursing & Allied Health Source
- Use Google Scholar
- Use Key Words

Are there any new evidence-based practices for the nurse practice guidelines you use on your unit??

Enhancing Knowledge and Skills Day 2

Nurse practice guidelines correlate with evidence-based practice. Use CINAHL or ProQuest to search for evidence-based practice literature. The participant will demonstrate how to look up evidence-based literature for clinical skills. The participant will examine how evidence-based practice findings can connect to other clinical situations. First, the group members will write practice skills that are performed on unit. The group members will compare nurse practice guidelines and select two guidelines to work on. They will then search new evidence-based literature for the selected guidelines The group will present findings to the class
The class will discuss how the findings can be related to other clinical situations.

Quality Improvement

- The participant will define the quality improvement process in clinical practice
- The participant will examine confidence level using quality improvement skills in clinical situations
- Participants will design a PDSA quality improvement chart for a selected topic
- The participant will examine how the selected PDSA quality improvement chart can connect to other clinical units

Enhancing Knowledge and Skills Day 2

This next section is on quality improvement. Based on my study, quality improvement self-confidence overall mean were the lowest scores out of the six QSEN competencies for both groups. Quality improvement is necessary to assess quality of care and change system's processes (Balakas & Smith, 2016). For the first hour and 30 minutes, the focus is on defining the quality improvement process in clinical practice and list quality improvement topics for the individual clinical units. Then, you will be asked to rank your quality improvement process confidence level. The second hour and 30 minutes focuses on designing a quality improvement chart for a selected topic. The goal of this section is to have each participant gain confidence in quality improvement knowledge and skills.

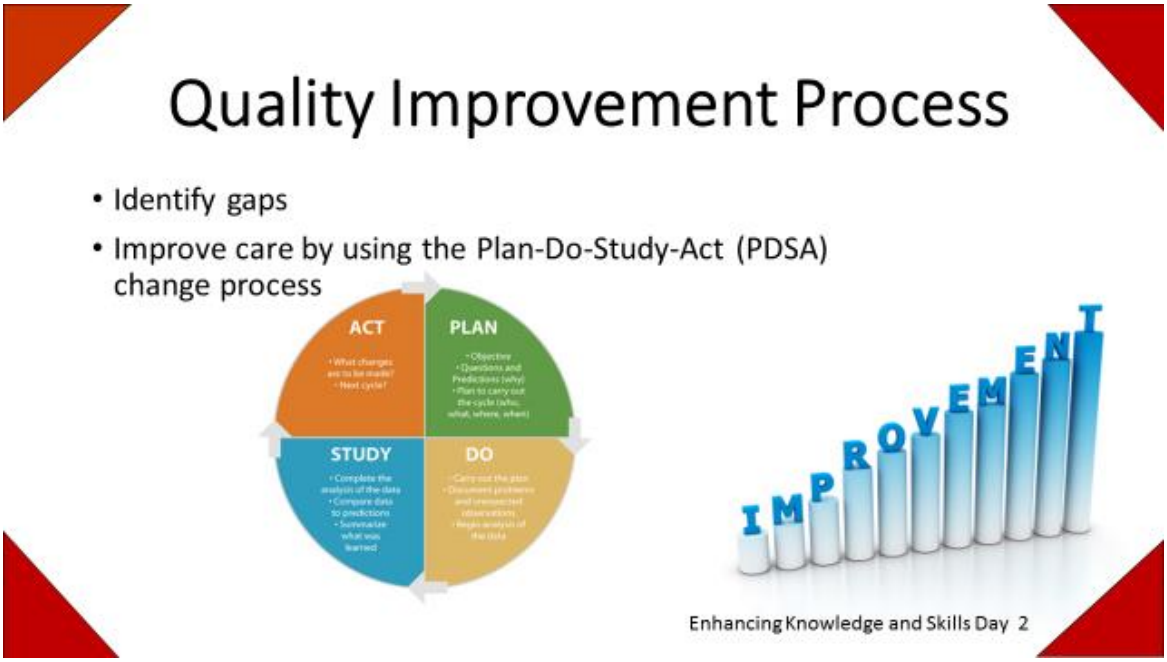
Quality Improvement Process

- Define outcomes of care
- Measuring tools
  - Flow charts
  - Audits – chart or documentation
  - Monitors - observation

Enhancing Knowledge and Skills Day 2

The quality improvement process starts with defining outcomes of care (Porter, Larsson & Lee, 2016). An example of an outcomes includes: All patients will be free from hospital acquired infections during their hospital stay. Measurements to measure this outcome include employee handwashing and hospital data.

What are the main outcomes of care for the patients you care for? List three outcomes of care in the designated column in your workbook. Then list at least two measurements fro the specific outcome of care.



Now, let's identify gaps in clinical practice. Can you think of any gaps related to the outcomes of care? If so, write down the gaps in your workbook.

Share your quality improvement exercise with your group members. Select an outcome of care that has gaps and use the Plan-Do-Study-Act method to make a quality improvement plan. The Plan-Do-Study-Act is a quality improvement method that is specific to healthcare (Taylor, McNicholas, Nicolay, Darzi & Bell, 2014). Define the problem needing change. Discuss data related to the problem. How do you know if it is problem? The data should confirm that a PDSA method is needed. The P stands for Plan. What is the goal or purpose of the plan? The D is the implementation of the plan. The S stands for Study. How will you review the results and if outcome was met? The A is the integrating the changes into practice.

Work with your group to create a PDSA for one hour. After, the groups will present their quality improvement plan to the class.

Questions?

Evidence-Based Practice

Quality Improvement

Enhancing Knowledge and Skills Day 2

This ends our second day of the 3 Day Training. Any questions related to what you learned today? Any evidence-based practice or quality improvement questions? Please complete the daily evaluation. The daily evaluation contains evaluation questions related to the curriculum, learning strategies and instructors. Thank you and I will see you on Day 3.

References

Andre, B., Aune, A. G. & Braend, J. A. (2016). Embedding evidence-based practice among nursing undergraduates: Results from a pilot study. Nurse Education in Practice 18, 30-35. doi:10.1016/j.nepre.2016.03.004

Balakas, K, & Smith. J. (2016). Evidence-based practice and quality improvement in nursing education. *The Journal of Perinatal & Neonatal Nursing 30*(3) 191-194. doi:10-1097/JPN.0000000000000197

Llasus, L., Angosta, A. D. & Clark, M. (2014). Graduating baccalaureate students' evidence-based practice knowledge, readiness and implementation. *Journal of Nursing Education 53*(9) 82-89. doi: 10.3928/014884834—20140806-05

Mackey, A. & Bassendowski, S. (2017) The history of evidence-based practice in nursing education and practice. Journal of Professional Nursing 33(1) 51-55. doi: 10.1016/j.profnurs.2016.05.009

Porter, M., Larsson, S. & Lee, T. (2016). Standardizing patient outcomes measurement. *The New England Journal of Medicine 374*(6) 504-506. doi: 10.1056/NEJMp1511701

Taylor, M., McNicholas, C., Nicolay, C., Darzi, A., Bell, D. & Reed, J. (2014). Systematic review of the application of the plan-do-study-act method to improve quality healthcare. BMJ Quality and Safety 23, 290-98. doi: 10.1136/bmjqs-2013-002703

Enhancing Knowledge and Skills Day 2

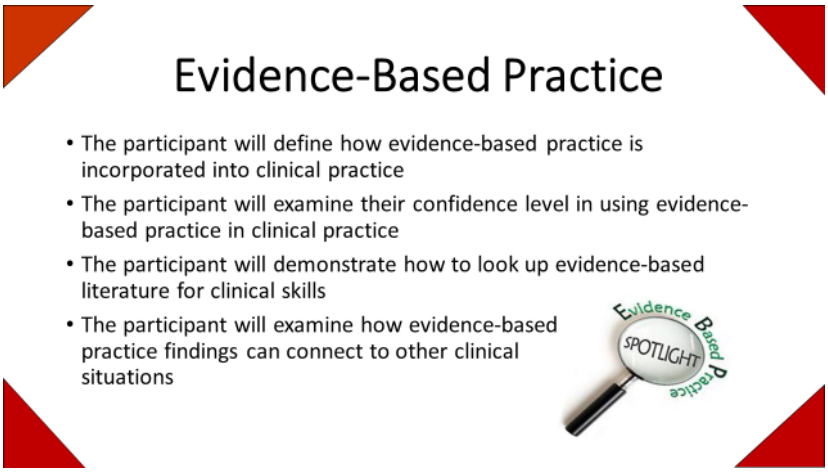
Enhancing Knowledge and Skills
3 Day-Training Workbook

This workbook will be used throughout the 3-Day Training "Enhancing Knowledge and Skills."

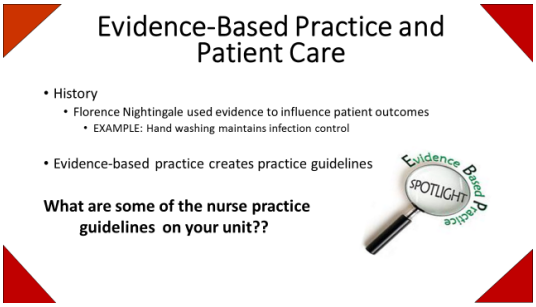
Day 2 Agenda

0900-0915: Welcome
0915-1015: Evidence-Based Practice Knowledge
1015-1030: Break
1030-1200: Evidence-Based Practice Skills
1200-1300: Lunch
1300-1400: Quality Improvement Knowledge
1400-1430: Quality Improvement Skills
1430-1445: Break
1445-1615: Quality Improvement Skills
1615-1630: Wrap-Up and Evaluations

Evidence-Based Practice



Evidence-Based Practice



Group Discussion

_____
_____
_____
_____
_____
_____
_____

Rate your confidence level for each evidence-based practice knowledge and skill criteria

Rating Scale:

1 (not at all confident) 2 (unsure of confidence) 3 (somewhat confident) 4 5 (very confident)

Evidence-Based Practice Knowledge and Skills	**Confidence Level Before Evidence- Based Practice Class Activity**	**Confidence Level After Evidence- Based Practice Class Activity**
Knowledge: I can define practice guidelines that are used on my nursing unit		
Skill: I can locate evidence-based references that match the practice guidelines		
Skill: I can search for new evidence-based guidelines		

Nurse Practice Guidelines: Select three practice guidelines you routinely use for patient care.

- Write the practice guidelines in the designated column.
- Write reason why this is a practice guideline.
- Search for an evidence-based article that corresponds to the practice guideline
- Write reference in the designated column

Knowledge **Practice Guideline**	**Knowledge:** **Why is this a practice guideline?**	**Skill** **Finding the Reference**
Example: Turning patient every 2 hours	Prevents skin breakdown	Lichterfeld, A., Hauss, A., Surber, C, Peters, T., Blume, U. & Kottner, J. (2015). Evidence-based skin care. *Journal of Wound Ostomy Continence Nursing 42*(5) 501-524
1.		
2.		
3.		

Share your answers with your learning group.
Add your learning group responses below:

Knowledge **Practice Guideline**	**Knowledge:** **Why is this a practice guideline?**	**Skill** **Finding the Reference**
Example: Turning patient every 2 hours	Prevents skin breakdown	Lichterfeld, A., Hauss, A., Surber, C, Peters, T., Blume, U. & Kottner, J. (2015). Evidence-based skin care. *Journal of Wound Ostomy Continence Nursing 42*(5) 501-524
1.		
2.		
3.		
4.		
5.		

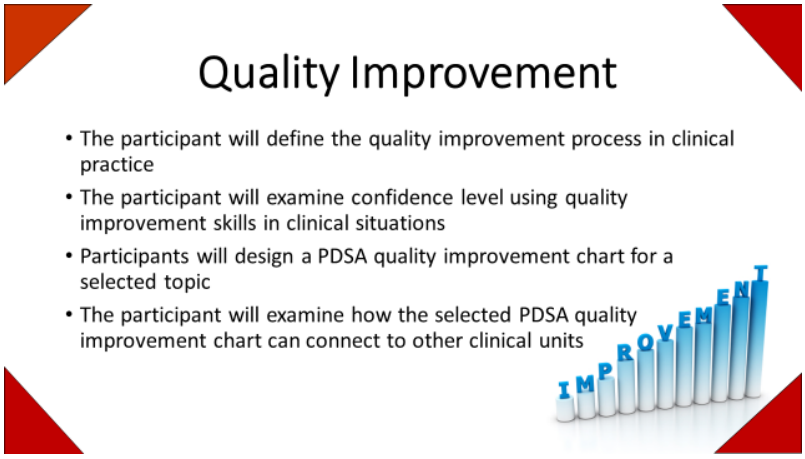
Group members: Select at least two nurse guidelines and together, search for new evidence-based literature related to the guideline

Selected Group Practice Guideline	**Why is this a practice guideline?**	**Skill: Search for new evidence**	**Skill: Search for the Reference**
Example: Turning patient every 2 hours	Prevents skin breakdown	New evidence shows that following a skin care algorithm can also prevent skin breakdown	Lichterfeld, A., Hauss, A., Surber, C, Peters, T., Blume, U. & Kottner, J. (2015). Evidence-based skin care. *Journal of Wound Ostomy Continence Nursing 42*(5) 501-524

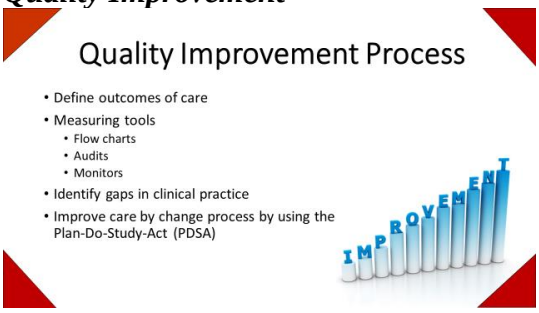
Present the nurse practice guidelines and the new evidence-based literature to class.

Enhancing Knowledge and Skills
3 Day-Training Workbook

Quality Improvement



Quality Improvement



Group Discussion

_____
_____
_____
_____
_____
_____
_____

Rate your confidence level for each quality improvement process criteria

Rating Scale:

1 2 3 4 5
(not at all confident) (unsure of confidence) (somewhat confident) (very confident)

Quality Improvement Knowledge and Skills	**Confidence Level Before Quality Improvement Class Activity**	**Confidence Level After Quality Improvement Class Activity**
Knowledge: I can define outcomes of care		
Skill: I can use measuring tools such as flow charts,		

audits and monitors		
Skill: I can identify gaps in clinical practice		
Skill: I can create a Plan-Do-Study-Act change process		

Quality Improvement Process:

- List three outcomes of care in the designated column
- List at least two measurements for the specific outcome of care
- Identify gaps

Outcomes of Care	**Measurement**	**Gaps (yes or no) if yes, what are the gaps?**
Example *All patients will be free from hospital acquired infections during their hospital stay*	Hospital Data Handwashing monitor	
1.		
2.		
3.		

Add your learning group responses below:

Outcomes of Care	**Measurement**	**Gaps (yes or no) if yes, what are the gaps?**	**Potential Plan-Do-Study-Act (PDSA) Change Process (yes or no)**
Example *All patients will be free from hospital acquired infections during their hospital stay*	Hospital Data Handwashing monitor		

1.			
2.			
3.			
4.			

Group members: Select one outcome of care that has gaps in clinical practice. Create a PDSA change process for the selected topic.
Selected topic for PDSA change process is
_____
Define the problem needing change
_____
How do you know it is a problem? (include data)
_____

PDSA Change Process	Group Discussion and Plan
Plan: What is the goal or purpose? Put a plan in action	
Do: Implement the plan	
Study: Review the results and outcome	
Act: Integrating the changes into practice	

Present the PDSA to the class.

This ends Day 2 Training. Please provide feedback and complete the evaluation document.

Day 2 Training Evaluation Form

Training Date _____

Thank you for attending Enhancing Knowledge and Skills Day 2.

Please complete the evaluation by adding an "X" in the box that corresponds to your impression of the following items:

Enhancing Knowledge and Skills Day 2 –Evidence-Based Practice and Quality Improvement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Curriculum					
The Day 2 training met my expectations					
I will be able to apply the knowledge and skills I learned					
The objectives for Evidence-Based Practice were identified and followed					
My confidence is higher in evidence-based practice knowledge and skills					
The objectives for Quality Improvement were identified and followed					
My confidence is higher in quality improvement knowledge and skills					
The content was organized					
The materials distributed were pertinent and useful					
The learning strategies were pertinent and useful					
The patients I care for will benefit from the knowledge I gained					
Instructor					
The presenters were knowledgeable					
The presenters were well prepared					
The presenters encouraged active participation					
Comments					

What part of the Day 2 training was the most beneficial to you? Why?	
What part of the Day 2 training was the least beneficial to you? Why?	
Other Comments:	

Day 3 Training Plan- Simulations

Purpose of the 3-Day Training: To provide learning opportunities for the new nurses who only attended the residency to enhance their skills in patient-centered care; and to enhance their knowledge and skills in informatics, evidence-based practice and quality improvement.

Project Goal: To increase the new nurse's QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement.

Overall Learning Outcome:

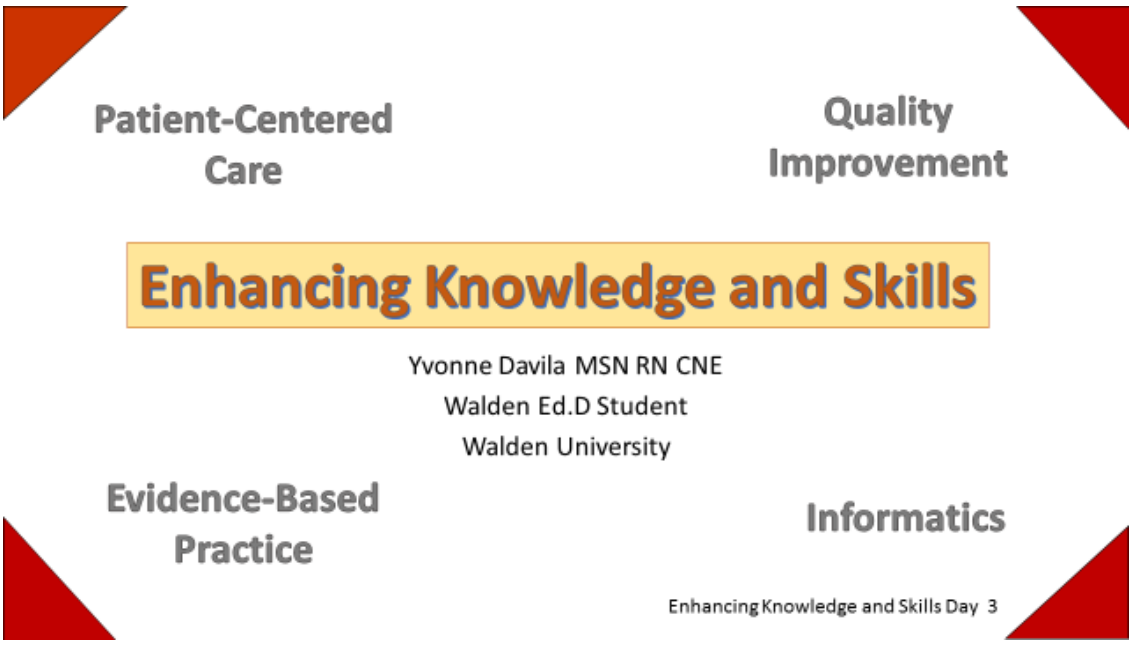
- The new nurse will have the knowledge and be able to provide appropriate patient-centered care skills to the simulated patient.
- The new nurse will have the knowledge and be able to provide the appropriate informatics, evidence-based practice, and quality improvement skills in the simulated scenarios.

Target Audience: New registered nurses who only attended the residency

Day 3 Training Plan- Simulations: The four 1hour 30 minute simulations will run simultaneously.

Time and Topic	OBJECTIVES	CONTENT	STRATEGY	EVALUATION
0900-0915 Welcome to Day 3	The participant will identify the purpose, goal and learning outcomes for the 3-Day Training	Review Purpose, Goal and Learning Outcomes for the Day 3.	PowerPoint Discussion	The participant will attend and complete the four 1 hour and 30 minute simulations during Day 3
0915-1045 Simulation 1	The participant will provide appropriate patient-centered care for the simulated patient	Patient-centered care simulation pre-briefing Patient-centered care simulation Patient-centered care de-briefing	Simulation	The participant will rate patient-centered care confidence higher after caring for simulated patient
1045-1100	Break			
1100-1230	The participant	Informatics	Simulation	The participant

Simulation 2	will provide appropriate informatics skills for the simulated situation	simulation pre-briefing Informatics simulation Informatics de-briefing		will rate informatics skills confidence higher after participating in the simulated situation
1230-1300	***Lunch***			
1300-1430 Simulation 3	The participant will provide appropriate evidence-based practice for the simulated situation	Evidence-based practice simulation pre-briefing Evidence-based practice simulation Evidence-based practice de-briefing	Simulation	The participant will rate evidence-based practice confidence higher after the simulated situation
1430-1445	***Break***			
1445-1615 Simulation 4	The participant will provide appropriate quality improvement for the simulated situation	Quality improvement simulation pre-briefing Quality improvement simulation Quality improvement de-briefing	Simulation	The participant will rate quality improvement confidence higher after the simulated situation
1615-1630 Wrap-Up and Daily Evaluations	The participant will have opportunity to provide feedback of the Day 3 Training and the overall training	Evaluation Sheet	Self-Reflection Discussion	The participant will complete the Day 3 Evaluation and the overall training evaluation



Welcome to the third and final day of the 3-Day training, "Enhancing Knowledge and Skills", focusing on patient-centered care, quality improvement, evidence-based practice and informatics. My name is Yvonne Davila and I am a Doctor of Education student from Walden University.

Have the five additional educators introduce themselves too.

The purpose of this 3-day training is to provide learning opportunities to enhance skills in patient-centered care; and to enhance knowledge and skills in informatics, evidence-based practice and quality improvement. The goal is to increase QSEN competency confidence level in patient-centered care skills; and knowledge and skills in informatics, evidence-based practice and quality improvement. The overall learning outcome is to have the knowledge and be able to provide appropriate patient-centered care skills for the simulated patient. Also, to have the knowledge and be able to provide the appropriate informatics, evidence-based practice and quality improvement skills in the simulated scenarios.

During Day 1 we reviewed patient-centered skills; and informatics knowledge and skills. During Day 2 we reviewed knowledge and skills related to evidence-based practice and quality improvement. Today's focus is simulations.

Day 3 Agenda

- 0900-0915: Welcome to Day 3
- 0915-1045: Simulation #1
- 1045-1100: Break
- 1100-1230: Simulation #2
- 1230-1300: Lunch

Enhancing Knowledge and Skills Day 3

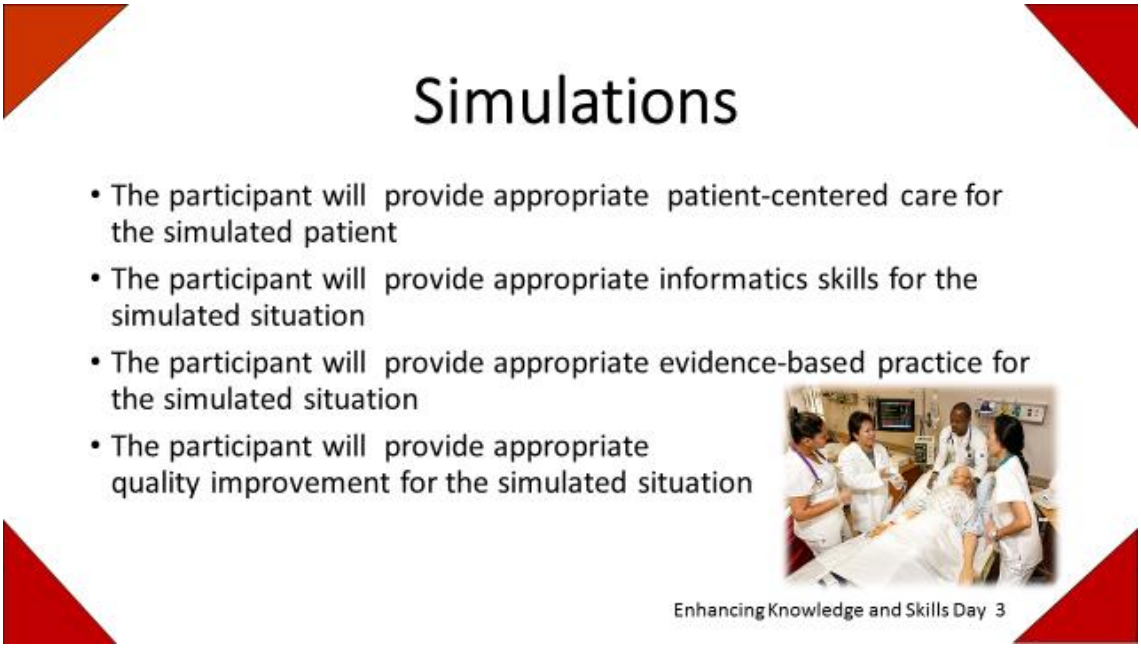
Day 3 Agenda Continued

- 1300-1430: Simulation #3
- 1430-1445: Break
- 1445-1615: Simulation #4
- 1615-1630: Wrap-Up and Evaluations

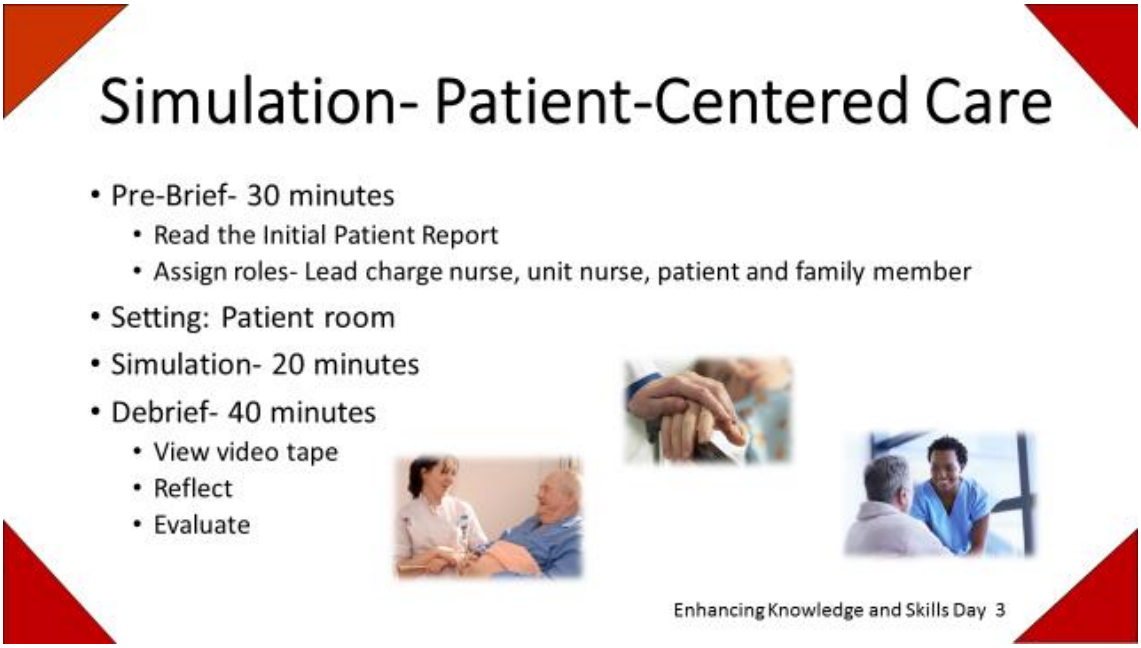
Enhancing Knowledge and Skills Day 3

Day 3 focuses on simulations based on patient-centered care, informatics, evidence-based practice and quality improvement. The four 1 hour and 30 minute simulations will run simultaneously. The goal is to integrate the learning from Day 1 and Day 2 to care for the simulated patient and simulated clinical situation.

There will be two breaks and a lunch on your own. Before we start, let's get together with our learning groups.



Simulation is an interactive effective strategy for adult learners (Garwood, 2015; Spies, Seale & Botma, 2015). The plan is to have the learning group members work together and encounter the simulation at the same time. The learning group members will alternate the role of the lead nurse for the different simulations. If there are four learning group members in a group, each one will be assigned to be the lead nurse in one of the four simulations. The group members will have opportunity to prebrief to discuss a plan before entering the simulation and debrief to evaluate the simulation.



The first simulation is related to patient-centered care.
For the first 30 minutes, read the initial patient report, decide roles and review previous Day 1 workshop notes. One learner will be the lead charge nurse, and the other learners will be unit staff nurses. Don't forget, each learning group member will be the lead nurse for at least one of the simulations today.
Give 20 minutes for the simulation- please refer to simulation education document for the complete scenario.
During the simulation, one educator will be watching the video in live action. The educator will tag the video for questionable actions to discuss during the debriefing.
Allow 40 minutes for the debriefing
Debriefing questions for educator:
What went well?
What did not go so well?
Have the learners review the videotape with highlighting the tags and have them critique the nurses' actions.

The second simulation focuses on providing appropriate informatics skills for the simulated situation.

For the first 30 minutes, read the initial clinical situation report, decide roles and review previous Day 1 workshop notes. One learner will be the lead charge nurse, and the other learners will be the staff nurses from other nursing units. Don't forget, each learning group member will be the lead nurse for at least one of the simulations today so if you were the lead nurse in the previous simulation, you cannot be the lead nurse for this simulation.

Give 20 minutes for the simulation- please refer to simulation education document for the complete scenario. During the simulation, one educator will be watching the video in live action. The educator will tag the video for questionable actions to discuss during the debriefing.

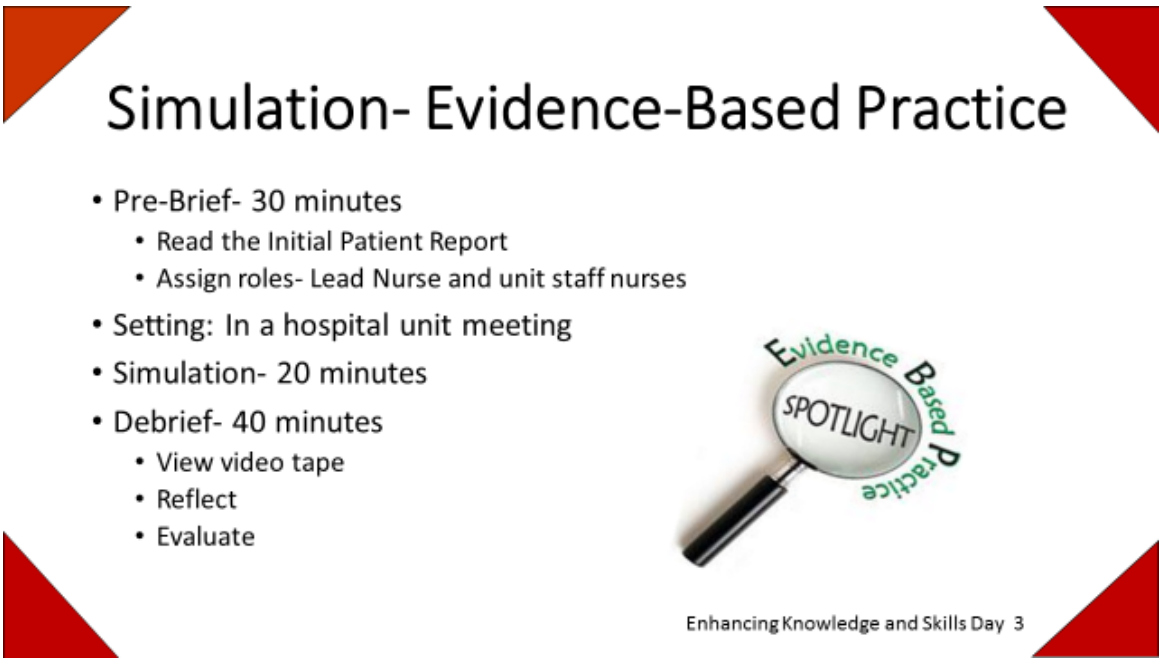
Allow 40 minutes for the debriefing

Debriefing questions for educator:

What went well?

What did not go so well?

Have the learners review the videotape with highlighting the tags and have them critique the nurses' actions.



The third simulation focuses on providing appropriate evidence-based practice for the simulated situation.

For the first 30 minutes, the learners will read the initial clinical situation report, decide roles and review previous Day 2 workshop notes. One learner will be the lead nurse, and the other learners will be staff nurses from the same nursing unit. Don't forget, each learning group member will be the lead nurse for at least one of the simulations today so if you were the lead nurse in the previous simulations, you cannot be the lead nurse for this simulation.

Allow 20 minutes for simulation

The simulation setting is at a hospital unit meeting. One educator will be watching the video in live time and will tag questionable actions to discuss during the debriefing.

Allow 40 minutes for debriefing

During debriefing, the educator will ask the learners what went well and what did not go so well. The learners will also review the videotape to critique the actions made during the simulation

The third simulation focuses on providing appropriate quality improvement for the simulated situation.

For the first 30 minutes, the learners will read the initial clinical situation report, decide roles and review previous Day 2 workshop notes. One learner will be the lead nurse, and the other learners will be staff nurses different nursing units. Don't forget, each learning group member will be the lead nurse for at least one of the simulations today so if you were the lead nurse in the previous simulations, you cannot be the lead nurse for this simulation.

Allow 20 minutes for simulation

The simulation setting is at a hospital quality improvement meeting. One educator will be watching the video in live time and will tag questionable actions to discuss during the debriefing.

Allow 40 minutes for debriefing

During debriefing, the educator will ask the learners what went well and what did not go so well. The learners will also review the videotape to critique the actions made during the simulation.

This ends our 3 Day Training. Any questions related to what you learned today? Any patient-centered care, informatics, evidence-based practice or quality improvement questions? Please complete the daily and overall evaluation. The daily evaluation contains evaluation questions related to today's curriculum, learning strategies and instructors and the overall evaluation contains evaluation questions pertaining to the overall curriculum. Please provide comments too. Please contact me if you have additional questions. Thank you for selecting nursing as your profession.

References

Garwood, J. K. (2015). Millennial students preferred methods for learning concepts in psychiatric nursing. *Journal of Psychosocial Nursing 53*(9) 38-43

Spies, C., Seale, I. & Botma, Y. (2015) Adult learning: What nurse educators need to know about mature students. *Curationis Pretoria 38*(2) 1-7. doi: 10.4102/curationis.v3812.1494

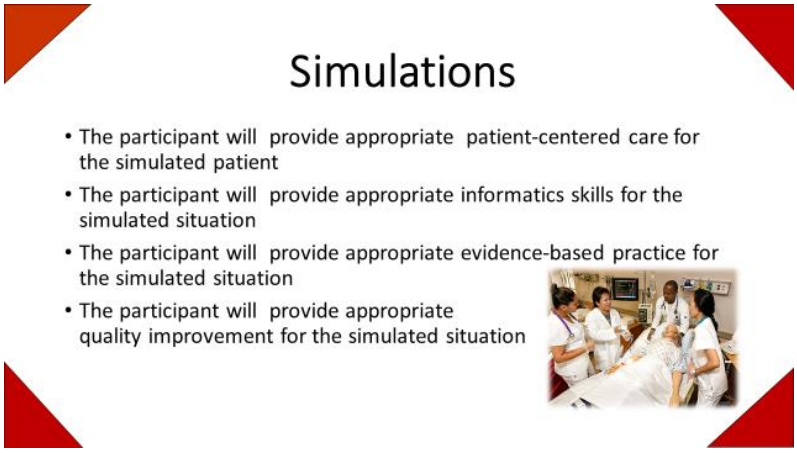
Enhancing Knowledge and Skills
3 Day-Training Workbook

This workbook will be used throughout the 3-Day Training "Enhancing Knowledge and Skills."

Day 3 Agenda

0900-0915: Welcome to Day 3
0915-1045: Simulation #1
1045-1100: Break
1100-1230: Simulation #2
1230-1300: Lunch
1300-1430: Simulation #3
1430-1445: Break
1445-1615: Simulation #4
1615-1630: Wrap-Up and Evaluations

Simulations



The four 1 hour and 30 minute simulations will run simultaneously.

Simulation: Patient-Centered Care
Setting: Hospital Patient Room

Report from the night shift nurse:
Room 321A is a 61 year-old male patient admitted last night with a right pleural effusion. Has a history of lung cancer, metastasis to the brain and pleural effusions. Lungs sounds clear to the right upper lobe (RUL) and left upper lobe (LUL), but diminished to the left lower lobe (LLL). Vital signs stable with pulse ox at 95% on 2 liters nasal cannula. Patient did not sleep at all due to back pain and is fearful to lean back. Pain medication morphine has been given 2 times during the night with the last one administered 15 minutes ago. Charge nurse and staff nurse meets the patient.

Simulation: Patient-Centered Care

Simulation Steps	**Notes and Reflection**
Prebriefing ***Charge Nurse:*** _____ ***Staff Nurse:*** _____ ***Patient:*** _____ ***Patient's Daughter:*** _____	***Review prior patient-centered care notes.***
Simulation	
Debriefing	***What went well?*** ***What did not go so well?*** ***What did you learn from being the lead charge nurse, staff nurse, patient and family member?***

Simulation: Informatics
Setting: Nursing Unit in Hospital

Clinical Situation:
Three nursing students are assigned to your unit. During report. The charge nurse assigns the student nurses to three unit nurses. The nursing students had a brief orientation on the electronic health record and the electronic medication record. The charge nurse is expected to assist the staff nurses during the simulation.

Simulation: Informatics

Simulation Steps	Notes and Reflection
Prebriefing ***Charge Nurse:*** _____ ***Staff Nurse 1:*** _____ ***Staff Nurse 2:*** _____ ***Staff Nurse 3::*** _____	***Review prior informatics notes.***
Simulation	
Debriefing	***What went well?*** ***What did not go so well?*** ***What did you learn from being the lead charge nurse and staff nurses?***

Simulation: Evidence-Based Practice
Setting: Unit Meeting

Clinical Situation:
The nurse director has called a unit meeting. The charge nurse and three nurses attend the meeting. During the meeting, the nurse director provides specific unit data that consist of hospital acquired infections rates and the number of falls.

Simulation: Evidence-Based Practice

Simulation Steps	Notes and Reflection
Prebriefing	***Review prior evidence-based practice notes.***
Simulation	
Debriefing	***What went well?*** ***What did not go so well?*** ***What did you learn from being the lead charge nurse and staff nurses?***

Simulation: Quality Improvement
Simulation Setting: Quality Improvement Hospital Meeting

Clinical Situation:
The charge nurse and three nurses are planning to attend a Quality Improvement Hospital Meeting. An agenda item includes bringing a quality improvement idea for the unit.

Simulation: Quality Improvement

Simulation Steps	**Notes and Reflection**
Prebriefing	***Review prior quality improvement notes.***
Simulation	***P:*** ***D:*** ***S:*** ***A:***
Debriefing	***What went well?*** ***What did not go so well?*** ***What did you learn from being the lead charge nurse, hospital nurses at a Quality Improvement meeting?***

Simulation- Patient Centered-Care Key for Educator

Setting: Hospital Patient Room

Report from the night shift nurse:
Room 321A is a 61 year-old male patient admitted last night with a right pleural effusion. Has a history of lung cancer, metastasis to the brain and pleural effusions. Lungs sounds clear to the right upper lobe (RUL) and left upper lobe (LUL), but diminished to the left lower lobe (LLL). Vital signs stable with pulse ox at 95% on 2 liters nasal cannula. Patient did not sleep at all due to back pain and is fearful to lean back. Pain medication morphine has been given 2 times during the night with the last one administered 15 minutes ago. Charge nurse and staff nurse meets the patient.

Simulation Timeline

Time	Patient	Nurse Expectations	Comments
Initial assessment (5-10 minutes)	Patient is sitting straight up in bed and states he still has back pain. Lungs are still clear to the RUL and LUL but diminished to the LLL Pulse ox if 97% on 2 liters Patient's daughter at bedside: crying and states "I can't stand seeing my dad in pain!"	Introduces self and addresses patient by full name Performs respiratory assessment Asks patient: "on rate of 10 what is your pain level?" Asks patient "what has helped your pain in the past? Place head of bed at 90% and provide pillows for his back. Contact doctor for another pain medication order	Pleural effusion is very painful. His respiratory status is stable so the pain management is a priority. Pain medication may or may not help so it is important for the nurse to ask what has helped him in the past. Patient centered care is going beyond on what is ordered such as using pain alternatives may help this patient (comfort, pillows, distraction relaxation methods)
The next 10-20 minutes	Patient states "I think this lung cancer has	The nurse does not interrupt the	Patient-centered care focuses on the

	gotten me… I can't do anything anymore" Patient's daughter states "you can't give up.. I don't want you to die!"	conversation. The nurse allows the patient and patient's daughter to talk The nurse checks chart to see if patient has a preferred religious domination and offers patient if he would like a hospital clergy person to talk to.	patient's spiritual needs as much as physical and psychosocial needs.

Simulation- Informatics Key for Educator

Setting: Nursing Unit in Hospital

Clinical Situation:

Three nursing students are assigned to your unit. During report. The charge nurse assigns the student nurses to three unit nurses. The nursing students had a brief orientation on the electronic health record and the electronic medication record. The charge nurse is expected to assist the staff nurses during the simulation.

Simulation Timeline

Time	Situation	Nurse Expectations	Comments
Initial situation (10 minutes)	The charge nurse introduces the three staff nurses to the three students. The students are having difficulty printing computer shift report sheets One student states to the other two students "My nurse gave me this communication device to communicate with her, and the patients but I am unsure how to use it. The students ask the nurses to explain the use of the communication device.	The three nurses welcome the students to the unit The nurses demonstrate or explain how to print the sheets The nurses explain and demonstrate the use of the communication device. The nurse also explains the different types of communication	The print report sheets help the nurses and students organize the day. Provide three different communication devices for the nurses to demonstrate. May be related to nurse to nurse communication, nurse to patient communication, and nurse to other healthcare professionals
The next 10 minutes	The students enter a room with the nurse. The room has new cardiovascular, respiratory and a new wound vac equipment. The student will randomly select an equipment device and will ask the nurse to show them how to use it.	The nurse will enter the room with the student and will explain and demonstrate how to use the equipment	Have a variety of equipment in room for the student to select from. Also, make sure that the policy and procedures are printed and available for the nurse to review if needed.

Simulation- Evidence-Based Practice Key for Educator

Setting: Unit Meeting
Clinical Situation:
The nurse director has called a unit meeting. The charge nurse and three nurses attend the meeting. During the meeting, the nurse director provides specific unit data that consist of hospital acquired infections rates and the number of falls.
Simulation Timeline

Time	Situation	Nurse Expectations	Comments
Initial situation (5-10 minutes)	The nurse director states that the number of hospital acquired infection rates have gone up from last quarter. The nurse director has asked the nurses to lead a focus group to review practice guidelines Each nurse selects one of the below: • Clostridium difficile • Catheter-associated urinary tract infection • Central line-associated blood stream infection • Fall prevention	Each nurse selects one topic and searches for the current practice guidelines that the hospital uses. The nurse is also expected to search for the guidelines in the hospital policy and procedures.	The participant will examine how evidence-based practice findings can connect to clinical situations
The next 10-20 minutes	The nurse director also asks the nurses to search for recent research and bring at least two new research articles that they can post for the staff to read.	The nurses use CINAHL and/or ProQuest to search for recent literature. The nurse will print the article.	This section may require additional time. The participant must have a computer with internet to search for recent literature

Simulation- Quality Improvement Key for Educator

Simulation Setting: Quality Improvement Hospital Meeting
Clinical Situation:
The charge nurse and three nurses are planning to attend a Quality Improvement Hospital Meeting. An agenda item includes bringing a quality improvement idea for the unit.
Simulation Timeline

Time	Situation	Nurse Expectations	Comments
Initial situation (10 minutes)	The charge nurse and three nurses select one of the below evidence-based topics • Clostridium difficile • Catheter-associated urinary tract infection • Central line-associated blood stream infection • Fall prevention	The charge nurse and three nurses will work together to select the topic. They will also gather the data for the topic They will also review the recent literature for any new recommendations.	The participants will identify gaps in clinical practice.
The next 10-20 minutes	The quality improvement hospital chair request the charge nurse and nurses to create a Plan-Do-Study-Act for the selected topic.	The charge nurse and nurses will follow the PDSA process. P- Plan. What is the goal or purpose of the plan? D- Implementation of the plan. S- Study. How will you review the results and if outcome was met? A -Integrating the changes into practice. The participants will come up with an audit or monitor	This section may require additional time. The participant must have a computer or paper to write the PDSA.

Day 3 Training Evaluation Form

Date _____

Thank you for attending Enhancing Knowledge and Skills Day 3.

Please complete the evaluation by adding an "X" in the box that corresponds to your impression of the following items:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Curriculum					
The Day 3 training met my expectations					
I will be able to apply the knowledge and skills I learned					
The objectives for the simulations were identified and followed					
My patient-centered care confidence is higher after caring for simulated patient					
My informatics confidence is higher after participating in the simulated situation					
My evidence-based practice confidence is higher after participating in the simulated situation					
My quality improvement confidence is higher after participating in the simulated situation					
The content was organized					
The materials distributed were pertinent and useful					
The learning strategies were pertinent and useful					
The patients I care for will benefit from the knowledge I gained					
Instructor					
The presenters were knowledgeable					
The presenters were well prepared					
The presenters encouraged active participation					

Comments					
What part of the Day 3 training was the most beneficial to you? Why?					
What part of the Day 3 training was the least beneficial to you? Why?					
Other Comments:					

Overall Training Evaluation Form

Date _____

Thank you for attending the 3-Day Enhancing Knowledge and Skills Program.

Please complete the evaluation by adding an "X" in the box that corresponds to your impression of the following items:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Overall Curriculum					
The 3-Day training program met my expectations					
The overall quality of the program was good					
The 3-Day Training is worthwhile and should be offered to all new nurses					
I will be able to apply the knowledge and skills I learned					
The content was organized					
The materials distributed were pertinent and useful					
The learning strategies were pertinent and useful					
The patients I care for will benefit from the knowledge I gained					
Comments					
What part of the entire training program was the most beneficial to you? Why?					
What part of the entire training program was the least beneficial to you? Why?					
Other Comments:					

Appendix B: Walden IRB Approval

Notification of Approval to Conduct Research
IRB <irb@mail.waldenu.edu>
Wed 4/11, 2:57 PMYvonne Davila;IRB;Jennifer L. Mathes

Dear Yvonne,

This email confirms receipt of the documentation of approval from Methodist Healthcare's Institutional Review Board and also serves as your notification that Walden University has approved BOTH your doctoral study proposal and your application to the Institutional Review Board. As such, you are approved by Walden University to conduct research.

Congratulations!

Bryn Saunders
Research Ethics Support Specialist, Office of Research Ethics and Compliance

Leilani Endicott
IRB Chair, Walden University

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link: http://academicguides.waldenu.edu/researchcenter/orec

Appendix C: Healthcare Facility IRB Approval

METHODIST HEALTHCARE
"Serving Humanity to Honor God"
www.SAHealth.com
INSTITUTIONAL REVIEW BOARD
FWA00000435
8109 Fredericksburg Road, 3rd Floor, San Antonio, TX 78229
Telephone: (210) 575-4918
Fax: (210) 575-0587
MHS IRB web site: https://sites.google.com/site/mhsirbsatx/

April 10, 2018

Yvonne Davila
8754 Welles Dale:
San Antonio TX 78240

Re:	[1220166-1] QSEN Competency Confidence Levels in Two Groups of New Registered Nurses
Site:	*[Methodist Hospital; Methodist StoneOak Hospital' Methodist Metropolitan Hospital; Northeast Methodist Hospital; Methodist Children's Hospital of South texas; Methodist Specialty & Transplant Hospital; Methodist Texsan Hospital]*
Sub-Inv:	*[N/A]*

Dear Ms. Davila,

The above referenced study has been reviewed under expedited review (DHHS Regulation 45 CFR 46.110). It is determined that this study meets minimal risk requirements as submitted. Provisions to protect the confidentiality of subjects have also been provided and are deemed appropriate and adequate measures for subject protection. Expedited approval is therefore granted effective **April 10, 2018**, per 45 CFR 46.110 Categories as described below:

- **Category 7:** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your study is restricted to a maximum of **60 subjects** .

In accord with 45 CFR 46.117(c)(2), the requirement for documentation of informed consent is waived for this study. The waiver is granted after determining that:

- The research involves no more than minimal risk to the subjects;
- The research involves no procedures for which written consent is normally required outside of the research context.

This approval expires April 10, 2019. A progress report must be submitted for continuing review and approved by the Board prior to that date. Failure to do so by this date will result in enrollment suspension. Further delay will result in study closure. A Progress Report form (and other forms needed for IRB submission) can be found in the library section of the Designer page on IRBNet.

RESPONSIBILITIES OF PRINCIPAL INVESTIGATOR:

1. Report immediately to the IRB all deaths of subjects, regardless of cause;

Appendix C: Healthcare Facility IRB Approval

2. Report immediately to the IRB any reportable severe adverse reactions or serious problems, per IRB Guidelines;
3. Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to take part;
4. Ensure that only persons formally approved by the IRB enroll subjects;
5. Submit for review and approval by the IRB all modifications to the protocol or consent form(s) prior to the implementation of the change;
6. Submit a progress report for continuing review by the IRB. Federal regulations require that the IRB review on-going projects no less than one year from the approval date (progress report available in the Library in IRBNet); and
7. Notify the IRB in writing when the study has been completed and prepare a final report (Progress Report form).

If you have any questions, please contact the IRB Office or Philip Oilepo at (210) 575-6910 or philip.oilepo@mhshealth.com. Please include your study title and reference number in all correspondence with this office.

"This document has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records."

Appendix D: Healthcare Facility IRB Amendment Approval

METHODIST HEALTHCARE
"Serving Humanity to Honor God"
www.SAHealth.com
INSTITUTIONAL REVIEW BOARD
FWA00000435
8109 Fredericksburg Road, 3rd Floor, San Antonio, TX 78229
Telephone: (210) 575-4918
Fax: (210) 575-0587
MHS IRB web site: https://sites.google.com/site/mhsirbsatx/

June 22, 2018

Yvonne Davila
8754 Welles Dale
San Antonio, TX 78240

Re:	[1220166-2] QSEN Competency Confidence Levels in Two Groups of New Registered Nurses
Site:	*[Methodist Hospital; Methodist StoneOak Hospital' Methodist Metropolitan Hospital; Northeast Methodist Hospital; Methodist Children's Hospital of South texas; Methodist Specialty & Transplant Hospital; Methodist Texsan Hospital]*

Dear Ms Davila,

The Revsion made to the above referenced study has been reviewed under expedited review (DHHS Regulation 45 CFR 46.110 and/or 21 CFR 56.110, as applicable). It is determined that the minor modification to increase the sample size from 60 subjects to 70 subjects, for this study, meets minimal risk requirements as submitted.

Expedited approval for the minor revision request is therefore granted, **effective June 22, 2018.**

Your study is restricted to a maximum of **70 subjects**.

This approval expires April 10, 2019. A progress report must be submitted for continuing review and approved by the Board prior to that date. Failure to do so by this date will result in enrollment suspension. Further delay will result in study closure. A Progress Report form (and other forms needed for IRB submission) can be found in the library section of the Designer page on IRBNet.

RESPONSIBILITIES OF PRINCIPAL INVESTIGATOR:

1. Report immediately to the IRB all deaths of subjects, regardless of cause;
2. Report immediately to the IRB any reportable severe adverse reactions or serious problems, per IRB Guidelines;
3. Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to take part;
4. Ensure that only persons formally approved by the IRB enroll subjects;
5. Submit for review and approval by the IRB all modifications to the protocol or consent form(s) prior to the implementation of the change;

Appendix D: Healthcare Facility IRB Amendment Approval

6. Submit a progress report for continuing review by the IRB. Federal regulations require that the IRB review on-going projects no less than one year from the approval date (progress report available in the Library in IRBNet); and
7. Notify the IRB in writing when the study has been completed and prepare a final report (Progress Report form).

If you have any questions, please contact the IRB Office or Tara Garcia at (210) 575-4918 or tara.garcia2@mhshealth.com. Please include your study title and reference number in all correspondence with this office.

"This document has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records."

Appendix E: Walden Notification of Amendment Approval

IRB <irb@mail.waldenu.edu>
Mon 6/25, 2:36 PM
Hi Yvonne,

This email is to confirm a Request for Change in procedures is not needed at this time as the described change concerned a limitation imposed by the site (not Walden) and the site has approved of this change.

Best of luck with the rest of your research!

Bryn Saunders
Research Ethics Support Specialist
Office of Research Ethics and Compliance
Email: irb@mail.waldenu.edu
Phone: (612-)312-1336
Fax: (626-)605-0472

Walden University
100 Washington Ave. S, Suite 900
Minneapolis, MN 55401

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link: http://academicguides.waldenu.edu/researchcenter/orec

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From: Yvonne Davila [mailto:yvonne.davila@waldenu.edu]
Sent: Saturday, June 23, 2018 11:32 AM
To: IRB <irb@mail.waldenu.edu>
Cc: Jennifer L. Mathes <jennifer.mathes@mail.waldenu.edu>
Subject: DavilaY A00563864 IRB

Dear IRB Committee,

The Methodist Healthcare IRB initially restricted my study to a maximum of 60 subjects but I received a total of 68 responses. I immediately contacted Philip Oilepo from Methodist Healthcare IRB and he directed me to submit an amendment form. I sent the form to request to change the 60 subjects to 70 subjects. Attached is the updated Methodist IRB Amendment Approval document.

Thank you,

Yvonne Davila
EdD Student

Appendix F: Letter of Cooperation

METHODIST
HEALTHCARE SYSTEM
"Serving Humanity to Honor God"
8109 Fredericksburg Rd ▪ San Antonio, Texas 78229
(210) 575-0200

March 7, 2018

Dear Yvonne Davila,

Based on my review of your research proposal, I give permission for you to conduct the study entitled QSEN Competency Confidence Levels in Two Groups of New Registered Nurses within the Methodist Healthcare System of San Antonio (MHS) during the year of 2018.

I understand that you will also be undertaking a Walden University student researcher role that is separate from your nurse educator role. In your student researcher role, I authorize you to recruit new nurses who have 5-7 months of RN experience to answer the Nursing Quality and Safety Self-Inventory tool via SurveyMonkey. I also understand that the participants will be asked if they participated in one of our pre-licensure programs which consists of Dedicated Education Units, Dedicated Transition to Practice Program, Nurse Externship, Paid Internship or Patient Care Assistant. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: determining the nursing cohort who has 5-7 months of RN experience, providing the selected cohort emails and providing a hospital computer to send the recruitment and reminder emails. We reserve the right to withdraw from the study at any time if our circumstances change.

This study will need to go through the Methodist Healthcare System Institutional Review Board (IRB) for approval after Walden University's IRB approves. I understand that the student will not be naming our organization in the doctoral project report that is published in Proquest. I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

We look forward to your results and the impact they may have on improving our safety initiatives

Sincerely,

Carolyn King, LCSW, LMFT, BCD

Carolyn King, LCSW, LMFT, BCD
Director of Grants & Clinical Education Operations
Clinical and Professional Education
Methodist Healthcare System of San Antonio
8109 Fredericksburg Road
San Antonio, TX 78229

Appendix G: Participant Email Invitation and Consent Form

Dear Methodist Healthcare Registered Nurse,

Hello, my name is Yvonne Davila, a doctoral student from Walden University. This is a reminder that you are cordially invited to take part in a project study related to Quality and Safety Education for Nurses (QSEN) competency confidence levels in new registered nurses. All new Methodist Healthcare Registered Nurses (RNs) who participated in a residency program and have 5 to 7 months of clinical experience are invited to participate in the study.

The purpose of this study is to investigate the difference between QSEN competency confidence levels of new nurses.

If you agree to be a participant in this study, you will be asked to complete an online survey through Survey Monkey that will take you approximately 15 - 20 minutes to complete.

Examples of questions are listed below:

"Please rate your level of agreement with each QSEN competency area statements listed below by clearing marking the box that corresponds with your level of agreement"

"I feel confident that I have the necessary knowledge to practice patient-centered nursing care:"

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

"I feel confident that I have the necessary skills to practice patient-centered nursing care:"

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

"I feel confident that I have the necessary attitudes to practice patient-centered nursing care:"

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

This study is voluntary. You are free to accept or turn down the invitation. No one at Methodist Healthcare will treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later. You may stop at any time.

Being in this type of study involves some risk of minor discomforts that can be encountered in daily life, such as stress as you reflect on your own self-confidence related to QSEN competencies. Being in this study would not pose risk to your safety or wellbeing.

The potential benefits of this study include understanding the differences between QSEN competency confidence levels of new registered nurses. The differences can help health care agencies determine if additional resources such as prelicensure programs and residency programs should be offered at hospitals.
As a thank you gift, I offer a $5.00 Starbucks gift card. Please click the link at the end of the survey to receive your redeemable gift card.

Reports coming out of this study will not share the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. Even the researcher will not know who you are. The study is anonymous. The researcher will not use your personal information for any purpose outside of this research project. Data will be kept secure by using encrypted passwords. Collected data will be transferred from Survey Monkey to an excel spreadsheet. The excel spreadsheet data will be exported into the SPSS file. The SPSS file will be saved in a flash drive, and the flash drive will be placed in a locked box and in a locked desk for at least 5 years, as required by the university.

You may ask any questions you have now. Or, if you have questions later, you may contact the researcher via phone number 210-213-0232 and/or email at Yvonne.davila@waldenu.edu If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210. Walden University's approval number for this study is 03-21-18-0563864 and it expires on March 20, 2019.

Please print or save this consent form for your records.

If you feel you understand the study well enough to make a decision about it, please indicate your consent by clicking the link below

The Survey Monkey link is https://www.surveymonkey.com/r/JL88SM7 and all responses will be anonymous

Appendix H: Permission for Use of the Nursing Quality and Safety Self-Inventory

Re: Request to Use NQSSI
Yvonne Davila
Ronald Piscotty piscotty@gmail.com

Dr. Piscotty,
Thank you so much for granting me permission to use the Nursing Quality and Safety Self-Inventory in my study. I will include proper credit/citation in my work, and I will also provide you a copy of my complete study when I am done.

Thank you for your support.
Yvonne A Davila MSN RN CNE
Walden Ed.D Student
210-213-0232

From: Ronald Piscotty <piscotty@gmail.com>
Sent: Wednesday, July 12, 2017 8:10:56 PM
To: Yvonne Davila
Subject: Re: Request to Use NQSSI

Hi Yvonne,
Yes, you have my permission. I have attached a copy of the tool and article to this email. The only thing I ask is that you give proper credit/citation (Journal of Nursing Education Article) when presenting or publishing.
I wish you the best in your studies.

Thanks,
Dr. Piscotty

Ronald (Ron) J. Piscotty, Jr., PhD, RN-BC
Assistant Professor
University of Maryland School of Nursing
Organizational Systems and Adult Health
Nursing Informatics Specialty
655 West Lombard Street, Baltimore, MD 21201, Rm. 445D
586 588 0271 (cell) | 410 706 6508 (office) | 410 706 3289 (fax)
*piscotty@umaryland.edu
https://www.nursing.umaryland.edu/directory/ronald-piscotty/

On Tue, Jul 11, 2017 at 12:06 PM, Yvonne Davila <yvonne.davila@waldenu.edu> wrote:

Mr. Ronald Piscotty,

Hello, my name is Yvonne Davila MSN RN CNE, I am a doctoral student at Walden University and a nurse instructor at University of the Incarnate Word Ila Faye Miller School of Nursing and Health Professions in San Antonio Texas.

I am currently working on my doctoral study project, ***QSEN Competency Confidence Levels in Two Groups of New Registered Nurses***, and I would like to use your Nursing Quality and Safety Self-Inventory (NQSSI) in my study. I found your tool in the Quality and Safety Education for Nurses (QSEN) website and in the article, ***Initial Psychometric Evaluation of the Nursing Quality and Safety Self-Inventory.*** I selected your tool because it is based on the QSEN competencies which aligns with my study.

Do I have your permission to use the NQSSI tool?

I will be happy to keep you updated in my progress and share my results with you.

Thank you for your support,
Yvonne A Davila MSN RN CNE
Walden Ed.D Student
210-213-0232

Appendix I: Nursing Quality and Safety Self-Inventory

Oakland University
School of Nursing

NQSSI©

Nursing Quality and Safety Self-Survey (NQSSI)©

Directions:

1. Please rate your level of agreement with each of the QSEN competency area statements listed below by clearing marking the box that corresponds with your level of agreement.

Example:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
	X					

2. A definition for each competency area has been provided below to enhance your understanding of the area.

3. There are three statements under each competency category which ask you to rate your knowledge, skills, and attitudes in regard to that area.

4. Knowledge, skills, and attitudes are defined as:

   a. Knowledge: Theoretical or practical understanding necessary to provide safe and quality nursing care.

   b. Skill: Abilities, expertise, or dexterity necessary to provide safe and quality nursing care.

   c. Attitudes: A settled way of thinking or feeling regarding the competency area that is necessary to provide safe and quality nursing care.

5. Please use the definitions when rating each statement.

6. Please be honest of your true ratings.

Appendix J: Nursing Quality and Safety Self-Inventory- Patient Centered Care

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Patient-centered Care

Definition: Recognize the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences, values, and needs.

1. **I feel confident that I have the necessary knowledge to practice patient-centered nursing care:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

2. **I feel confident that I have the necessary skills to practice patient-centered nursing care:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

3. **I feel confident that I have the necessary attitudes to practice patient-centered nursing care:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

Appendix K: Nursing Quality and Safety Self-Inventory- Teamwork and Collaboration

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Teamwork and Collaboration

Definition: Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.

4. **I feel confident that I have the necessary knowledge to ensure an effective nursing practice based on teamwork and collaboration:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

5. **I feel confident that I have the necessary skills to ensure an effective nursing practice based on teamwork and collaboration:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

6. **I feel confident that I have the necessary attitudes to ensure an effective nursing practice based on teamwork and collaboration:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

Appendix L: Nursing Quality and Safety Self-Inventory- Evidenced-Based Practice

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Evidenced-based Practice (EBP)

Definition: Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.

7. **I feel confident that I have the necessary knowledge to achieve an evidenced-based nursing practice:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

8. **I feel confident that I have the necessary skills to achieve an evidenced-based nursing practice:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

9. **I feel confident that I have the necessary attitudes to achieve an evidenced-based nursing practice:**

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

Appendix M: Nursing Quality and Safety Self-Inventory- Quality Improvement

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Quality Improvement (QI)

Definition: Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems.

10. I feel confident that I have the necessary knowledge to participate in quality improvement (QI) in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

11. I feel confident that I have the necessary skills participate in quality improvement (QI) in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

12. I feel confident that I have the necessary attitudes to participate in quality improvement (QI) in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

Appendix N: Nursing Quality and Safety Self-Inventory- Safety

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Safety

Definition: Minimize risk of harm to patients and providers through both system effectiveness and individual performance.

13. I feel confident that I have the necessary knowledge to deliver safe nursing care:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

14. I feel confident that I have the necessary skills to deliver safe nursing care:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

15. I feel confident that I have the necessary attitudes to deliver safe nursing care:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

Appendix O: Nursing Quality and Safety Self-Inventory – Informatics

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Informatics

Definition: Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.

16. I feel I have the necessary knowledge to integrate and utilize technology in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

17. I feel I have the necessary skills to integrate and utilize technology in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree

18. I feel I have the necessary attitudes to integrate and utilize technology in nursing practice:

Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree