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Comparing the Knowledge, Skills and Attitudes of Newly Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Nursing Orientation Program

Dana Lusk

Submitted In Partial Fulfillment of the Doctor of Nursing Practice Degree

Rueckert-Hartman College for Health Professionals

Loretto Heights School of Nursing

Regis University

Denver, CO

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This material is the result of work supported with resources and the use of facilities at the Denver VA Medical Center and VA Eastern Colorado Health Care System. The views expressed in this work are the views of the author do not necessarily represent the views of the Department of Veterans Affairs or the United States Government.

Executive Summary

Comparing the Knowledge, Skills and Attitudes of Newly Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Nursing Orientation Program

Problem

There was a lack of content regarding quality and patient safety in an urban Veterans Administration (VA) health care system nursing orientation program. A Department of Veterans Affairs culture of safety survey indicated frontline VA nursing staff scored lower in the safety culture dimensions compared to other VA health care professionals. Developing a curriculum for nursing orientation incorporating the six Quality and Safety Education for Nurses (QSEN) competencies and utilizing a trans-theoretical approach guided by Marilyn Ray's theory of bureaucratic caring and Albert Bandura's self-efficacy theory was developed to offer a solution.

Purpose

The purpose of this project is to determine if a theory-guided, competency-based, nursing orientation program will increase the self-reported self-efficacy of the knowledge, skills and attitudes associated with the six QSEN competencies and learner satisfaction of newly hired nursing staff within an urban, Veterans Administration health care system.

Goals

The goals of this project are to redesign the nursing orientation program to increase quality and safety content in the nursing orientation curriculum; increase learner satisfaction of nursing orientation; and ensure compliance with the VA and Office of the Inspector General standards regarding competency validation of nursing competency, and improve the facility culture of safety.

Objectives

The objectives of this project are to develop a nursing orientation program within the framework of the existing orientation program; develop a QSEN competency validation form; administer the Nursing Quality and Safety Self-Inventory (NQSSI) as a pre and posttest of the participants in nursing orientation and a post Utilization-Focused Evaluation before and after implementation to compare for any differences in the self-efficacy or learner satisfaction of newly hired nursing staff.

Plan/Method

Causal-comparative/case control design with a comparative group using interrupted time series pretest, posttest and approximately 30 day post-posttest.

Outcomes and Result

Results of the NQSSI found no significant difference in all of the KSAs of the six QSEN competencies between the control and intervention groups except for post-posttest results for Knowledge in the Quality Improvement competency. Significantly higher satisfaction is found in the intervention group who had the Quality and Safety Competency-Based Nursing Orientation compared to the control group with usual nursing orientation in all areas except for the classroom being conducive to learning. Differences were found in some of the results of the NQSSI regarding years of experience and having had QSEN in nursing school. Those with 0-3 years of experience or had QSEN in nursing school scored lower in some of the KSAs than those with more experience or those who did not have QSEN or were not sure. There are no significant differences regarding level of nursing education and NQSSI results.

Acknowledgements

This project would not be possible without the following individuals:

- My Regis University Capstone Chair, Dr. Alma Jackson for her inspiration and support without whom this topic and project would never had become a reality.
- My Faculty Advisor, Dr. Patricia Cullen for all of her words of wisdom and encouragement.
- My mentors at the VA: Dr. Eric Rodger, who acted as my DNP Clinical Mentor and Dr. Sarry Moscatel, who acted as the VA Faculty Investigator.
- Dr. Cheryl Krushke for her help with "the numbers." I will always remember her words: "Look at the data; it tells the story."
- My loving and supportive husband for putting up with my "melt downs" and "I can't do this." He believed in me even when I did not.

Especially loving and heartfelt thanks to Dr. Marilyn "Dee" A. Ray, whose generosity in providing her time and counsel to me regarding her theory of bureaucratic caring was an amazing gift. She breathed new life into this project when she read and critiqued my paper. Her wisdom and loving spirit helped me to see her vision of looking at caring beyond the humanistic caring of the nurse-patient relationship, but also to the economic-legal-political caring of the nurse administrator within the complex, bureaucratic healthcare system. I will forever treasure our time together.

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Comparing the Knowledge, Skills and Attitudes of Newly Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Nursing Orientation Program

When referring to quality and safety in healthcare, these terms are often interconnected with term care (i.e., quality care or safe patient care). Caring is a nurturing behavior and as such, may seem out of place in large hierarchical, formal organizations where resources, roles, rules, regulations and policies are decided and implemented from officially designated authorities (Ray, 1989). If healthcare systems are functioning within a bureaucratic culture, how can the concept of caring in regards to quality and safety become integral to institutional political, legal, economic, or financial viability? How do we define quality care or safe patient care within bureaucratically organized systems? Caring has become associated with the essence or dominant concept within the epistemology of professional nursing working within these bureaucratic organizations (Ray, 1989). In examining the concept of caring in nursing, Morse, Solberg, Neander, Bottorff, and Johnson (2013) found a divergence between those who view caring as a process of interaction or interpersonal versus caring as interventions. The authors concluded these divergent views of caring are manifested when nurses view their work as being controlled by organizational authority and limiting their time spent in providing interpersonal caring activities with patients in order to be more efficient and focus on interventions as care. This is to ensure nursing care is as economically viable as possible while nurses are struggling to provide the more interpersonal or interaction side of caring. This divergent view results in professional dissatisfaction, and nurses' fear of spending less time with patients may result in unsafe care (Morse et al., 2013). Dr. Marilyn Ray's theory of bureaucratic caring explains these divergent views by informing us how bureaucratic culture differentiates caring depending on administrative or clinical roles within the organization (Ray, 1989). By examining the

substantive theory of differential caring categories within bureaucratic caring (political, economic, legal, technological, educational, social, spiritual and ethical) provides understanding these are not divergent views of caring after all but are actually part of the whole of which the whole is part. According to Dr. Ray, this is the holographic theory of bureaucratic caring, grounded in Complexity Science, which reveals the mutual process of organizational, environmental and individual caring into a holistic meaning of culture of caring and culture of safety (M. Ray, personal communication, September 25, 2015). So the methods within the teaching/learning environment in introducing the policies, procedures and philosophies of the organization, the new nurses are actually exposed to the connections of differential caring. This is also the educational caring of the clinical nurse educator according to bureaucratic caring (Ray, 1989).

According to Bandura (2009), orientation and training for newly hired employees should be designed to prepare them for their roles they were hired into and the structure and culture of the organization. New employees with low self-efficacy prefer specific and "prescriptive training, which tells them how to perform the roles" and tasks assigned (Bandura, 2009, p. 181). Whereas those with high self-efficacy prefer orientation, which will enable them to be innovative in their roles and bring experience and ideas that may improve customary practice. According to Hodges and Hansen (1999), a well-designed competency-based nursing orientation is learner-centered by focusing on the individual employee's ability to perform their new role. A traditional orientation program tends to be structured solely on the cognitive knowledge regarding the new role and is more subject-centered. In providing a learner-centered orientation, an assessment of the learner's competencies will determine an individualized orientation for each employee (Hodges & Hansen, 1999). Additionally, a competency-based nursing orientation

program, which is learner-centered, may improve the employee's orientation experience and sense of welcome to the organization.

Problem Recognition and Definition

Statement of Purpose

The aim of this quality improvement study is to determine if a theory-guided competency-based nursing orientation (QSC-BNO) program increased the self-reported self-efficacy of the knowledge skills and attitudes (KSA's) associated with the six QSEN competencies and learner satisfaction of newly hired nursing staff within an urban, Veterans Administration (VA) health care system.

Problem Statement

A need was identified to address low culture of safety scores by frontline VA nurses (Office of Quality & Safety and Value, 2012; Singer et al., 2009; Sculli et al., 2013), while also standardizing the process to validate nursing competencies (Department of Veterans Affairs & Office of the Inspector General, 2012), while improving the quality and safety of patient care. A redesigned nursing orientation program and a nursing competency policy to incorporate the QSEN competencies have been developed. The policy addresses how nursing competencies are developed and validated using the QSEN competencies and associated KSAs. The first steps in this policy are the validation of the initial competencies in the orientation period of newly hired nursing staff. This will be accomplished through a quality and safety competency-based nursing orientation (QSC-BNO) program. The problem statement associated with this practice issue in PICO format:

P: Newly hired nursing staff at an urban VA health care system.

I: Implementation of a quality and safety competency-based nursing orientation program.

C: Usual general nursing orientation.

O: Improved self-reported self-efficacy of knowledge, skills and attitudes (KSAs) in providing quality and safe patient care and learner satisfaction.

The question this project aims to answer is: Will newly hired nursing staff at an urban VA health care system, after the implementation of a quality and safety competency-based nursing orientation program, compared to newly hired nursing staff prior to implementation, demonstrate improved self-reported self-efficacy of knowledge, skills and attitudes in providing quality and safe patient care to veterans and learner satisfaction?

The null hypothesis: There is no difference between self-rated knowledge, skills and attitudes and learner satisfaction of newly hired nursing staff before and after implementation of the QSC-BNO.

Project Significance, Scope and Rationale

Significance

The IOM and the QSEN Institute have revealed a set of core competencies that should be required of all health care professionals to provide quality and safe care to patients (Greiner & Knebel, 2003; Sherwood & Barnsteiner, 2012). Therefore, it seems essential to redesign a quality and safety competency-based orientation program, based on those competencies, to improve the quality and safety of the care provided to the veterans at a VA urban medical center. There is a gradual movement underway to incorporate the IOM and QSEN competencies into practice within the Veterans Health Administration (VHA), which is evidenced by the QSEN and IOM language in the initiatives of the VA Quality Scholars Fellowship Program (Patrician et al., 2012), which began accepting pre- and post-doctoral nurses as fellows into the program in 2011.

Project Scope and Appropriateness

This Doctor of Nursing Practice (DNP) capstone is a quality improvement (QI) project to determine the effectiveness of a redesigned competency-based nursing orientation program, as evidenced by comparing nursing self-efficacy and learner/participant satisfaction. This will be achieved by measuring the self-rated scores by newly hired nursing staff of their KSAs related to the QSEN competencies using the Nurses Quality and Safety Self-Inventory tool (NQSSI) (Piscotty, Grobbel, & Abele, 2013) and a utilization-focused evaluation by the participants. The scores of the NQSSI will be obtained using a pretest and posttest methodology. The learners will also conduct a utilization-focused evaluation on the last day of General Nursing Orientation (GNO) to measure satisfaction of the participants with the program. The scores of the NQSSI and the utilization-focused evaluations will be compared to those of newly hired nursing staff prior to the implementation of the quality and safety competency-based program.

This scholarly capstone project demonstrates an essential DNP role of operationalizing theory in clinical practice by: 1) Focusing on an evidence-based solution to an identified clinical practice problem; 2) Being specific to one particular health care system and not generalizable, though may be applied in other settings; and 3) Demonstrating the "scholarship of integration and application" by bringing "life to theory and reality to research in the context of the real world" (Zaccagnini & White, 2011, p. 453).

Rationale

The rationale for this capstone project is to serve as a pilot program to assess the effectiveness of a QSC-BNO program and the feasibility of a future expansion to a preceptor program for unit-based orientation. The GNO program for newly hired nursing staff is the ideal

place to begin this initiative to utilize the QSEN competencies and the associative KSAs for the entire nursing service at VA ECHCS and not just newly-hired nursing staff.

Theoretical Foundation

Integration of the six Quality Safety Education for Nurses (QSEN) competencies into a competency-based nursing orientation using a trans-theoretical approach by combining Ray's theory of bureaucratic caring and Bandura's self-efficacy theory provides a framework to redesign a quality and safety competency-based nursing orientation program. Both theories address organizational culture and effectiveness with Ray focusing on holographic caring in an organizational culture (Coffman, 2006; Ray & Turkel, 2010; Ray and Turkel, 2012) and Bandura on achieving individual self-efficacy and competency to improve organizational effectiveness (Bandura, 1982, 2009, & 2014). Through the understanding of complexity science as it relates to self-efficacy theory, as Ray does in her theory of bureaucratic caring (Ray & Turkel, 2012), then the connection of increasing individual self-efficacy of newly hired nurses during their orientation results in increasing organizational efficacy of the whole (Manojlovich, 2005; Bandura, 2009; Bumann & Younkin, 2012), regarding quality and safe patient care. The attainment of competencies by an individual nurse, such as those described by QSEN, may be achieved through the theory of self-efficacy developed by Albert Bandura (Bumann & Younkin, 2012). Combining personal interest with extrinsic rewards for personal mastery will result in the attainment of personal competence among those who have high self-efficacy (Bandura, 1982). Bandura's theory, when applied to nursing orientation, suggests nurses with high self-efficacy would engage in activities and attain competence in providing quality and safe patient care even if they believe the circumstances in doing so is wrought with insurmountable obstacles (Bandura, 2009).

Marilyn Ray's grounded theory of bureaucratic caring seems to be the ideal theoretical framework to inform bureaucratic systems, such as the VHA, how a caring culture is able to exist within an extremely complex, holistic and dynamic organization. As with many large health care organizations, the VHA has a hierarchical structure with a penchant for authoritative power and control in order to effectively function not only in caring for the sick and injured, but also as a technical-politico-economic and legal organization (Davidson, Ray, & Turkel, 2011). The theory of bureaucratic caring has continued to evolve as a holographic theory from the new science of Complexity Science and quantum theory, which provides a deeper understanding of complex systems thinking (Ray & Turkel, 2012). The field of theoretical physics, complex or quantum theory, explains the interconnectedness of all existence where the whole and the part are one and the same (Porter-O'Grady & Malloch, 2011). According to Porter-O'Grady and Malloch (2011) complex or quantum theory also informs us of the impact of any change occurring within an organization; even the smallest change will eventually effect the whole organization.

Bureaucratic caring theory helps us to understand the concept of caring within a complex, holistic and dynamic health care bureaucracy such as the VHA. Bureaucratic caring theory began through the discovery of what Ray (1989) identified and defined as the substantive theory of differential caring within health care organizations. The categories of differential caring are political caring, economic caring, legal caring, technological caring, educational caring, social caring, spiritual and religious caring and ethical caring (Ray, 1989; Ray & Turkel, 2010). Individuals in different roles or positions within the culture of a health care organization will have varying meaning or methods of operationalizing caring (Ray, 1989; Turkel, 2007). The Theory of Bureaucratic Caring describes the dialectical synthesis of caring in terms of

humanistic, social, educational, ethical and religious-spiritual and the antithesis of caring in terms of economic, political, legal and technological to create a caring wholeness within a bureaucracy (Ray, 1989). Ray and Turkel (2010) illuminate how differential caring is able to exist within the culture of the bureaucracy by illustrating how the nurse on the oncology unit is practicing holistic and spiritual caring, while the nurse in the critical care unit is practicing technological caring, and the nurse administrator is practicing economic caring by assuring economic viability of the organization. In bureaucratic caring the differentiated caring parts (social-cultural, spiritual-ethical, technological, legal, political, educational, or economic) described above are allowed to exist simultaneously thus co-creating an organizational wholeness of caring. If the differentiated caring parts are actually reflections or single fractals within a multifractal or interconnected whole, then caring is no longer the antithesis of the bureaucracy, but is a synthesis of the whole (Coffman, 2006).

The categories of differential caring categories in bureaucratic caring theory are relatable to each of the following six competencies as defined by the QSEN Institute (QSEN Institute, 2014; Cronenwett et al., 2007; Turkel, 2007): 1) Patient-centered care (PCC) is related to the differential caring categories of social-cultural caring and spiritual-ethical caring. 2) Teamwork and collaboration (T&C) is related to the differential caring category of political caring. 3) Evidence-based practice (EBP) is related to the differential caring category educational caring. 4) Quality improvement (QI) is related to the caring category for QI is economic caring. 5) Safety (S) is related to the differential caring category for physical caring and legal caring. 6) Informatics (I) is related to the differential caring category is technological-physiological caring. Table 1 illustrates the relationship between the six QSEN competencies and the eight categories of differential caring.

Table 1.

Related Definitions of QSEN Competencies and Differential Caring.

QSEN Competency	Definition (qsen.org)	Differential Caring Category	Definition/Meaning of Caring (Turkel, 2007, p. 59)
Patient Centered Care (PCC)	"Recognizes 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."	Social-Cultural Caring	"Ethnicity and family structures; intimacy with friends and family; community; social interaction and support; understanding relationships; involvement, and intimacy; and structures of cultural groups, community and society."
		Spiritual-Ethical Caring	"Holism and integration of body, mind, and spirit. Spirituality involves creativity and choice and is revealed in attachment, love and community. The ethical imperatives of caring that join with the spiritual relate to our moral obligation to others."
Teamwork and Collaboration	"Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care."	Political Caring	"Political factors and the power structure within healthcare administration influence how nursing is viewed in healthcare and include patterns of communication and decision making in the organization; role and gender stratification among nurses, physicians, and administrators; union activities, including negotiation and confrontation."
Evidence-Based Practice	"Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care."	Educational Caring	"Formal and informal educational programs, use of audiovisual media to convey information, and other forms of teaching and sharing information."

Quality Improvement	"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 health care systems."	Economic Caring	"Money, budget, insurance systems, limitations, and guidelines imposed by managed care organizations and, in general, allocation of scarce human and material resources to maintain the economic viability of the organization."
Safety	"Minimizes risks of harm to patients and providers through both system effectives and individual performance."	Legal Caring	"Responsibility and accountability; rules and principles to guide behaviors, such as policies and procedures; informed consent; rights to privacy; malpractice and liability issues; client, family, and professional rights; and the practice of defensive medicine and nursing."
		Physical Caring	"Related to physical state of being, including biological and mental patterns.
Informatics	"Use of information and technology to communicate, manage knowledge, mitigate error, and support decision-making."	Technological/ Physiological Caring	"Non-human resources, such as the use of machinery to maintain the physiological well-being of the patient, diagnostic tests, pharmacological agents, and the knowledge and skill needed to utilize these resources. Also included with technology are computer-assisted practice and documentation."

Operationalization of the theory of bureaucratic caring in providing quality care and patient safety within the organization occurs by defining quality and safety within the categories of differential caring in Ray's theory (Turkel, 2007). According to Turkel (2007), the "theory of bureaucratic caring arose from the decisions that were made and related to the organizational structure in terms of the ability to make choices of balancing the system demands with

humanistic patient care needs" (p. 61). If, within a part of the organization, nursing staff were demonstrating competent KSAs associated with the six QSEN competencies then, according to Ray's bureaucratic caring and complexity theory, the part will become the interconnected whole and competent quality and safe patient care will also be part of the whole bureaucratic culture of care (Porter-O'Grady & Malloch, 2011).

Bandura's self-efficacy theory, which is founded within the framework of social cognitive learning theory, may also have an impact on organizational outcomes and effectiveness particularly in the orienting and training newly hired employees. Self-efficacy is defined as the belief in one's ability to perform a task or behavior successfully (Bandura, 2006). Four sources of information influence the individual's perceived self-efficacy: 1) enactive mastery; 2) social modeling; 3) social persuasion and social influences that one possesses certain capabilities; and 4) somatic and affective information to judge their capability, strength and vulnerability (Bandura, 1982). These beliefs held by the individual as to their ability will determine the likelihood of whether or not they will be motivated to perform a given activity regardless of their experience or lack of experience with the particular activity. A person with high self-efficacy will not be dissuaded from potential failure and will confidently attempt to perform the activity. On the other hand, another person with low self-efficacy will be dissuaded and will not perform the activity due to concern of a possible poor outcome (Bandura, 2009).

For organizational effectiveness, newly hired employees usually receive orientation and/or training to prepare them for their role. According to Bandura (2009), employees with low self-efficacy prefer detailed training, with detailed instructions on how to perform tasks within their role. Conversely, employees with high self-efficacy prefer training that allows for innovation, experimenting and role development. These self-efficacious individuals take

initiative in their own self-development to formulate ideas to improve outcomes in their work environment (Bandura, 2009). In developing a competency-based orientation curriculum for new nursing staff, it is important to apply the principles of perceived self-efficacy, to ensure success in integrating both low self-efficient and high self-efficient new nurses into the organization.

In Ray's Theory of Bureaucratic Caring, when the part or an individual enacts caring, then the organization as a whole is responsive to and achieves caring (Coffman, 2006; Turkel, 2007). By using Bandura's precepts of self-efficacy to achieve collective-efficacy within the organization then, according to Ray's theory, if the individual achieves self-efficacy of a competency, then the collective or the whole achieves collective-efficacy (Bandura 2013; Nielsen, Yarker, Randall, & Munir, 2009). By operationalizing the structural framework of both of these theories, while integrating these theoretical constructs using the QSEN competencies, then the development of a trans-theoretical model for a quality and safety competency-based nursing orientation program is realized. The blending of these two organizational theories to form the theoretical framework for this project is represented in the theoretical framework of quality and safety competency-based nursing orientation (Figure 1).

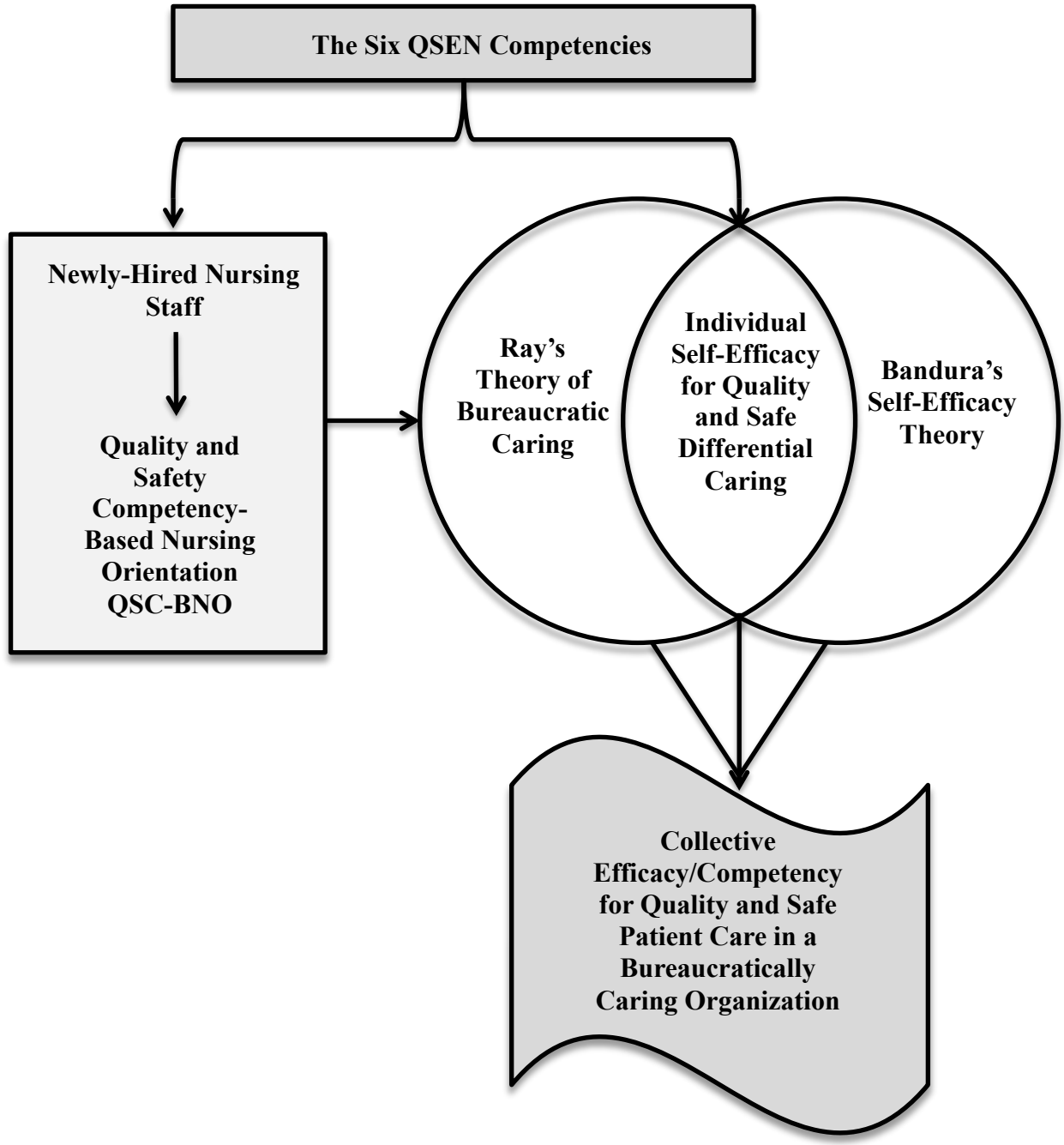

Figure 1. Theoretical Framework for QSC-BNO

Review of Evidence

Background

Among the Quality Chasm series of published reports by the Institute of Medicine (IOM), is the *Health Professions Education: A Bridge to Quality* (Greiner & Knebel, 2003). This landmark report lays a foundation for radical change in the education of health care professionals by identifying five core competencies that all health care professionals must possess in order to practice quality and safe patient care (Greiner & Knebel, 2003). The five competencies are: provide patient-centered care, work in interdisciplinary teams, employ evidenced-based practice, apply quality improvement, and utilize informatics. According to Sherwood and Barnsteiner (2012) the IOM focus is on competencies for all health care professionals, for improvement in quality and safety. However, due to the unique work practices of nurses in an increasingly complex and chaotic health care environment and their close proximity to patients, nurses have a higher degree of direct impact to issues associated with patient safety (Page, 2004; Sherwood & Barnsteiner, 2012). Responding to the IOM report, the Quality and Safety Education for Nurses (QSEN) Initiative was developed and funded through a grant by the Robert Wood Johnson Foundation to transform nursing education and address the quality and safety climate in health care (Sherwood & Barnsteiner, 2012; Cronenwett et al., 2007). The QSEN initiative adapted the five IOM core competencies by identifying and defining six core competencies for nurses: Patient-centered care (PCC), teamwork and collaboration (T&C), evidenced-based practice (EBP), quality improvement (QI), Safety (S), and Informatics (I) (Sherwood & Barnsteiner, 2012). A Delphi study of nursing educators and leaders further identified associated knowledge, skills and attitudes (KSAs) as learning objectives under each of the six QSEN competencies (Barton, Armstrong, Preheim, Gelmon, & Andrus, 2009; Sherwood & Barnsteiner, 2012). A

Delphi study of nursing educators and leaders further identified associated knowledge, skills and attitudes (KSAs) as learning objectives under each of the six QSEN competencies (Barton, Armstrong, Preheim, Gelmon, & Andrus, 2009).

According to a Veterans Health Administration (VHA) survey, frontline VA nurses working at the bedside report significantly lower scores on their responses on the culture of safety dimensions compared to other VA health care professionals (Office of Quality & Safety and Value, 2012; Singer et al., 2009). Additionally, a report from the Office of the Inspector General (OIG) found inconsistencies in how nursing competencies are validated among 29 VA facilities surveyed by their inspectors (Department of Veterans Affair & Office of The Inspector General, 2012).

The traditional nursing department orientation for newly hired staff at the VA Eastern Colorado Health Care System (VA ECHCS) consisted of five days of didactic content regarding policies and procedures, nursing documentation and a series of return demonstration skills checklists. There was also a paucity of content regarding patient safety and quality care in the previous orientation curriculum. A recent Department of Veterans Affairs culture of safety survey conducted in 2011 reported frontline VA nurses predominantly working at the bedside had significantly lower scores on their responses related to the safety culture dimensions compared to other VA health care professionals (Office of Quality & Safety and Value, 2012; Singer et al., 2009). This is of concern when considering the 2000 Institute of Medicine (IOM) report, *To Err is Human*, which attributed approximately 98,000 deaths per year due to preventable adverse events (PAE) in hospitals and clinics throughout the United States (IOM, 2000). Thirteen years later, those numbers in U.S. health care facilities have not improved, and according to James (2013), the deaths per year estimate due to PAE may actually range from

210,000 to 400,000 when using alternate epidemiological methods of weighted averages to determine more accurate rates. In contrast, Rosen et al. (2010) did not find a statistically significant relationship between culture of safety and hospital safety performance in study of 30 VA hospitals using a linear regression model. Of interest though, Rosen et al. did find that frontline employee perceptions of a "just culture" of blamelessness and recognition of safety achievement was associated with improved patient safety outcomes, whereas, senior management perceptions did not. Even though this study indicated that a culture of safety might not influence safety outcome, frontline employee perceptions do, thus providing an additional argument for the importance of implementing a Quality and Safety Competency-Based Nursing Orientation (QSC-BNO) program.

Systematic Review of the Literature

Searches for literature related to the practice issue of utilizing QSEN in developing a newly hired orientation program were obtained using CINAHL, Journals at OVID, Medline, Google Scholar and Cochrane, electronic databases as well as searches within the intranet of the Veterans Health Administration. The literature search of the electronic databases was conducted from August 2013 to March 2014. Key words used for the searches were: quality and safety, QSEN, competency-based orientation, nursing orientation, evaluation of nursing orientation, measuring competency, assessing nurse competency, bureaucratic caring and self-efficacy. Initial search from key word search and snowballing technique yielded 172 articles. Snowballing technique is defined by Garrard (2011) as the discovery of further references within the papers or books previously found during the initial search. The search in the Cochrane database yielded no meta-analysis or randomized controlled trials pertaining to the practice issue. Review of the articles resulted in 121 exclusions due to lack of relevance or only remote relevance to the

practice issue (Levy & Ellis, 2006). Full texts of the remaining 51 articles selected were reviewed in entirety to determine if they met the following inclusion criteria: Published in a peer-reviewed journal; primary focus on new-hire nursing orientation and/or new graduate nurses; key issues addressed in the articles include quality and safety in nursing, competency-based teaching/orientation, effectiveness and evaluation of new hire orientation programs, self-efficacy theory and theory of bureaucratic caring. The review resulted in the exclusion of 11 additional articles due to not meeting the prescribed inclusion criteria listed above, and one article was excluded due to poor quality. Thirty-nine studies remained for the final literature review. The PRISMA diagram of literature review is shown in Figure 2 (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). The Seven Tiered Level of Evidence was used to weigh the strength of the evidence in the literature reviewed (Melnyk & Fineout-Overholt, 2011; Rodgers, Williams, & Oman, 2011). (See Appendix B for a summary of the literature review).

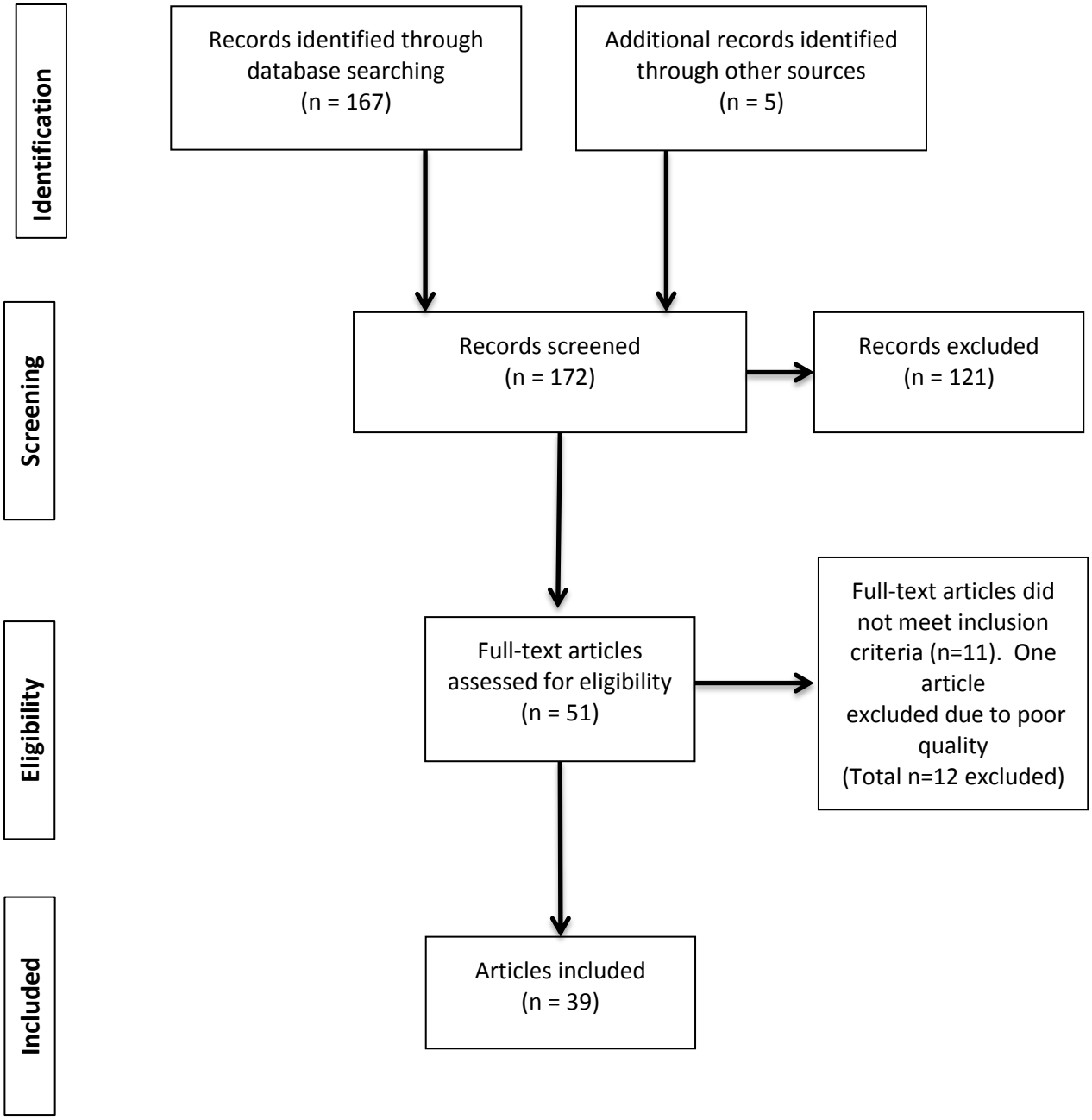

Figure 2. PRISMA Diagram of Literature Review (Moher, et al., 2009)

Findings in the Literature

Nursing orientation. Bashford, Shaffer, and Young (2012); found a correlation between patient safety and nursing orientation. Results of a mix-method study demonstrated the efficacy and reported high value of an intial competency-based assessement by the nurses. Additional literature also supporting competency-based nursing oreintation to begin with a self-assesment of

competency is learner focused and more relevent to the needs of the individiual (Hodges, 1999 & Cowperthwaite, Schutt-Aine, Herranen, & Sorribes, 2012). Practice-centered learning strategies may also include a competency-based orientation, which begins with a self-assessment of competencies by the newly hired nurse (Bashford, Shaffer & Young, 2012). The strategy of providing a competency-based orientation is to enable the nurse educator to individualize the orientation in partnership with the newly hired nurse and the preceptor (Tyler et al., 2012). The literature also demonstated a strong relationship to quality nursing orientation and retention of nursing staff (Bowers, Bennett, Schneider, and Brunner, 2009). Quality nursing orientation programs that provide a sense of belonging is critical to successful employer-employee relationships, which has a direct impact on recruitment and retention of nursing staff (Baxter, 2010 & Brakovich, 2012). According to Kennedy, et al (2012), learner-focused, practice-centered learning strategies by nurse educators in professional development roles increased nursing staff retention up to 90%.

Quality and Safety Education for Nurses (QSEN). In academic settings, QSEN has been transforming the delivery and outcome of nursing education (Cronenwett et al., 2007; Altmiller, 2011). A national Delphi study of experts in nursing education further identified associated knowledge, skills and attitudes (KSAs) as learning objectives under each of the six QSEN competencies (Barton, Armstrong, Preheim, Gelmon, & Andrus, 2009; Sherwood & Barnsteiner, 2012). Sullivan, Hirst, and Cronenwett (2009) conducted a study to measure graduating nursing students' perceptions of the content (knowledge) of quality and safety education they received, their preparedness (skills) and their perceptions (attitudes) of the importance of the QSEN competencies. The results of the study show that the graduating students scored high in preparedness, and they believe the QSEN competencies to be important

in professional practice. What is important to note is the competencies of which the students feel least prepared are evidenced-based practice, quality improvement and teamwork and collaboration (Sullivan et al., 2009). This gap in the bridge to practice is not limited to newly graduated nurses. Dycus and McKeon (2009) measured quality and safety competencies of professional pediatric oncology in a health care system implementing QSEN competencies. The tool these investigators used for this study is the Quality Improvement Knowledge, Skills and Attitudes (QulSKA) survey, which has an inner-item correlation coefficient of Chronbach's alpha 0.839. The findings were similar to the Sullivan et al. (2009) study in that it showed experienced nurses also scored lowest in teamwork and collaboration and quality improvement processes and tools. These two studies are indicative of the need for clinical nurse educators in the practice setting to consider the benefit of implementing QSEN into nursing orientation, education and competency development. A logical consequence of the results of these two studies is for nurse educators and preceptors of newly hired nursing staff to ensure high quality teaching/learning experiences in quality improvement and teamwork/collaboration.

Durham and Sherwood (2008) advise nursing educators in academia, clinical settings and professional development to integrate learning strategies, which are interactive and stimulate knowledge, skills and attitudes in clinical reasoning and judgment necessary for quality and safe patient care. An example of a strategy to integrate quality and safety into a nursing orientation program is utilizing case studies with participant role-play in low fidelity simulation (Durham & Sherwood, 2008). By incorporating QSEN competencies into nursing orientation and competency development, it is familiarizing professional staff with the QSEN language of the nursing students they precept on the units; which has the benefit of strengthening academic partnerships (Didion, Kozy, Koffel, & Oneail, 2013). Additional strategies involve techniques

such as presenting a patient scenario and asking participants to role-play a handoff report or to notify a physician using Situation-Background-Assessment-Recommendation (SBAR) communication technique. All of these teaching strategies examples involve some form of learner-focused activities.

Patient safety and quality care. Richardson and Storr (2010) conducted a systematic review of the literature to determine if a direct link exists between nursing and patient safety. The authors found the literature to support evidence of nursing's role in patient safety through nursing leadership, empowerment, teamwork and collaboration. However, the number of quality studies in this area is limited due to research regarding patient quality and safety in nursing care is not yet fully developed. The authors concluded from their review of the literature, the role of nurses within health care organizations places them in the ideal position to avert preventable, adverse errors. This makes it essential to develop well-designed studies using tools and interventions, which measure and support nurses' unique role in quality and safe patient care (Richardson & Storr, 2010). Hartmann et al. (2009) performed a stratified randomized controlled study of Veterans Health Administration employees to assess the relationship between organizational culture and the safety climate among VA hospitals nationally. Another study by Rosen et al. (2010), examined the relationship between the safety climate of VA health care facilities and patient safety indicators. Overall, the findings in this study did not find any significant association between hospital safety climate and patient safety indicators. However, the results of the study did find correlations of "fear of blame and punishment" with decubitus ulcers and postoperative complications. Rosen et al. (2010) also found low "psychological safety" was significant for failure to rescue. Interesting to note, the results showed a variation of scores between senior management and frontline workers was significant for failure to rescue.

Both studies examining safety climate agreed the higher the hierarchical culture is within an organization, the poorer the patient safety outcomes (Hartmann et al., 2009) or the Patient Safety Indicators (Rosen et al., 2010).

In addition to the results of the two previous studies regarding the safety climate of hospitals and patient safety outcomes, Singer et al. (2009) conducted a study comparing VA hospitals to non-VA hospitals in a cross-sectional study. The authors found being a part of a large health care system did not have an effect on safety climate of individual facilities. The analysis also found safety climates to be better in non-VA hospitals versus VA hospitals (Singer et al., 2009).

Theory of bureaucratic caring and self-efficacy theory. The review of the literature regarding the theory of bureaucratic caring and self-efficacy theory was given in detail in the section on Theoretical Framework.

The overall picture gleaned from the review of the literature, related to general nursing orientation, suggests it should be interactive and learner-focused with emphasis on quality improvement and teamwork/collaboration. Combining the above strategies with practice-centered, competency-based learning to include a competency-based assessment with a learning plan individualized to the nurses' knowledge, skills and attitudes, has the potential to improve learning outcomes and nursing efficacy in practicing quality and safe patient care, and ultimately in improving care throughout the whole organization (Ray & Turkel, 2014). Additionally, there was paucity in the literature on incorporating QSEN into professional, post-licensure practice. No literature was found examining developing a new-hire nursing orientation program curriculum and initial competency validation program. The evidence used for developing this program was a compilation of literature addressing nursing orientation programs and QSEN

articles from academia with the focus on the nursing student populations.

Project Plan and Evaluation

Market/Risk Analysis

The organization where this project was conducted is the Denver VA Medical Center, which is in the VA Eastern Colorado Health Care System (ECHCS), located in Denver, Colorado. The facility is a 252 bed general medical and surgical hospital, which offers inpatient and outpatient services. The VA ECHCS is a teaching facility and is affiliated with a nearby medical school and several area schools of nursing (VA Eastern Colorado Health Care System, 2013). VA ECHCS is part of the Veterans Health Administration (VHA), which is the largest integrated health care system in the United States (Department of Veterans Affairs, 2011). The motto of the Veterans Health Administration comes from a line taken from Abraham Lincoln's second inaugural address: "To care for him who shall have borne the battle and for his widow and his orphan" (Lincoln, 1865). Lincoln's message continues to inspire employees of the VA to remember the importance of their work in caring for our nation's heroes.

Driving and Restraining Forces

The success of this capstone project may be judged by the long-term impact of how nursing competency and orientation is conducted at the system and unit level within the nursing department. This means a cultural as well a procedural change in the environment. One tool for assessing organizational readiness to make decisions to enact change is the Force Field Analysis, which was developed by the well-known social psychologist, Kurt Lewin (Mind Tools, 2013). Lewin's original intent of the Force Field Analysis from his change theory was to assess for social change, but business and organizations have adapted this model to make decisions to enact change based on the likelihood of success (Figure 3). Bozak (2003) explains the importance of

assigning weight to each of the driving and restraining forces. This will enable those involved in the decision to implement change to strategize where to focus the energy to weaken the restraining forces and strengthen the driving forces. The bureaucratic caring theorist, Ray (2011) reinforced through knowledge of complexity science, how relational self-organization and transformation emerge within choices made in networks of relationships. "How organizations either thrive or disintegrate or fail to transform due to the efficacy of its lack of human and spiritual-ethical caring" (M. Ray, personal communication, September 25, 2015).

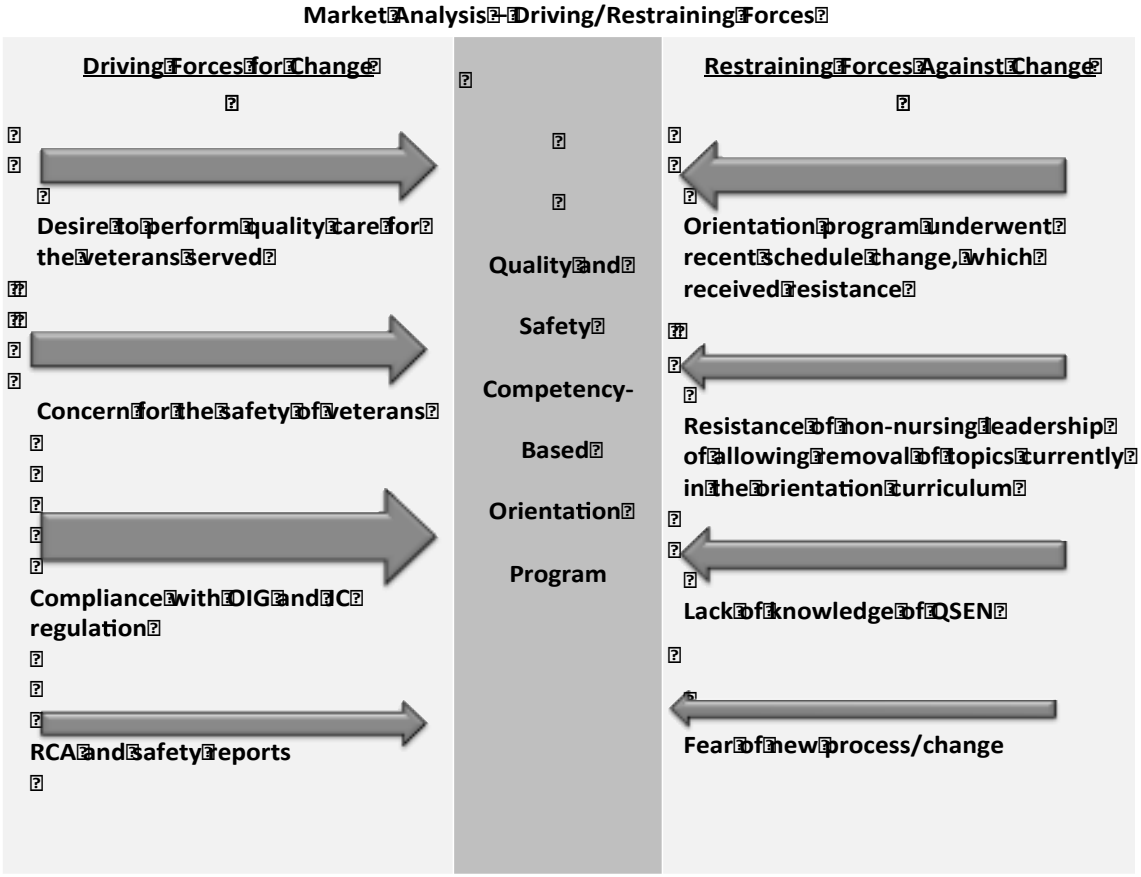

Figure 3. Lewin's Driving and Restraining Forces for QSC-BNO (Mind Tools, 2013).

Strengths, Weakness, Opportunities, and Threats (SWOT)

According to Fortenberry (2010), a SWOT analysis is a tool to examine or assess internal (strengths and weakness) and external (opportunities and threats) market forces and the positive

or negative effects these forces may place on the organization's strategic plan or marketing plans. A SWOT analysis was conducted for the purpose of assessing and anticipating internal and external forces that may impact the success of this project (Table 1).

Strengths. Education for nursing staff is encouraged by nursing leadership and 20 hours per nurse per year is calculated into the staffing matrix. A new Associate Chief Nurse of Research and Education has renewed a commitment to encourage nursing led research and quality improvement projects. Nursing leadership is supporting the effort to implement shared governance, which has paved the way for the development of a comprehensive nursing policy and procedure on nursing competency and development. This policy is the foundation of introducing the QSEN competencies and associated KSA's to the nursing department. The approval of this policy has garnered support from nursing leadership to design a competency-based nursing orientation program based on the six QSEN competencies.

Weaknesses. Top-down situational management is currently the leadership structure and style of the facility, including the nursing department. Policies at the local level are often driven by directives from Central Office in Washington D.C. that may or may not apply to issues at the local level. Change can be very slow with many barriers and resistance within the current culture, particularly when change involves a major procedural shift, such as how nursing competencies are developed and validated.

Effective collaboration between nursing staff and attending physicians or medical residents, regarding patient care issues need improvement and is a symptom of the current top-down management structure. This is also true of all interdisciplinary collaboration within the organization. Results from Department of Veteran Affairs all employee surveys report interdisciplinary communication and culture of safety scores are lower in frontline nursing staff

compared to other disciplines (Office of Quality & Safety and Value, 2012).

Opportunities. In the SWOT analysis, opportunities are identified from an external exam of outside positive influences on the business of the organization (Fortenberry, 2009). The Veterans Health Administration has medical centers and clinics across the country, which provides VA personnel access to a very large national database of patient outcomes regarding safety and quality. Along with the large internal VA database, the Denver VA medical center is a teaching facility affiliated with a university medical school and health science center.

Another opportunity regarding the development of a Quality and Safety Competency-Based Nursing Orientation program is the nursing students and newly graduated nursing staff's exposure to QSEN in their pre-licensure nursing programs. The preceptors and nursing staff have frequent interactions with these nursing students and new graduates as they conduct their clinical practicums and/or new hire orientation on the nursing units, which in turn increases their exposure to QSEN. An external opportunity for this project is the discovery of the NQSSI tool, which will be used as the survey tool for this project. This tool has a very high internal validity of Chronbach's Alpha 0.93 (Piscotty, Grobbel, & Abele, 2013).

Threats. Threats that may affect the QSC-BNO program include budget constraints, lack of knowledge regarding QSEN and cumbersome hiring practices. Congress has oversight on the budget of the VA and its affiliates (Panangala, 2012), which contributes to difficulty appropriating resources or supplies for some educational opportunities, which could impact this project's budget as well as a potential deleterious effect on the sample size. Another potential threat to the sample size is the cumbersome hiring process at the national level, which impacts ability to hire nursing staff at the local level. Threats of government shutdowns by congress and funding issues coupled with a very long hiring process may discourage qualified applicants from

accepting an offered position, thus decreasing the number of newly hired nursing staff.

In addition to the budget constraints are the lack of exposure and knowledge of QSEN. Related to the QSEN competencies, nurses with five or more years of experience may not have been exposed to QSEN, which could be a threat to the project if these nurses are the preceptors and/or managers of newly hired nursing staff. Educating these nurses on the QSEN competencies and knowing how to validate the KSA's will be essential for the success of this project and future expansion of the competency-based orientation to the unit-level. Another potential threat is using the NQSSI tool for measuring nursing self-efficacy related to the knowledge, skills and attitudes associated with QSEN. This tool was developed and validated for nursing students and has not been validated in post-licensure, professional staff.

Table 2.

SWOT Analysis for QSC-BNO Project (Fortenberry, 2010).

SWOT Analysis

	Strengths	***Weaknesses***
Internal	• Leadership support of the project • Nursing led research encouraged • Transitioning from the design phase to the implementation phase of nursing shared governance • 20 hours per nurse per year is added to staffing matrix for education • New push to encourage nursing led research and QI projects	• Unpredictable sample size • Sample size is dependent on Human Resources hiring factors • Lack of knowledge of nursing staff and leadership of QSEN • Change is very slow and usually met with resistance • Preceptor program following General Orientation is not standardized
	Opportunities	***Threats***
External	• Association with local schools of nursing using QSEN competencies • Access to national databases of patient outcomes regarding safety and quality • Most nursing students in clinical rotations at VA ECHCS are exposed to QSEN Competencies and KSAs in their academic programs • NQSSI tool has high internal validity	• Experienced new hire nurses have not been exposed to QSEN • Recent government budget constraints continue to effect hiring • Cumbersome and long hiring process at the national level inhibits quality applicants from being hired locally • The NQSSI has proven validity in the nursing student population only

Community and Veteran Health Administration Resources and Sustainability

There are at least three other VA health care systems that have also integrated QSEN into their competency development program located in Iowa, New York and Florida. Open dialog among nurse educators throughout the VA system is enhanced through a web-based discussion workgroup and monthly national calls. Collaboration with these resources has resulted in gaining insight from "lessons learned" as well as the sharing of information such as competency forms and institutional policies.

Internal resources for this project are based on an already existing infrastructure. There is classroom space available with training computers, which has been reserved six months out for the planned nursing orientation dates. Additionally there are two-master's prepared nurse educators developing the competency validation tools with input from the unit-based nurse educators and nurse managers. Consultation with the VA Research and Development Department is available as well as access to a research nurse scientist to assist with methodology and statistical questions.

Valuable community resources via community partnership with academic-practice partnership will also strengthen the integration of QSEN into professional practice. The staff nurse, who learns to provide high quality clinical education to nursing students through an academic-practice partnership, must also be well versed in the six QSEN competencies and their associated KSAs. The six QSEN competencies are now part of the curriculum in many schools of nursing, therefore well known to the student nurses who are on the nursing units during their clinical rotations (Sherwood & Barnsteiner, 2012). Didion, Kozy, Koffel, and Oneail (2013) described their experience with using QSEN to enhance both the student's learning and the nursing staff's knowledge in quality and safe patient care as part of their academic-practice

partnership in Ohio. The collaboration between the faculty of the school of nursing, leaders of the facility, staff nurses and the students resulted in a successful teaching/learning partnership. With the nursing staff having a more responsible role with the nursing students than they did in the traditional role of preceptor to the student, the outcome resulted in the nursing students having a more meaningful clinical experience in which they were able to integrate more as a member of the team on the unit (Didion et al., 2013). Increasing the knowledge of the nursing staff and preceptors at VA ECHCS of the QSEN competencies has the potential of enhancing the clinical experience of nursing students.

Stakeholders and Target Market

The primary stakeholders and target market for this project are newly hired nursing staff at all education levels at VA ECHCS in positions, which require them to attend General Nursing Orientation (GNO). Nursing staff practicing under services other than nursing, such as nurse practitioners or those working in remote outpatient clinics, historically do not attend GNO. Primary stakeholders also include the veterans served and their families who are receiving nursing care from the newly hired nursing staff. The veteran patients are the primary beneficiaries when nursing staff practices quality and safe patient care. This project is being developed to ensure the safety and quality care that these veteran patients should expect.

The secondary stakeholders are the unit nurse managers, nurse educators, preceptors and staff nurses. The input regarding the curriculum development and competency development of these stakeholders is essential for the long-term success and sustainability of this project. It is primarily the nurse manager who will benefit from the outcomes of the staff nurse with a higher level of self-efficacy and competence in providing safe and quality patient care.

The demographics of the primary stakeholders (nursing staff) at this urban VA health care system are closely aligned with the fiscal year 2012 national nursing data of all VA facilities (Office of Nursing Service, 2013):

Nursing staff by skill mix:

- Registered Nurses 60.7%
- Nurse Practitioners 5.4%
- Clinical Nurse Specialists 0.6%
- Licensed Practical/Vocational Nurse (LPN/LVN) 16.3%

Registered Nurses in a direct care role by level of education:

- Nursing diplomas 8.4%
- Associate Degree 28.1%
- Bachelors (BSN) 47.3%
- Bachelors (non-nursing) 6.9%
- Masters (nursing) 5.5%
- Masters (non-nursing) 3.4%
- Doctorate (nursing) 0%
- Doctorate (non-nursing) 0.3%
- Professional degree 0.1%

Highest level of Education for all VA RNs:

- Baccalaureate degree (nursing and non-nursing) 46%
- Masters or Doctorate 22.7%

Registered Nursing staff eligible for retirement as of fiscal year 2012 by role:

- Administrative 40.7%

- Advanced Practice Registered Nurse 35.3%
- Direct Care 23.4%
- Hospital Support 36.6%

Approximately 650 nurses report to the nursing department. In addition to the primary and secondary stakeholders discussed above, are those stakeholders who are indirectly affected by the outcome of this project. These are the quality and safety department personnel, as well as the administrative and executive leadership of the organization.

Capstone Project Team

The capstone team at this urban VA ECHCS is comprised of the Doctor of Nursing Practice (DNP) student, who is the lead in initiating this project and the primary investigator during implementation. Additional members providing the DNP student with extremely valuable input and expert advice are the unit-based and service level nurse educators, Associate Chief Nurse of Research and Education, and the DNP Clinical Mentor. Additional support was provided by staff within the Research and Development Department at VA ECHCS.

Cost Benefit Analysis and Budget

All of the costs associated with this project, other than the costs of consulting with the nurse scientist did not exceed the usual costs in providing monthly General Nursing Orientation at VA ECHCS. Therefore, no additional funding source was needed. Some of the cost incurred by the primary investigator was envelopes for the study information letter, surveys and a one year rental cost for the student SPSS software package. The estimated cost of orientation for 30 newly hired nursing staff is represented in the cost analysis in Table 3.

Table 3.

Capstone Project Budget

Category	Details	Cost
Printing	30 Orientation books 70 pages with binding Orientation workbooks- unbound	$500 $250
5 days salary for nursing staff	Average salary of newly hired nursing staff for 5 days + benefits, approx. $1,182 x 60	$71,352
16 weeks salary for 2 master's prepared nurse educators	One week class preparation and one week of class. Salary + benefits approx. $3,252 x 16	$52,032
Indirect cost	Operating cost of building/hospital	$10,000
1 box of 100 letter size envelopes	For dissemination and return of pretest/posttest surveys	$28
SPSS software	Statistical software	$100
4 hours with nurse scientists	Review statistics and method for project	$800
Total		**$135,062**

The most visible cost benefit of re-designing the nursing orientation program and of high interest to administration is retention cost of nursing staff and particularly registered nurses (RN). Brakovich and Bonham (2012) made this argument from the results of surveys given to nurses who were newly hired. The nurses agreed that a quality nursing orientation program with skilled preceptors increases nurses' satisfaction. Increase nursing satisfaction translates to higher retention rates. A report from the Robert Wood Johnson (RWJ) Foundation (2009), states the average cost of replacing an RN ranges from $22,000 to $64,000. This wide range is due to different hospital markets or the specialty of the nurse. This report also emphasizes that two-thirds of the direct cost of replacing a full-time equivalent (FTE) RN is in the temporary filling of the vacancy during the posting, hiring and orienting phase of bringing in a newly hired nurse. The estimated cost of hiring 30 newly hired nursing staff during the hospital-wide orientation phase at VA ECHCS is approximately $208,750, compared to the cost of replacing 30 nurses (using a conservative amount of $32,000 per FTE RN as an average) is $960,000. If those 30

nurses were satisfied with the nursing orientation program and stayed as a result, the facility would save $751,000 over a span of one year.

Another benefit, which is more difficult to calculate, is the decreased cost associated with preventable adverse medical errors. It is difficult to prove a negative, but the literature suggests nurses are in positions and roles within the health care team to be the drivers of a quality and safety agenda (Richardson & Storr, 2010). Data from 2008 reports the annual cost of PMEs in the United States to be approximately $19.5 billion (Andel, Davidow, Hollander, & Moreno, 2012). No published data could be found for the estimated cost to individual health care facilities. However, as Andel et al. (2012) states, the cost of providing quality and safe patient care is much less.

Project Objectives

Project Mission and Vision

The mission of this project is to redesign an orientation program for newly hired nursing staff within an urban VA health care system to ensure individual and collective self-efficacy of newly hired nursing staff related to competence in their ability to provide quality and safe patient-centered care to veterans and their families.

The vision of this project is to provide a new-hire nursing orientation experience, which results in quality and safe patient care by:

- Promoting professional development of the nursing staff, which fosters innovation in the delivery of quality and safe patient care within a theory-guided framework of Bureaucratic Caring Theory (Ray, 2014).

- Having the highest intention of good while being authentically present and in transformational and caring teaching/learning relationships with the nursing staff (Watson, 2011).

Goals, Outcomes and Objectives

Goals. The project goals of redesigning the nursing program for newly hired nursing staff are to: increase quality and safety content in the nursing orientation program; increase learner satisfaction with the nursing orientation program; improve the culture of safety scores on the VA employee survey; and ensure compliance with the VHA and OIG standards regarding validation of nursing competencies.

Outcomes. The short-term outcomes for this project are to improve the self-reported efficacy of the KSAs associated with the QSEN competencies and a reported higher satisfaction by the participants with the newly redesigned nursing orientation. The long-term outcomes are to expand the QSEN competencies outside of general nursing orientation and into the nursing units and clinical areas; improve the scores on the VA culture of safety survey; increase nursing satisfaction and retention rate; and improve quality and safe patient care within a bureaucratically caring organization.

Objectives. The objectives of this project are to: 1) Develop and implement the theory-guided QSC-BNO within the infrastructure of the existing nursing orientation program; 2) develop a QSEN competency validation form; 3) administer a pretest and posttest to participants of nursing orientation before and after implementation to determine if the QSC-BNO improved newly hired nursing staff's self-efficacy; and 4) administer a post utilization-focused evaluation of the participants before and after implementation of the QSC-BNO program to determine if the newly designed orientation curriculum increased participant satisfaction.

In order to meet these objectives to determine the effectiveness of QSC-BNO, a pretest and posttest NQSSI survey tool was administered to the orientation participants before and after implementation to compare the results of their self-report on their confidence and self-efficacy in each of the knowledge, skills and attitudes within each of the six QSEN competencies. Satisfaction of the participants was measured and compared before and after implementation of the program by means of a post utilization-focused evaluation. Additional information was obtained by analyzing the NQSSI results to determine if there is any relationship to level of education, years of experience or having had QSEN in nursing school and the NQSSI results.

Evaluation Plan

Development and Implementation of the QSC-BNO Program

QSC-BNO as a redesigned orientation program was developed on the existing nursing orientation infrastructure. The orientation curriculum and learning modules are based on the six QSEN competencies and the associated KSAs (QSEN Institute, 2014) and guided by the Ray's theory of bureaucratic caring and Bandura's self-efficacy theory (See Appendix B). Additionally, the competencies are to be customized and/or expanded to include the special needs of VA ECHCS and the veteran patient population. The revised orientation program is the same length, as the previous orientation curriculum and contains many of the items from the previous curriculum, which was deemed as essential. Nearly all of these items fit within one of the six QSEN domains. Examples of how the previous learning activities will apply under the new competency-based program include: Applying knowledge of veteran culture to improve patient care was placed under the QSEN domain of Patient Centered Care (PCC); demonstrating peripheral line insertion and central line care was placed under the QSEN domain of Evidenced

Based Practice (EBP); and documentation and hand-off communication was placed under the QSEN domain of Teamwork and Collaboration (T&C).

The difference between the previous and redesigned curriculum is reframing each module to incorporate the definitions of each of the six QSEN competencies and the associated knowledge, skills and attitudes and develop the learning objectives accordingly. More emphasis in the new curriculum is focused on identifying actual problems associated with daily nurse's work and to act on those problems in active discussion and problem solving. Instructions with case studies are utilized to determine techniques for problem solving related to quality improvement, teamwork/collaboration and the patient safety reporting structure. Low fidelity simulation activities are incorporated within the modules and enable the nurse educator to validate the competencies in all six QSEN domains

The QSC-BNO orientation is offered monthly for five days beginning on the Friday after New Employee Orientation and concluding the following Thursday, which is identical to the existing orientation schedule. The modules are taught by a nurse educator and assisted by other members of the hospital staff as content experts. Daily classes are 8 hours in length with a start time of 7:30 AM and end time of 4:00 PM. There are two 15-minute breaks and a 30-minute lunch. The modules are a combination of lecture, computer activities, videos, role-playing activities and low fidelity simulation. The participants are evaluated through validation of competencies within the six QSEN domains (Sherwood & Barnsteiner, 2012). Additionally, the participants of both the previous and newly designed orientation evaluated the program by completing a utilization-focused evaluation following the final module on the fifth day. Review of participant evaluations by the nurse educators is also a function of the already existing continuous quality improvement of the orientation program by the nursing education department.

Logic Model

According to Zaccagnini and White (2011), a logics model is a visualization of the logical steps of how the developer of a project believes it will be accomplished. The pictures and words within the model are also a way in which the project may be explained to others involved in the project. Appendix D depicts the development of a logic model for the QSC-BNO project, which was adapted from the W.K. Kellogg Foundation (2004) Logic Model.

The left sides of the model are the planned work or what is to be done in order for the right side or the intended results and outcomes to happen (Kellogg, 2004). The inputs are the resources available (financial, organizational or human structure), which will enable the project to move forward. The constraints are the barriers that may impede the project to move forward. The goal is to have enough resources to weaken the effect of the constraints. The activities are the way in which the program utilizes the resources. Outputs are the products, which are a direct result of the activities from the program. And finally, the outcomes are the desired changes or final impact the project will have. These outcomes are short-term, long-term and continual impact. The continuous impact of the project is the future effect, either intended or unintended, within the next seven to ten years (Kellogg, 2004).

Population and Sampling Parameters

The population of interest is newly hired, licensed nursing staff within an urban VA health care system. Using purposive sampling (Terry, 2012), a control group (prior to implementation of the QSC-BNO) and a treatment group (after implementation of the QSC-BNO) are recruited from each general nursing orientation class over a six-month time frame. Inclusion criteria of the sample are newly hired licensed practical nurses (LPNs), associate degree nurses (ADNs), diploma nurses (DIP), Bachelor of science in nursing (BSNs), and

Masters of science in nursing or of nursing (MS/Ns), who will be attending general nursing orientation. Excluded will be newly hired nurses in positions, which exempt them from attending general nursing orientation. These positions include nurses under other services that are not within the reporting structure of the nursing department, such as Nurse Practitioners, research nurses, and nurses not practicing in nursing roles.

Method

The design for this quality improvement study is a causal-comparative/case-control design with a comparative group (Houser, 2008) using an interrupted time series pretest/posttest (Terry, 2012). The tool used for the pretest, posttest is the NQSSI (Piscotty, Grobbel, & Abele, 2013). The NQSSI is an 18-item Likert scale test with level of disagreement on the low end and level of agreement on the upper end. The author of this tool determined it to have satisfactory reliability with a Cronbach's alpha score of 0.93 to measure self-rated knowledge, skills and attitudes associated with the six QSEN competencies in nursing students. This is the first time the tool was used to measure the self-rated competencies of post-licensure professional nurses. Permission was obtained to use the tool by the primary developer and investigator of the tool's psychometric properties (R. Piscotty, personal communication, 10/28/2013).

The interrupted time series pretest/ posttest using the NQSSI was administered to the control group before and after the current orientation program and approximately 30 days post orientation. After implementation of the redesigned orientation, the experimental group will also be given the NQSSI before, after and 30 days following the orientation. According to Terry (2012), the use of the interrupted time series technique with a pretest/posttest design with a comparison group is to negate the possibility of decreased validity of the results due to repeat test bias.

Variables of interest were also studied for possible correlations between the results of the NQSSI in both groups. Those variables were years of nursing experience, level of education and whether or not the subject was exposed to QSEN in their nursing programs.

A utilization-focused evaluation (U-FE) tool (Patton, 2002; Meyer & Meyer, 2000) was also administered at the end of each GNO class to compare participant or learner satisfaction with the usual orientation program to the QSC-BNO. The U-FE tool is a 5-point Likert-type scale developed by the nursing education service at ECHCS as an internal continuous quality improvement tool. See Appendix H for the U-FE tool.

Human Subjects Protection

According to the Quality Assurance study evaluation tool of the Colorado Multiple Institutional Review Board (COMIRB), the VA Research and Development (2011), and the Regis University IRB, "this project meets the definition of an evidence-based practice (EBP) project in which a quality improvement plan, program evaluation, educational, or standard of care intervention will be completed. In most cases, a pretest/posttest evaluation will assess the effect of the intervention. The project will be internal to an agency and will inform the agency of issues regarding health care quality, cost, and patient satisfaction. The results of this project are not meant to generate new knowledge or be generalizable across settings but rather seek to address a specific population, at a specific time, in a specific agency. These projects translate and apply the science of nursing to the greater health care field" (Melnyk & Fineholt-Overholt, 2011, p. 31). This project also met the exempt status for full IRB by COMIRB (see Appendix N). The primary investigator has completed the Collaborative Institutional Training Initiative (CITI) for both Regis University (Appendix R) and the Colorado Multiple Institutional Review Board (Appendix Q).

Data Analysis Plan

The subjects of the control group and the intervention group were obtained using a non-randomized, convenience and purposeful sampling technique. The dependent variables were the self-rated self-efficacy of quality and safety knowledge, skills and attitudes within each of the six QSEN competencies. Self-efficacy was measured and compared the results of the pretest and posttest scores of the NQSSI with a follow-up post-posttest approximately 30 days after nursing orientation of the control and intervention groups. The Mann-Whitney *U* test was used to test the null hypothesis that no difference exists between the control group and the intervention group. Additional correlation testing utilizing the Kruskal-Wallis H test was conducted to determine if any difference exists between other variables of interest from the demographic information of the subjects to their NQSSI scores. The independent variables of interest studied were years of experience, level of education and whether or not the subject was exposed to QSEN during nursing school. Post hoc testing using pairwise comparisons with the Bonferroni correction to prevent a type I error was conducted when significance was found in the Krusal-Wallis H statistic.

To compare the satisfaction of the usual nursing orientation program to the QSC-BNO program, a post U-FE was completed by the participants. A chi-square test of independence was conducted on the nominal dependent variable data, and a Mann-Whitney *U* test was conducted on ordinal dependent variable data results of the U-FE to compare the level of satisfaction of the of the control and intervention groups. All data was analyzed using the IBM® Statistics Premium Statistical Software (SPSS®) Version 22.0.

Project Findings and Results

Demographics

The combined sample size of the control and intervention groups is N=63. The sample in the control group is N=31, and the intervention group is N=32. Frequency data of the demographics by level of education, years of experience, QSEN in nursing school, race/ethnicity age, and gender are listed in Table 4.

Table 4.

Frequency Data of Sample

Level of Education	Years Experience	QSEN in Nursing School	Race / Ethnicity	Age	Gender
LPN N=2 (3.2%)	0-3 N=25 (38.7%)	Yes N=24 (38.1%)	Cauc./Wht. N=47 (74.6%)	18-24 N=9 (14.3%)	Male N=17 (27%)
ADN N=14 (22.2%)	4-7 N=18 (28.6%)	No N=18 (28.6%)	Hisp./Latino N=4 (6.3%)	25-34 N=22 (34.9%)	Female N=46 (73%)
Diploma N=1 (1.6%)	8-10 N=4 (6.3%)	Not Sure N=21 (33.3%)	Black/ A. Am N=4 (6.3%)	35-44 N=15 (23.8%)	
RN-BSN N=8 (12.7%)	11-15 N=3 (4.8%)		Asian/Pac. Island N=3 (4.8%)	45-54 N=14 (4.8%)	
BSN Trad N=25 (39.7%)	16-20 N=5 (7.9%)		Other N=5 (7.9%)	55-64 N=3 (4.8%)	
BSN Acc. N=10 (15.9%)	>20 N=8 (12.7%)				
MS N N=3 (4.8%)					
Total 63	**Total 63**	**Total 63**	**Total 63**	**Total 63**	**Total 63**

NQSSI and UF-E of the Control group

The control group sample size was comprised of N=31. The pre, post and post-post NQSSI data and the U-FE data were collected from 7/18/2014 to 9/18/2014 over three separate pre-intervention orientation cohorts. All participants returned both their pretest and posttest NQSSI surveys for a response rate of 100%. The post U-FE was returned by 80.6% of the participants (N=25). The same number (N=25) returned their 30-day post-posttest, which was sent via inner-office mail with follow-up email reminders. This resulted in a post-posttest dropout rate of 19% (N=7) for the control group.

Implementation of the QSC-BNO Program

The theory-guided GNO curriculum based on the six QSEN competencies and associated KSAs was developed. A committee of nurse educators and the DNP project team updated the facility nursing competency policy based on the six QSEN competencies, which included the development of the initial GNO competency form. (See Appendix C for the GNO QSEN competency form). The length of GNO continues to be five days, and the schedule is the same for both pre and post implementation. Implementation of the QSC-BNO began 11/7/14.

NQSSI and UF-E of the Intervention Group

The control group sample size was comprised of 32 participants. The pretest posttest and post-posttest NQSSI data and the U-FE data were collected from 11/7/2014 to 3/3/2014 over four separate QSC-BNO orientation cohorts. All participants returned both their pretest and posttest NQSSI surveys for a response rate of 100%. The post U-FE was returned by 93.7% of the participants (N=30). The return rate of the 30-day post-post NQSSI was 84.4% (N=27), which was sent via inner-office mail with follow-up email reminders. This resulted in a post-posttest dropout rate of 15.6% (N=4) for the intervention group.

Comparison of the NQSSI and UF-E Results of Both Groups

NQSSI Results

The Mann-Whitney *U* test was conducted to compare the NQSSI results between the control and intervention group and no significant differences in all of the KSAs of the six QSEN competencies were found except for the post-posttest for Knowledge in the Quality Improvement QSEN domain ($z = -1.96$, $p = .05$). The average ranks of the intervention group was 30.22 versus the average ranks of the control group was 22.48. (See Appendix J for the SPSS output of the Mann-Whitney *U* comparison NQSSI results).

The overall impression of the results failed to show any significant change in the self-efficacy of newly hired nursing staff attending orientation between the control group and the intervention group before and after implementation of the QSC-BNO other than for Knowledge in the Quality Improvement QSEN domain. Additional analysis using independent *t*-test, determined the mean of the control group to be 6.15 (*s.d.* = .801) and the intervention group to be 6.56 (*s.d.* = .604). Post hoc analysis showed the statistical power for this sample of moderate effect was Cohen's *d of* .577 with an effect size of $r = .277$. The Chronbach's alpha for the NQSSI was .986.

Utilization-Focused Evaluation

A chi-square test of independence and Mann-Whitney *U* test was conducted to test the difference between the control group and the intervention group regarding learner satisfaction with nursing orientation before and after implementation of the QSC-BNO.

The chi-square test of independence for the nominal dependent variables responses of the UF-E showed significantly higher satisfaction in the intervention group than the control group. For the question regarding the length of orientation, the response "Just right" was significantly

higher in the intervention group [X^2 (df3, N = 54) =13.49, p = .004] versus higher for "Too long" (N = 13 in the control group versus N = 3 in the intervention group). This response is particularly interesting given the fact the length of orientation is exactly the same for the control group and the intervention group. The question asking if orientation was helpful, the response "Very helpful" was significantly higher in the intervention group [X^2 (df2, N = 54) = 8.85, p = .012]. For the question "Should any part of orientation be changed?", the response "Leave it as it is" is significantly higher in the intervention group [X^2 (df3, N = 54) = 11.40, p = .003]. (See Figure 5 for comparison of the control and intervention group results).

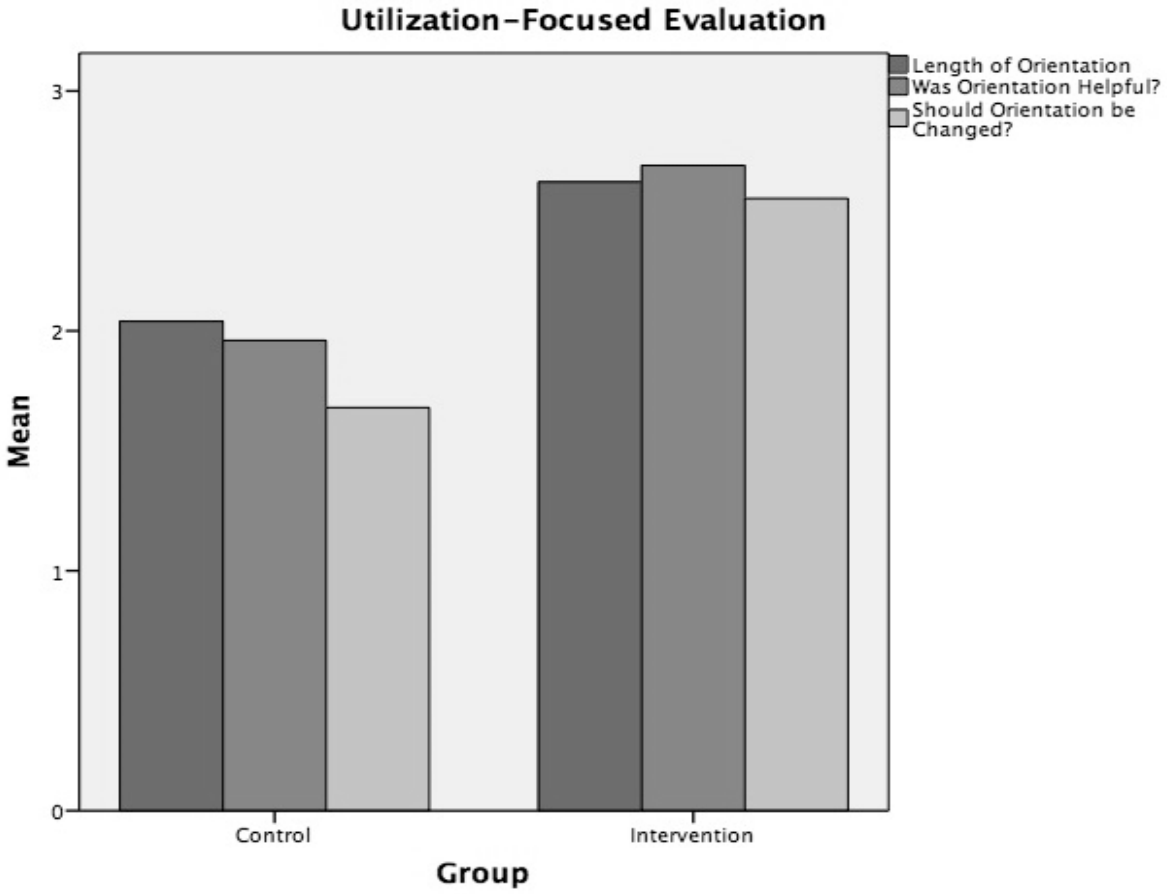

Figure 5. Chi-Square test of independence for nominal data results of the U-FE.

The Mann-Whitney *U* test was conducted on the ordinal responses for the five-item Likert scale portion of the U-FE. Once again, the intervention group responses showed significantly higher satisfaction among the intervention group than the control group. The significant results are: "Orientation will help me to perform my job" (z = -3.128, p = .002; intervention group average rank of 32.88 versus control group average rank of 21.26). "The handbook was helpful" (z = -2.623, p = .009; intervention group average rank of 31.78 versus control group average rank of 22.54). "I will use the handbook later as a reference" (z = -2.860, p = .004; intervention group average rank of 32.24 versus control group average rank of 22.00). "GNO met the learning objectives" (z = -2.157, p = .031; intervention group average rank of 30.93 versus control group average rank of 23.52).

There was no significant difference between the intervention group regarding the classroom being conducive to learning, p = .251. Since the classrooms where nursing orientation and the QSC-BNO were the same, this is an expected result. (See figure 6 for the ordinal responses comparing the control and intervention groups).

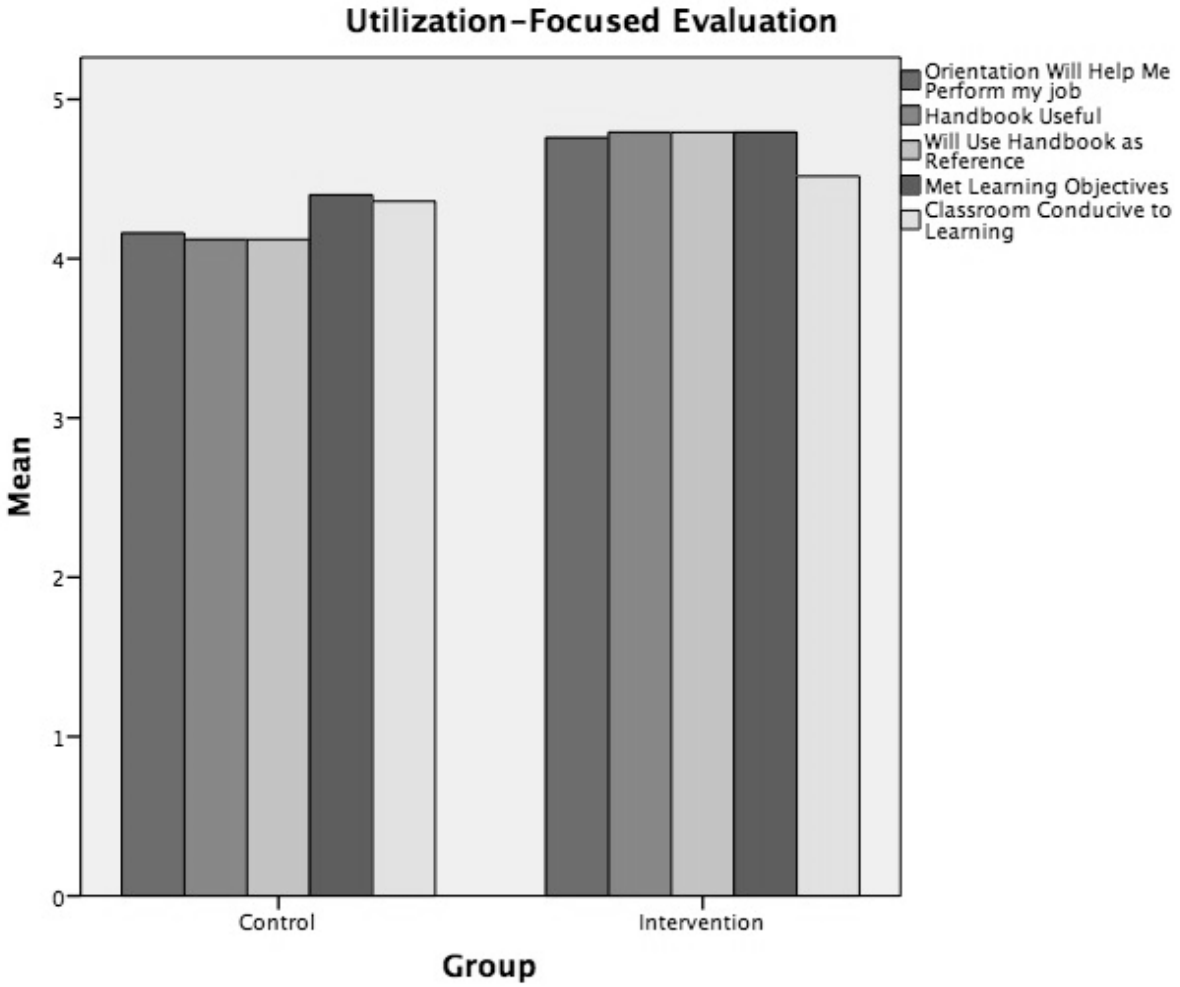

Figure 6. Mann-Whitney *U* for ordinal data results of the U-FE.

Relationships of Variables of Interest to NQSSI results

The Kruskal-Wallis H was conducted to determine if there were any significant differences in the NQSSI results related to years of nursing experience, level of nursing education and if the respondent was exposed to QSEN in nursing school. The test statistic was performed on the pretest results only of both groups to prevent any posttest bias. If any significant findings were indicated, follow up tests were conducted to evaluate pairwise comparisons among the groups while controlling for type I error using the Bonferroni correction.

Years of experience was the first variable of interest tested to determine if there was relationship to the NQSSI pretest result using the Kruskal-Wallis H statistic. The results initially indicated significance in Knowledge for Teamwork and Collaboration, $X^{2=}$ (*df*5, N=63) = 15.456, p = .009, and Evidence-Based Practice, $X^{2=}$ (*df*5, N=63) = 15.652, p = .008. However, post hoc testing with pairwise comparison using a Bonferroni correction for both of these areas failed to show significance.

Significance was found for those with 0-3 years of experience having scored lower on the NQSSI than those with greater than 20 years of experience or those with 4-7 years of experience in the following KSAs: Attitudes for Evidence-Based Practice (p=.005); Knowledge and Skills for Quality Improvement (p=.012 and p=.007); Knowledge and Skills for Safety (p=.004 and p=.013; and Knowledge and Skills for Informatics (p= .008 and p= .037). (See Table 5 for pairwise comparison for years of experience).

Table 5.

Years of Experience Pairwise Comparison

QSEN Competency by Years of Experience	Kruskal-Wallis Statistic*	P Value	Pairwise Comparison	Mean Rank	Bonferoni Correction
Evidence-Based Practice: Attitudes	16.697	p=.005	0-3 yrs to >20 yrs	23.4 vs. 45.25	p=.021
Quality Improvement: Knowledge	14.680	p=.012	0-3 yrs to >20 yrs	24.04 vs. 48.2	p=.010
Quality Improvement: Skills	15.896	p=.007	0-3 yrs to >20 yrs	23.48 vs. 47.5	p=.005
Safety: Knowledge	17.444	p=.004	0-3 yrs to 4-7 yrs	22.5 vs. 40.25	p=.005
Safety: Skills	14.367	p=.013	0-3 yrs to 4-7 yrs	23.04 vs. 39.78	p=.013
Informatics: Knowledge	15.682	p=.008	0-3 yrs to 4-7 yrs	23.54 vs. 43.17	p=.004
Informatics: Skills	11.877	p=.037	0-3 yrs to 4-7 yrs	24.42 vs. 41.78	p=.018

**df 5, N*=63. Post hoc testing with pairwise comparison using the Bonferroni correction of α=.008, found significant difference for those with 0-3 years of experience rated themselves lower.

The next variable of interest tested was to determine if having had QSEN in Nursing School was related to the results of the NQSSI. Kruskal-Wallis H testing for a relationship to the NQSSI pretest and if the subject had QSEN in nursing school yielded unexpected results (See Table 6). Those who had QSEN in nursing school scored lower in several NQSSI items compared to those with no QSEN or those who do not know or unsure in: Patient Centered Care: Knowledge (p = .008), Skills (p = .015) and Attitudes (p = .035); Teamwork & Collaboration: Skills (p = .004); Quality Improvement: Knowledge (p = .000), Skills (p = .002) and Attitudes (p = .008); Safety: Knowledge (p = .003) and Skills (p = .002); and Informatics: Skills (p = .007). This result may suggest those who have had QSEN in nursing school also have fewer years of experience. The frequency data supports this, since there are N = 25 with 0-3 years of experience and N = 24 who had QSEN in nursing school.

Table 6.

QSEN in Nursing School Pairwise Comparison

QSEN Competency by Years of Experience	Kruskal-Wallis Statistic*	P Value	Pairwise Comparison	Mean Rank	Bonferoni Correction
Evidence-Based Practice: Attitudes	16.697	p=.005	0-3 yrs to >20 yrs	23.4 vs. 45.25	p=.021
Quality Improvement: Knowledge	14.680	p=.012	0-3 yrs to >20 yrs	24.04 vs. 48.2	p=.010
Quality Improvement: Skills	15.896	p=.007	0-3 yrs to >20 yrs	23.48 vs. 47.5	p=.005
Safety: Knowledge	17.444	p=.004	0-3 yrs to 4-7 yrs	22.5 vs. 40.25	p=.005
Safety: Skills	14.367	p=.013	0-3 yrs to 4-7 yrs	23.04 vs. 39.78	p=.013
Informatics: Knowledge	15.682	p=.008	0-3 yrs to 4-7 yrs	23.54 vs. 43.17	p=.004
Informatics: Skills	11.877	p=.037	0-3 yrs to 4-7 yrs	24.42 vs. 41.78	p=.018

*df 5, N=63. Post hoc testing with pairwise comparison using the Bonferroni correction of α=.008, found significant difference for those with 0-3 years of experience rated themselves lower.

The final variable of interest analyzed for any relation to the NQSSI results was Level of Education. The Kruskal-Wallis H test statistic failed to show any significant difference in Level of Education and results of the NQSSI. (See Appendix L for the NQSSI results for the variables of interest).

Limitations

The sample size is small due to the small number of participants in each monthly nursing orientation group as well as a post-posttest dropout rate of 19% (N=7) for the control group and 15.6% (N=4) for the intervention group, which may have skewed the post-posttest results. The power analysis determined the effect size to be moderate (Cohen's d = .577). However, since there was essentially no significant difference between the groups, it is unlikely the dropout rate had any affect on the results. The size of the sample was dependent on the recruitment and hiring practices of the facility.

The control group had a larger number of nurses with one year or less of experience. Although this was not statistically significant, it may have impacted the overall results. Additionally 33% of the participants (N = 21) did not know whether or not they had QSEN in nursing school. This should be taken into consideration since the most significant independent variable related to results of the NQSSI was found in those who had QSEN in nursing school.

The newly developed QSC-BNO was limited to general nursing orientation only and did not continue during specific unit-based orientation. This may have an impact on the results or lack of significance of the 30-day post-post testing of the NQSSI.

Finally, the sample is specific to an urban VA health care system and therefore, may not be generalizable to the larger population. Further studies are recommended to test professional nurses in other settings.

Recommendations and Implications for Change

Further studies to include a preceptor program and/or continue QSC-BNO into unit orientation following General Nursing Orientation for impact of individual self-efficacy on collective-efficacy of nursing staff is recommended. Preliminary discussions are underway to plan an expansion of this QSC-BNO into a preceptor-training program and then into unit-based orientation of new staff.

Additional recommendations are for more studies focused solely on the impact of Ray's Bureaucratic Caring Theory and Differential Caring of nursing and organizational leadership within highly hierarchal organizations such as those within the VHA and the impact on staff/employees. As the data of this study has shown, organizational culture, climate of safety or differential caring within bureaucratic caring may be more important and more impactful than strictly nursing orientation to increase self-efficacy for quality and safe patient care.

The implications for practice and organizational change comes from the data, which suggests nurses, no matter their level of education, years of experience or if they had QSEN in nursing school, all have high levels of self-efficacy in the knowledge, skills and attitudes regarding the QSEN competencies. Even when the results of the NQSSI showed higher scores related to some variables, the nurses with lower scores were still above the neutral area of the Likert scale. So if newly hired nursing staff comes to the organization with high-level self-efficacy, then why have the statistics associated with the 2000 Institute of Medicine, *To Err is Human,* not improved in the last 15 years? Individual self-efficacy is essential, but perhaps it is useless if the organization does not support a culture of safety or climate of safety. The tendency is to focus on the individual nurse as the source of preventing harm to patients when the focus should shift upward to leadership and bureaucratic caring as the whole of the organization to

ensure the social-cultural, spiritual-ethical, technological, legal, political, educational, or economic caring results in a holistic culture of safety. Bureaucratic caring informs us of the human-environmental mutual process with the complex nature of organizational culture. This study may have shown a disparity between the culture of the organization and individual nurse's Knowledge, Skills and Attitudes of caring. As Ray states, " Nursing is always this interplay between the individual and the system, but if choices are made to denigrate nursing or ignore its contributions at the expense of the system, nursing does not thrive, and thus the culture of safety is jeopardized" (M. Ray, personal communication, September 25, 2015).

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Appendix A

Summary Table of Review Literature Review

Seven Tiered Rating System for the Hierarchy of Evidence

Nursing Orientation and Competency-Based Orientation		
Database and Keyword Search	**Articles**	**Level of Evidence***
CINAHL, Journals at OVID- Keywords: Nursing orientation, competency-based nursing orientation.	Bashford, C. W., Shaffer, B. J., & Young, C. M. (2012).	Level IV
	Baxter, P. E. (2010).	Level V
	Bowers, B., Bennett, S. S., Schneider, S. K., & Brunner, B. S. (2009)	Level VII
	Brakovich, B., & Bonham, E. (2012).	Level IV
	Cowperthwaite, J., Schutt-Aine, R., Herranen, M., & Sorribes, M. P. (2012).	Level VII
	Hodges, J., & Hansen, L. (1999).	Level VII
	Kennedy, J. M., Nichols, A. A., Halamek, L. P., & Arafeh, J. M. (2012).	Level V
	Kiel, J. M. (2012).	Level VII
	Meyer, R. M., & Meyer, M. C. (2000)	Level VII
	Wilkinson, C. A. (2013).	Level V
	Yanhua, C., & Watson, R. (2011).	Level V
Quality and Safety Education for Nurses (QSEN)		
Database and Keyword Search	**Articles**	**Level of Evidence**
CINAHL, Journals at OVID, Keywords: Quality and Safety Education for Nurses, QSEN.	Altmiller, G. (2011).	Level VII
	Barton, A., Armstrong, G., Preheim, G., Gelmon, S. B., & Andrus, L. C. (2009).	Level VI
	Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., & Warren, J. (2007).	Level VII
	Didion, J., Kozy, M. A., Koffel, C., & Oneail, K. (2013).	Level VI
	Dolansky, M. A., & Moore, S. M. (2013).	Level VII
	Durham, C., & Sherwood, G. (2008).	Level VI
	Dycus, P., & McKeon, L. (2009).	Level III
	Hall, L. W., Moore, S. M., & Barnsteiner, J. H. (2008).	Level VII
	Miltner, R. S., Patrician, P. A., Dawson, M., & Jukkala, A. (2012).	Level VI
	Piscotty, R., Grobbel, C., & Abele, C. (2013).	Level III
	Sullivan, D. T., Hirst, D., & Cronenwett, L. (2009).	Level IV
Patient Safety and Quality Care		
Database and Keyword Search	**Articles**	**Level of Evidence***

CINHAL, Journals at OVID; Keywords: quality care, patient safety and safety culture.	Andel, C., Davidow, S. L., Hollander, M., & Moreno, D. A. (2012).	Level VII
	Hartmann, C. W., Meterko, M., Rosen, A. K., Zhao, S., Singer, S., & Gaba, D. M. (2009).	Level II
	James, J. T. (2013).	Level I
	Richardson, A., & Storr, J. (2010).	Level V
	Rosen, A. K., Singer, S., Zhao, S., Shokeen, P., Meterko, M., & Gaba, D. (2010).	Level IV
	Sculli, G. L., Fore, A. M., Neily, J., Mills, P. D., & Sine, D. M. (2011).	Level VII
	Sculli, G. L., Fore, A. M., West, P., Neily, J., Mills, P. D., & Paull, D. E. (2013).	Level V
	Singer, S., Hartmann, C. W., Hanchate, A., Zhao, S., Meterko, M., Shokeen, P., & Rosen, A. K. (2009).	Level III
Theory of Bureaucratic Caring		
Database and Keyword Search	**Articles**	**Level of Evidence***
CINHAL; Theory of Bureaucratic Caring, Marilyn Ray.	Ray, M. A. (1989).	Level VI
	Ray, M. A., & Turkel, M. C. (2012).	Level VII
	Ray, M. A., & Turkel, M. C. (2014).	Level VII
	Turkel, M. C. (2007).	Level VII
Theory of Self-Efficacy		
Database and Keyword Search	**Articles**	**Level of Evidence***
Journal at OVID; Keywords: Theory of self-efficacy, Albert Bandura, nursing self-efficacy.	Bandura, A. (1982).	Level VII
	Bumann, M., & Younkin, S. (2012).	Level VII
	Manojlovich, M. (2005).	Level III
	Nielsen, K., Yarker, J., Randall, R. & Munir, F. (2009).	Level III
	Tyler, S., Bourbon, E., Cox, S., Day, N., Fineran, C., Rexford, D., Rinas, J., Shumate, K., Ward-Smith, P. (2012).	Level III

Level I: Evidence from a systematic review or meta-analysis of all relevant RCT's.

Level II: Evidence obtained from well-designed RCT's.

Level III: Evidence obtained from well-designed controlled trials without randomization.

Level IV: Evidence form well-designed case-control and cohort studies.

Level V: Evidence from systematic reviews of descriptive and qualitative studies.

Level VI: Evidence from single descriptive of qualitative studies.

Level VII: Evidence from the opinion of authorities and/or reports of expert committees.

(Melnyk & Fineout-Overholt, 2011, p. 12).

Appendix B

Quality and Safety Competency-Based Nursing Orientation Curriculum

Institution	VA Eastern Colorado Health Care System
Program Name	Quality and Safety Competency-Based General Nursing Orientation
Target Experience Level	Newly hired nursing staff at all educational and experience levels (RN, LPN, CNA)
Duration	2 8-hour days for CNAs and 5 8-hour days for RNs and LPNs

A. Brief Description of Program

Purpose of General Nursing Orientation (GNO) is to prepare the newly hired nursing staff employee to function in their new role from a department wide perspective.

The **Quality and Safety Education for Nurses (QSEN)** initial competencies with associated **Knowledge, Skills and Attitudes (KSA),** will be validated in GNO. Phase two of nursing orientation is a preceptor guided unit or area-based, specific nursing orientation, which follows GNO.

QSEN = Quality **S**afety **E**ducation for **N**urses

K= Knowledge; **S=** Skills; **A=** Attitudes

In addition to the modules listed below, 1.5 hours is spent reviewing the mission, vision, philosophy, the theoretical framework of nursing practice and the governing structure of Patient Care Services (PCS) at VA ECHCS.

B. Content and Evidence of Learning

Module 1: Providing Culturally Competent Care. *QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
1.1. Define culture and the components of culture. 1.2. Identify culturally competent nursing care. 1.1. Apply culturally competent communication strategies. 1.4. Recognize diversity in the healthcare workplace 1.5. Describe veteran culture and the influence of military culture on veterans.	• Definition of Patient Centered Care: 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). • Definition of Cultural competence: A set of attitudes, skills and policies that enable an individual to work respectfully with patients and each other in a culturally diverse work environment (Joint Commission, 2002)	**K**: Describe how diverse cultural, ethnic and social backgrounds function as sources of patient family and community values. **K**: Discuss principles of effective and culturally competent communication. **S**: Identifies pa **S:** Provide patient-centered care with sensitivity and respect for the diversity of human experience. **A**: Seek learning opportunities with patients who represent all aspects of human diversity. **A**: Recognize personally held attitudes about working with patients from different ethnic, cultural and social backgrounds. **A**: Willingly support patient-centered care for individuals and groups whose values differ from own.	Lecture and class discussion with PPT. GNO Handbook Competency self-assessment Competency validation by GNO faculty
Module 1 Evidence of Learning: Participation in class discussion. Verbal acknowledgment of learning and self-assessment of competency.			

Module 2: Providing Age Specific Care: ***QSEN: 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. **(30 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
2.1. Identify Erikson's theory of developmental tasks and related nursing implications 2.2. Describe the age demographics of veterans under care at the VA 2.3. Compare personality, cognitive, developmental, and moral theories 2.4. Describe inter-generational differences and implications for working in a multi-generational work-place	• Definition of Patient Centered Care: 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). • Age specific care means to care for the patient, resident, or client at that individual's stage of life. • "Age-specific competencies" are the KSAs to communicate with each patient, in a way that is appropriate to his or her particular age, capabilities or disabilities, temporary impairments, emotions, stresses, in a respectful manner.	**K**: Describes how social-cognitive development function to provide patient-centered care **K**: Discusses Erikson's stages of human development and associative nursing implications. **K**: Compares different human and social-cognitive developmental theories and implications for nursing practice. **K**: Examine common barriers to active involvement of patients in their own health care processes **S**: Communicates patient's values and preference according to their stage of development. **A**: Values understanding generational and developmental difference in providing patient-centered care. **A** – Respects patient preferences for degree of active engagement in the care process. **A** – Appreciates shared decision-making with empowered patients and families	Lecture and class discussion with PPT. GNO Handbook Developmental theory comparison chart Competency self-assessment Competency validation by GNO faculty

Module 2 Evidence of Learning: Participation in class discussion. Verbal acknowledgment of learning and self-assessment of competency.			
Module 3: Pain Management of the Veteran. ***QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
3.1. Define pain 3.2. Describe special consideration for pain management in the veteran population 3.3. Identify barriers to pain management 3.4. Demonstrate documentation of pain assessment, nursing interventions and outcomes in CPRS 3.5. Determine how to select an appropriate pain assessment tools 3.6. Differentiate addiction, tolerance and dependency	• Review of literature on the current status of pain in Veterans • VHA Pain Management directive – 2009-053 • VHA the 5th Vital Sign Tool Kit	**K –** Demonstrates comprehensive understanding of the concepts of pain and suffering including physiologic models of pain and comfort. **K** – Explains importance of timely assessments /reassessments & documenting level of pain using a Verbal Descriptive, Numeric Rating (0-10), Wong-Baker Faces, or Cognitive Impairment scales based on individual patient needs including character, location, duration, origin, severity, alleviating factors, and exacerbating factors. **K** – Describes the elements of a WILDCATS pain assessment (RN/LPN) **S –** Demonstrates accurate documentation of pain assessment in CPRS (RN/LPN). **S** - Initiates pain interventions that are timely (R/LPN). **S** – Demonstrates documentation of patient/family education in	Lecture and class discussion with PPT. GNO Handbook Table top simulation scenarios with Test Patient accounts in CPRS Level 1 pain management test (CNA) Pain Knowledge test (RN/LPN) Competency validation by GNO faculty

		CPRS regarding pain (RN/LPN). **S** - Assesses pain in relation to patient's values, preferences, and psychological, spiritual and social needs. (RN/LPN). **A** - Recognizes personally held values and beliefs about the management of pain or suffering. **A –** Recognizes that patient expectations influence outcomes in management of pain or suffering.	
Module 3 Evidence of Learning: Participation in tabletop simulation activities including documenting a pain assessment using WILDCATS in CPRS in a test patient account, and PRN effectiveness documentation in BCMA. Minimum 80% or more passing on the Level 1 test (all levels) and Pain Management Knowledge test (RN/LPN only). Verbal acknowledgment of learning and self-assessment of competency.			
Module 4: Glycemic Control and Management of the Diabetic Patient: *QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
4.1. Identify 3 challenges in achieving good glycemic control in inpatient and outpatient settings 4.2. Identify interventions to manage hyperglycemia and hypoglycemia	• Policy review: Hypoglycemic protocol and use of inpatient and outpatient glucometer use • Actions/intervention for hyperglycemia and/or hypoglycemia • Patient education	**K** - Identify 3 challenges in achieving good glycemic control in hospitalized veterans with diabetes. **K** - Describe how to prevent and manage hyperglycemia and hypoglycemia. **K** - Identify a common deviation from best practice of hyperglycemia and hypoglycemia management in the hospital **S –** Demonstrates correct	Lecture and class discussion with PPT. GNO Handbook Hands on demonstration with return demonstration of the glucometer Glucometer written test

4.3. Apply best practice for inpatient hyperglycemia/ diabetes management using subcutaneous insulin including use of physiologic insulin 4.4. Discuss common deviations from best practice of insulin management in the in-patient setting	• Locate and review hypoglycemic protocol	glucometer use **S** – Demonstrates critical lab documentation in CPRS test patient account (RN/LPN) **A** – Appreciates the importance of glycemic control and management and special needs of the Veteran population (RN/LPN) **A** – Respects patient preferences for degree of active engagement in the care process. **A** – Appreciates shared decision-making with empowered patients and families	Competency validation by GNO faculty
Module 4 Evidence of Learning: Participation in glucometer class with lecture; demonstration and return demonstration of Glucometer glucose testing. Minimum of 80% or more passing on glucometer written test.			
Module 5: Ethical Issues. ***QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
5.1. Discuss facility Ethics Policies 5.2. Define palliative care and hospice care 5.3 Explore the role of the facility palliative care team	• Review policy #00-83 – Organizational and Integrated Ethics • Review policy #118-23 – Nursing Department Ethics Policy • Explore the ANA Code of Ethics for Nurses	**K –** Described the boundaries of therapeutic relationships **K -** Identified the nurse's role in assuring coordination, integration, and continuity of care (RN/LPN) **K –** Demonstrated knowledge of procedure for identifying patient's resuscitative/code status. **S –** Recognized inappropriateness of developing any personal or	Lecture and class discussion with PPT. GNO Handbook Competency validation by GNO faculty Review and discuss: • Employee/Patient

5.4. Discuss the Advanced Directives/ DNR/DNI policy 5.5. Identify the steps to implement a DNR/DNI order 5.6. Identify issues associated with violating professional boundaries 5.7. Identify the protocol in caring for the patient who has died	• Discuss the DNR/DNI policy for inpatients • Discuss the role of the palliative care team and the special needs of Veterans at end-of-life.	financial relationships with patients by self or co-workers. **S** – Described the process of obtaining informed consent by the patient for nursing care (RN/LPN) **S** – Described strategies to ensured patient's/family's wishes are congruent with treatment plan and code status (RN/LPN). **A** – Respects patient preferences for degree of active engagement in the care process. **A** – Acknowledges tension may exist between patient rights and the organizational responsibility for professional, ethical care. **A** – Appreciates shared decision-making with empowered patients and families	Relationships policy # 00-23 • ANA Code of Ethics for Nursing Practice • Patient Abuse policy # 00-78
Module 5 Evidence of Learning: Level of participation in class discussion. Signature on Memorandum of Understanding for Employee/Patient Relationships and Patient Abuse			
Module 6: Skin and Wound Care: ***QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
6.1. Understand the elements of the Braden Scale to determine pressure wound risk 6.2. Review mattress options	• Braden Scale and nursing intervention/documentation • Bed surfaces and mattresses • Wound assessments/staging	**K-** Explore the resources available for skin and wound care **K-** Describe the elements of a pressure ulcer risk assessment. **K-** Apply knowledge of pressure ulcer staging for documentation **S-** Demonstrate skin assessment/re-assessment	Interactive lecture with class discussion with PPT. GNO Handbook Equipment demonstration

6.3. Identify skin care and wound products available in the formulary 6.4 Demonstrate ability to document elements of wound prevention and care	• Consultation process for Wound Care Specialists • Wound prevention for patients who are wheel chair and bed bound • VA Handbook 1180.2 Pressure Ulcer Prevention and Treatment; ECHCS Pressure • Ulcer Prevention and Treatment Policy 118- • Negative Pressure Wound Therapy policy 118- • Braden Scale for Predicting Pressure Sore Risk	in CPRS test patient account. **A**– Values personal responsibility and accountability for pressure wound prevention **A** – Respects patient preferences for degree of active engagement in the care process. **A** – Appreciates shared decision-making with empowered patients and families	Competency self-assessment Competency validation by GNO faculty
Module 6 Evidence of Learning: Participation in class. Hands on demonstration with wound care products and Wound Vac. Verbal acknowledgment of learning and self-assessment of competency.			
Module 7: Respiratory Care: ***QSEN: 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. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
7.1. Identifies respiratory care equipment 7.2. Reviews respiratory care medication and how to administer	• Equipment demonstration by Respiratory Care Department • Handout of respiratory care medication in formulary and demonstration of aerosol medication	**K –** Recognizes simulated patient conditions based on ABG interpretations **S –** Identifies respiratory equipment, indications and proper usage **A** – Respects patient preferences for degree of active engagement in the care process.	Interactive lecture and class discussion GNO Handbook Competency self-assessment

7.3. Demonstrates basic knowledge of ABG interpretation	administration devices • Review of ABG interpretation	**A** – Appreciates shared decision-making with empowered patients and families	Competency validation by GNO faculty
Module 7 Evidence of Learning: Participation in Respiratory Care module class and simulated patient ABG interpretation. Verbal acknowledgment of learning and self-assessment of competency.			
Module 9: Discharge Planning: ***QSEN: 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. **(15 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
9.1. Differentiate Care Coordination, Utilization Management and Case Management 9.2. Review the discharge planning process and contact information	• Interdisciplinary Rounds • Nursing discharge planning screening process • Facility policies	**K –** Acknowledges RN role in the discharge planning process **S –** Identifies members of the discharge planning team and contact information **A** – Respects patient preferences for degree of active engagement in the care process. **A** – Appreciates shared decision-making with empowered patients and families	Interactive lecture and class discussion. GNO Handbook Competency self-assessment Competency validation by GNO faculty
Module 9 Evidence of Learning: Participation in Discharge Planning Module. Verbal acknowledgment of learning and self-assessment of competency.			
Module 10: Communication: ***QSEN: Teamwork & Collaboration-*** Definition: Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision making. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
10.1. Define Teamwork and Collaboration 10.2. Identify barriers and impact of effective	• National Patient Safety Goal #2- Facilities must implement standardize hand-off communication, including an opportunity to ask	**K**- Analyzes differences in communication style preferences among patients and families, nurses and other members of the health team.	Interactive lecture with class discussion with PPT. Table top, case study simulation for handoff and

versus ineffective communication on patient safety 10.3. Define SBAR and each SBAR component 10.4. Demonstrate using the SBAR tool in case study simulation	and respond to questions. • Barriers to communication • SBAR • Seven Crucial Conversations in Healthcare	**K –** Explores the impact of own communication style on others. **K** - Describes the impact of team functioning on safety and quality of care. **K –** Describes scope of practice and roles of interdisciplinary, licensed and unlicensed team members. **K –** Defines each component of SBAR **K –** Discusses the correlation between utilizing an effective communication tool with the interdisciplinary healthcare team and safe, quality patient care. **S** - Employs communication techniques to coordinate care for patients. **S –** Adapts own style of communicating to needs of the team and situation. **S –** Demonstrates awareness of own strengths and limitations as a team member. **S -** Acts with integrity, consistency and respect for differing views. **S –** Follows communication practices that minimize risks associated with handoffs among team members and across transitions in care. **S –** Asserts own position/perspective in discussions about patient care.	SBAR communication GNO Handbook Competency self-assessment Competency validation by GNO faculty

		A – Values teamwork and the relationships upon which it is based. **A –** Contributes to resolution of conflict and disagreement. **A –** Appreciates the risks associated with handoffs among providers and across transitions in care. **A –** Values the influence of system solutions in achieving effective team functioning. **A –** Values different styles on communication used by patients, families and health care providers **A –** Values teamwork and the relationships upon which it is based.	
Module 10 Evidence of Learning: Level of participation in Communication Module. Evaluation of SBAR and handoff communication simulation activities in class. Verbal acknowledgment of learning and self-assessment of competency.			
Module 11: Patient Emergencies - Code Blue/Rapid Response/Medical Assist Team: ***QSEN: Teamwork & Collaboration*****-**Definition: Functions effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision making **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
11.1. Differentiate Code Blue, Rapid Response and Medical Assist Teams 11.2. Identity the roles and responsibilities of healthcare team members when responding to a	• Cardiopulmonary arrest and medical assistance teams policy #00-058 • AED training; table top mock code attends Code Blue/Rapid • Communication, teamwork and interdisciplinary	**K –** Demonstrates knowledge of recognition of patients' change of condition and how to initiate interventions to prevent further decline and possible cardio-pulmonary-arrest. **K –** Describes the roles and responsibilities of members of the Code Team. **K –** Differentiates Code Blue, Rapid Response and	Interactive lecture with class discussion with PPT. Interactive code cart demonstration with training cart and AED/ Defibrillator GNO Handbook

patient emergency 11.3. Demonstrates correct documentation and completion of the Code Blue Form	roles during patient emergencies	Medical Assist Team and how to call each. **S** -Demonstrates safe use and care of defibrillator and/or Automated External Defibrillator (AED) available in work area. **S** - Recognizes airway distress in patients with assistive breathing device (e.g. tracheostomy, speaking valves, and ventilator). **A –** Values the personal role in preventing patient care emergencies. **A** – Appreciates the aspects of teamwork and collaboration if called upon to participate in a patient emergency.	Competency self-assessment Competency validation by GNO faculty Written Mock Code Guidelines for Nursing Staff
Module 11 Evidence of Learning: Level of participation in the Patient Emergency module.			
Module 12: Model of EBP at VA ECHCS: *QSEN: Evidence-Based Practice-* Definition: Integrate best current evidence with clinical expertise and Veteran/family preferences and values for delivery of optimal health care. **(30 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
12.1. Compare and contrast the EBP model adopted at VA ECHCS and other EBP models 12.2. Identify and develop a simulated EBP practice issue 12.3. Discuss various tools to	• Modified Stetler/Rosswurm and Larrabee EBP models • Iowa Model of EBP to Promote Quality Care • The ACE Star Model of Knowledge Transformation	**K** – Explain the role of evidence in determining best clinical practice **K –** Differentiate clinical opinion from research and evidence summaries **K –** Describe reliable sources for locating evidence reports and clinical practice guidelines **S** - Locates the VA ECHCS modified Stetler/Rosswurm & Larrabee Models of EBP	Interactive lecture and class discussion GNO Handbook Simulated identification of an EBP problem Competency self-assessment

determine level of evidence of the literature	• The Colorado Patient-Centered Interprofessional EBP Model • Hierarchy of Evidence for Intervention Studies • VA online library – Access to literature databases • Level of Evidence of the literature	**S** - Locates Comprehensive Index of Nursing and Allied Health Literature (CINAHL), on the VA Intranet Library (VALNET) **S** – Demonstrates the evaluation process to determine the strength and level of evidence in professional literature. **S** - Recognizes the process for determining a practice issue **S**: Formulates a practice issue question using PICO **A –** Acknowledges own limitation in knowledge and clinical expertise before determining when to deviate from evidence-based practices **A –** Appreciates Strengths and weaknesses of scientific bases for practice **A –** Values the concept of EBP as integral to determining best clinical practice **A –** Appreciates the importance of regularly reading relevant professional journals	Competency validation by GNO faculty
Module 12 Evidence of Learning: Level of participation in EBP module. Demonstrate level of understanding in discussion related to developing an EBP question. Verbal acknowledgment of learning and self-assessment of competency.			
Module 13: QI at the Bedside: ***QSEN: Quality Improvement*****-** 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. **(30 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*

13.1. Define Quality and Performance Improvement (QI, PI) 13.2. Differentiate QI from EBP 13.3. Develop a QI project question from a simulated quality or performance practice issue using PICO 13.4. Identify examples of QI tools	• Stating a practice problem • Formulating a QI question • Strategies to selecting a QI tool	**K** –Explain the importance of variation and measurement in assessing quality of care **K –** Describe strategies for learning about the outcomes of care on the nursing unit or ward **K** – Explore approaches for changing/improving processes of care. **K –** Discuss the role of nursing as a part of a system of care and care processes that affect outcomes for patients and families **K –** Describe examples of tension between professional autonomy and system functioning. **S -** Locates the Joint Commission *National Patient Safety Goals.* **S -** Identifies unit or service performance improvement activities. **S -** Identifies opportunities to improve patient care through monitoring, analyzing, and evaluating care outcomes. **A –** Appreciate that continuous quality improvement is an essential part of the daily work of all health professionals **A –** Value measurement/data and its role in quality patient care	Interactive lecture and class discussion GNO Handbook Simulated identification of an QI/PI practice issue Competency self-assessment Competency validation by GNO faculty
Module 13 Evidence of Learning: Level of participation during QI module. Demonstration of teamwork in developing a simulated QI practice issue and question. Verbal acknowledgment of learning and self-assessment of competency.			

Module 14: Enteral Feeding/ Medication Administration/Kangaroo Pump: *QSEN: Patient Safety* Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
14.1. Identify patient safety issues associated with enteral feeding and medication administration 14.2. Discuss disease states and conditions that may require enteral feeding and medication administration 14.3. Recognize the various types of feeding tubes and their indication of use for enteral feeing and medication administration 14.4. Explore the 2009 American Society for Parenteral and Enteral Nutrition (ASPEN) Guidelines with implications to prevent enteral feeding and medication	• American Society for Parenteral and Enteral Nutrition (2009) • ECHCS Nutrition and Food Service Enteral Feeding Manual	**K** - Identify patient safety issues associated with enteral feeding and medication administration **K** - Discuss disease states and conditions that may require enteral feeding and medication administration **K** - Recognize the various types of tubes and their indications of use for enteral feeding and medication administration **K** - Explore the 2009 ASPEN Guidelines with nursing implications to prevent enteral feeding and medication administration complications **S –** Demonstrate Set-up and use of Kangaroo pump (See attached Skills validation form) **A** – Values patient safety issues associated with enteral feeding **A** – Appreciate the psychosocial aspect of enteral/tube feeding from the patient's perspective **A** – Value the patient safety aspect of the ASPEN Guidelines	Interactive lecture and class discussion with PPT GNO Handbook Hands on demonstration/return demonstration of the Kangaroo feeding pump Competency self-assessment Competency validation by GNO faculty

administration complications			
Module 14 Evidence of Learning: Level of participation in Enteral Feeding module. Verbal acknowledgment of learning and self-assessment of competency.			
Module 15: Infection Control: ***QSEN: Patient Safety-*** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(45 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
15.1. Differentiate multiple drug resistant organisms (MDRO) to non-resistant strains. 15.2. Identify means of transmission of pathogenic organisms to patients. 15.3. Define the different types of isolation and the procedure to initiate isolation and how to transport a patient with a MDRO 15.4. Define catheter associated urinary tract infections (CAUTI) and methods of prevention	• Infection Control Manual • Environmental Services SOP on Bed Bug protocol in the inpatient and outpatient areas. • Use and Reprocessing of Reusable Medical Equipment (RME) # 00-115 • VHA Directive 2009-004, Use and Reprocessing of RME in VHA Facilities	**K –** Describes the principles of infection prevention and control. **K –** Differentiates the types of infectious disease isolation. **K –** Explains the principle of hand hygiene. **K –** Differentiates infection from colonization. **K –** Differentiates RME from single use only medical equipment and how to prevent nosocomial infection of patients by utilizing proper care and/or disposal. **S** - Reviews infection control policies/procedures for cleaning and reprocessing reusable medical equipment (RME). **S –** Selects correct isolation type based on the organism and mode of transmission **S –** Demonstrates procedure for identifying and containing bed bugs in the inpatient and outpatient setting	Interactive lecture and class discussion with PPT GNO Handbook Simulated identification of an EBP practice issue Competency self-assessment Competency validation by GNO faculty

15.5. Define central line associated blood stream infections (CLBSI) and methods of prevention. 15.6. Differentiate critical, semi-critical and non-critical Reusable Medical Equipment (RME) and how to determine proper cleaning, care and maintenance.		**S –** Demonstrates procedure for obtaining nasal swab for MRSA (See skills validation form) **A –** Appreciates personal accountability in prevention of transmission of infectious disease. **A –** Values knowing proper cleaning technique of RME to prevent nosocomial infection.	
Module 15 Evidence of Learning: Level of participation in the Infection Control module. Verbal acknowledgment of learning and self-assessment of competency.			
Module 16: Dysphagia/Oral Care: ***QSEN: Patient Safety-*** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(30 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
16.1. Define dysphagia 16.2. Identify aspiration risks associated with dysphagia	• Management of Patients with Swallowing and Feeding Disorders Policy #117-10.	**K –** Defines dysphagia. **S** – Describes the procedure to complete dysphagia screen within 24 hours of admission. **S –** Describes procedure to obtain an NPO order and SLP consult for patients with a positive dysphagia screen	Interactive lecture and class discussion with PPT GNO Handbook Dysphagia written test

16.3. List common symptoms of dysphagia 16.4. Discuss dysphagia screening and the RNs role in the admission screen 16.5. Identify patient risk associated with poor oral care		**A –** Appreciates the risk of aspiration for a dysphasic patient **A –** Values the importance of performing an early dysphagia screen	Competency self-assessment Competency validation by GNO faculty
Module 16 Evidence of Learning: Level of participation in Dysphagia module. Minimum of 80% or more passing on the dysphagia written test. Verbal acknowledgment of learning and self-assessment of competency.			
Module 17: Falls Prevention & Safe Patient Handling: ***QSEN: Patient Safety-*** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(3 hrs. 15 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
17.1. Identify strategies and techniques to prevent patient and personal injury in handling, moving and positioning patients. 17.2. Discuss the risk factors in the Morse Fall Risk Assessment tool 17.3. Explore best practice for documentation	• SPH-and Movement # 118-31 • Fall Prevention Policy # 00-63 • Morse Fall Assessment Risk tool • Safe Patient Handling algorithm • JC National Patient Safety Goal # 0.02.01-Fall prevention program	**K –** Describes the techniques used to prevent personal and patient injury in handling, moving and positioning patients. **K –** Explains the Falls prevention program at VA ECHCS **S** – Demonstrates fall risk assessment using the Morse Scale **S -** Locates the Safe Patient Handling algorithm for lifting, moving, and repositioning patients per policy # 118-31. (See SPH skills validation form) **S -** Utilizes proper ergonomic techniques (see	Interactive lecture and class discussion GNO Handbook Hands on demonstration/return demonstration Competency self-assessment Competency validation by GNO faculty

of fall risk in CPRS		SPH skills validation form) **S** – Demonstrates proper use of lifts and equipment for SPH (see SPH skills validation form) **S** - Maintains and responds to patient alarms. Adjusts alarms based on specific needs of the patient (e.g. bed alarms, monitor parameters). **A –** Appreciates personal accountability in using safe techniques during patient handling, positioning and handling, to prevent injury to self, patient and others.	
Module 17 Evidence of Learning: Level of participation in Falls and SPH module. Demonstration of correct application of knowledge in hands on demonstration of the lift and patient handling equipment. Verbal acknowledgment of learning and self-assessment of competency.			
Module 18: Restraints/Seclusion/Code Yellow: ***QSEN: Patient Safety*****-** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(45 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN, CNA)*
18.1 Discuss safety risks, including death in using restraints in the medical-surgical areas. 18.2. Define "least restrictive environment" as it is related to use of restraining or confining a patient.	• Use of Restraints in Non-Behavioral Medical and Surgical Care, policy #00-24 • Behavioral Health Care Restraint and Seclusion, policy # 00-28 • Quick Release Knot; GNO Patient Restraint Safety module.	**K –** Defines "Least Restrictive Environment" regarding restraint use in patient care. **K –** Describes injury risks to patients due to restraint use. **K –** Explains the rationale for frequent assessment of a patient in restraints **S –** Demonstrates applying and releasing a limb restraint with a Quick Release Knot. (See skills validation form).	Interactive lecture and class discussion GNO Handbook Hands on demonstration/return demonstration Competency self-assessment Competency validation by GNO faculty

18.2. Identify the steps for restraining a patient including obtaining an order from a physician or LIP.		**A –** Appreciates the need to apply the principles of "least restrictive environment in utilizing restraints. **A** - Values patient's dignity and need to be assured in a calm, caring manner if restraints are needed to protect the patient from harm	
Module 18 Evidence of Learning: Demonstration of correct procedure to apply soft wrist restraints using the Quick-Release tie. Verbal acknowledgment of learning and self-assessment of competency.			
Module 19: PIV/PICC/CL Care/Alaris® Pump/Guardrails®: *QSEN: Patient Safety* - Definition: Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
19.1. Define catheter line related blood stream infections (CLBSI or CR-BSI) and methods of prevention. 19.2. Identify the role of the Vascular Access Team and the Staff RN regarding peripheral and central line care. 19.3. Differentiate various peripheral and central	• Demonstrate/return demonstration of a peripheral inserted vascular line (PIV) using an IV arm simulator. • Demonstrate/return demonstration of a PICC line dressing change using an IV arm simulator. • Intravenous Medication Administration Policy #00-60	**K –** Describe venous anatomy and physiology **K –** Describe infection control principles associated with proper insertion technique and routine PIV care **K –** Differentiate the various device used for central vascular access. **K –** Describes methods to prevent central line associated blood stream infection (CLABSI). **K –** Identify the components of the Central Line Bundle for infection prevention. **K –** Explains IV "Smart Pump" concept and how proper use of this technology prevents medication errors.	Interactive lecture and class discussion GNO Handbook Hands on demonstration/ return demonstration with IV/PICC care using simulator IV arm Hands on demonstration/ return demonstration with training Alaris® Pump with PCA and ETCO2 module

vascular access devices and their indications.		**K –** Describes the Guardrail feature of the Alaris® IV pump. **K –** Explains the benefit of ETCO2 monitoring versus SPO2 monitoring for patients on a PCA pump. **K –** Differentiates "standard" dose opioid concentration and "high dose" opioid concentration for PCA infusion and which menus to access the different concentration. **K-** Discusses important concepts to educate patients and family regarding PCA. **S –** See PIV skills validation form **S –** See CL Skills Validation form **S –** See the Alaris® skills validation form **A –** Values personal accountability in prevention of infection and/or patient harm in PIV insertion and care **A –** Values the importance of personal accountability in the prevention of CLABSI. **A –** Appreciates the importance of the Guardrail® feature and avoiding "overriding" Guardrail® alerts as a means to increase patient safety. **A –** Values this importance of accurate programing of the Alaris® pump, including second RN verification of high risk and opioid	Competency self-assessment Competency validation by GNO faculty

		medications is correlated with prevention of medication error and preventable adverse events for patients	
Module 19 Evidence of Learning: Level of participation in the PIV and CL care module. Application of knowledge in simulation of PIV insertion and CL dressing change. Verbal acknowledgment of learning and self-assessment of competency.			
Module 20: Medication Administration: ***QSEN: Patient Safety*****-** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
20.1. Examine human, environmental, and organizational factors design principles that contribute to medication errors. 20.2. Discuss factors that create a culture of safety and just culture. 20.3. Describe common unsafe practices such as workarounds and relying on memory.	• Medication error prevention and drug storage #119-08 • Bar Code Medication Administration Policy and Procedure #118-23 • IV Medication Administration #00-60 • Use of Intravascular (IV) Infusion Pump with Does Error Reduction Software #118-26	**K –** Describe the benefits and limitations of selected safety-enhancing technologies (such as BCMA, POE, Alaris® guardrails and alarm/alerts). **K –** Examine human factors and other basic safety design principles. **K –** Describe unsafe practices (such as "work-arounds" and dangerous abbreviations). **K –** Describe factors that create a culture of safety (i.e., open communication and safety/error reporting) **K** – Explore effective strategies to reduce reliance on memory **S -** Describes 2 unique patient identifiers prior to medication administration	Interactive lecture and class discussion GNO Handbook Medication calculation test Competency self-assessment Competency validation by GNO faculty

20.4. Explore processes used in understanding causes of error and allocation of responsibility and accountability.		**S -** Recognizes workarounds as potential hazards leading to errors **S –** Demonstrates patient safety reporting process for near miss and error reporting. **A –** Appreciate the cognitive and physical limits of human performance **A –** Values personal accountability in preventing errors **A –** Values the contributions of standardization/reliability to safety	
Module 20 Evidence of Learning: Level of participation in Medication Administration Safety module. Minimum of 80% or more passing on the Medication Calculation test. Verbal acknowledgment of learning and self-assessment of competency.			
Module 21: Blood Product Administration: ***QSEN: Patient Safety-*** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
21.1. List the blood products administered at our facility and the indications for their use. 21.2. Describe the procedure for safe transfusion of blood products. 21.3. Identify transfusion reactions and associated symptoms.	• ECHCS Blood Transfusion and Procedures for Nurses and Physicians, 9th Edition	**K –** List the types of blood products used at ECHCS and the indications for their use. **K –** Describe the procedure for safe transfusion of blood products **K –** Explain the circumstance and process for obtaining uncrossmatched blood from the Blood Bank **K –** Identify transfusion reactions and associated symptoms.	Interactive lecture and class discussion with PPT GNO Handbook Blood Administration written exam Competency self-assessment Competency validation by GNO faculty

21.4. Discuss safety issues associated with verification of blood product, donor information and recipient information prior to transfusion of any blood product. 21.4. Describe the procedure if a transfusion reaction is suspected		**K –** Describe the correct procedure for applying a blood band to the patient. **S –** Demonstrate correct procedure for labeling a blood specimen for Type and Screen or Type and Cross (see blood banding skills validation form). **S –** Demonstrate applying a Typenex® blood band on a simulated patient (see blood banding skills validation form). **A –** Values the importance of complying with each step of the identification and verification process of blood banding, specimen collecting and transfusion.	
Module 21 Evidence of Learning: Level of participation in the Blood Administration Module. Minimum of 80% or more passing on the Blood Administration test. Verbal acknowledgment of learning and self-assessment of competency.			
Module 22: Laboratory Specimen Labeling and Blood Banding: ***QSEN: Patient Safety-*** Definition**:** Minimizes risk of harm to patients and providers through both system effectiveness and individual performance. **(60 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
22.1. Discuss importance of using 2 unique patient identifiers when applying a blood band to a patient. 22.2. Demonstrate the correct procedure for applying a blood band to the patient.	• ECHCS Blood Transfusion and Procedures for Nurses and Physicians, 9th Edition (2015)	**K –** Identify transfusion reactions and associated symptoms. **K –** Describe the correct procedure for applying a blood band to the patient. **S –** Demonstrate correct procedure for labeling a blood specimen for Type and Screen or Type and Cross (see blood banding skills validation form). **S –** Demonstrate applying a Typenex® blood band on a simulated patient (see	Interactive lecture and class discussion GNO Handbook Hands on demonstration and return demonstration of procedure for type and cross and type and match of blood specimens and application of

		blood banding skills validation form). **A –** Values the importance of complying with each step of the identification and verification process of blood banding, specimen collecting and transfusion.	Typenex® Blood Band Competency self-assessment Competency validation by GNO faculty
Module 22 Evidence of Learning: Demonstration of knowledge by correctly demonstrating the procedure by correctly applying a Blood Band to a simulated patient. Verbal acknowledgment of learning and self-assessment of competency.			
Module 23: Bar Code Medication Administration (BCMA): *QSEN: Informatics*- Definition: Use information and technology to communicate manage knowledge, mitigate error, and support decision making and critical thinking **(180 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
23.1. Describe how BCMA is a safety system designed to prevent medication errors. 23.2. Defines "work-arounds" to bypass safety systems and associated risk.	• Bar Code Medication Administration Policy and Procedure #118-23. • BCMA unit specific contingency plan for computer down times.	**K –** Describes process of medication administration using BCMA **K-** Verbalizes knowledge of computer and BCMA contingency plan and conditions requiring activation of plan. **K –** Describes the 2 unique patient identifiers correctly **K –** Explores the patient safety risk of making medication errors when practicing "work-arounds" and/or overriding the safety features of BCMA **S –** Demonstrates use of Missed Medication Report in BCMA. **S –** Performs simulated medication administration using a BCMA patient test account	Interactive lecture and class discussion Computer simulation of BCMA documentation using patient test accounts GNO Handbook Competency self-assessment Competency validation by GNO faculty

		S – Identifies and locates the unit contingency computer and printer. **S** - Locates the BCMA and Computer Downtime Contingency plan. **S -** Demonstrates procedure for implementation of contingency plan when activated. **A –** Appreciates personal responsibility in understanding the computer and BCMA contingency plan for safe medication administration and limiting delay in patient cares and treatments. **A –** Values the importance of utilizing BCMA safety features to prevent medication errors	
Module 23 Evidence of Learning: Level of participation in the BCMA module. Demonstrated knowledge by simulation of administering medication to a patient using a test patient account. Verbal acknowledgment of learning and self-assessment of competency.			
Module 23: Nursing Documentation/Risk Management/CPRS: *QSEN: Informatics*- Definition: Use information and technology to communicate manage knowledge, mitigate error, and support decision making and critical thinking **(120 min)**			
Module Learning Objectives	*Key Concepts/ Information*	*Knowledge/Skills/Attitudes (KSA)*	*Teaching/Learning Strategies Level (RN, LPN)*
23.1. Recognize opportunities for documentation. 23.2. Locate appropriate documentation resources.	• ECHCS – Charting on Interdisciplinary Plan of Care • P.I.E. Charting: Problem, Intervention, Evaluation	**K –** Describe examples of how technology and information management are related to the quality and safety of patient care **S -** Identifies essential information, which must be available in the medical record to support patient care.	Interactive lecture and class discussion Computer simulation of CPRS nursing documentation using patient test accounts

23.3. Discuss individual nurses responsibility to provide accurate documentation of nursing assessment, intervention and outcomes. 23.4. Discuss individual nurses responsibility to provide and document patient education 24.5 Identify legal aspects of documentation in the patient's medical record.	• ECHCS Nursing Documentation Requirements • Common ECHCS CPRS Documentation Nursing Note Titles	**S –** Documents nursing admission and nursing progress successfully on test account patient **S -** Protects confidentiality of protected health information in electronic health records. **S -** Employs communication technologies to coordinate care for patients, and acknowledges/ responds to unit-based clinical practice information resources. (E-mails, consults, Shared Governance updates) **A –** Appreciate the necessity for all health professionals to seek lifelong, continuous learning of information technology skills	GNO Handbook Competency self-assessment Competency validation by GNO faculty
Module 23 Evidence of Learning: Level of participation in the CPRS/Nursing Documentation Module. Demonstration of knowledge by documentation in a patient test account in CPRS. Verbal acknowledgment of learning and self-assessment of competency.			

C. Assessment of Participant Progress and Performance

Evidence / Product	Brief description
1. Test of knowledge using written exams 2. Class participation in simulation activities and discussion 3. Competency validation by GNO faculty 4. Participant evaluation	1. Select module test participant using written exam. Participant pass rate is 80%. 2. Participants will be evaluated based on simulation activities and discussion in some of the modules. Individual accommodations will be made for participants uncomfortable with group participation. 3. All modules require GNO faculty to validate participant KSA associated with the competencies.

	4. The participants will fill out an evaluation form asking if the learning objectives were met and what suggestions they have to improve the content and what topics would they like to see in future committee education.

Quality and Safety Education for Nurses (QSEN). **http://www.qsen.org**.

The Quality and Safety Education for Nurses Education Consortium is a national initiative of the American Association of Colleges of Nursing (AACN).

Appendix C

QSEN Nursing Orientation Competency Form

Job Title: Registered Nurse				**Name:**	**Department/Unit:**
Method of Validation: A. Lecture/Self-study B. Discussion/Verbal feedback C. Case Studies D. Direct observation/Daily work E. Written exam F. Reflective practice/Journal G. Guided journal club H. Skills lab/Return demonstration I. Quality improvement monitor J. Peer review K. Mock event, drill or tracer L. Simulation M. Exemplar N. Other (specify)				**<u>Population Served</u>:** If knowledge or skills **<u>vary</u>** for different age groups, gender, impairments, cultural background or language indicate in "population served" column the characteristic for each competency demonstrated as appropriate. E.g. Population served: **YA, MA, OA, G** **Codes**: Age groups: **YA** = Young Adult (18-39 yrs), **MA**= Middle Adulthood (40-64), **OA**= Older Adult (65-80),**G**= Geriatric (80+ years old) Gender: **M**=Male **F**=Female Knowledge (**K),** Skills (**S),** Attitudes (**A)**	
Date	**Population Served (Note codes)**	**Validation Method Code**	**Initials of Validator**	**Competency Statements as applicable** **Training Reference/Resources (TR) criteria-** Procedure, WEB based training (i.e. TMS), a Policy, Course/Program or Evidence-Based Practice (EBP), Internet Evidence-based resources	
Domains/Cores **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.	
	YA, MA, OA, G, M,F	**A, B**		**Culturally Competent Care** **K –** Described how diverse cultural, ethnic and social backgrounds function as sources of patient, family, and community values. **K –** Discussed principles of effective and culturally competent communication **S –** Identified patient values, preferences and expressed needs as part of nursing assessment and documents in CPRS in the Admission Assessment Note and/or Interdisciplinary Plan of Care. **S –** Demonstrated ability to communicate patient values, preferences and expressed needs to other members of the health care team. **A –** Values seeing health situations "through the patient's eyes" **A –** Recognizes personally held attitudes about working with patients from different ethnic, cultural and social backgrounds. **TR:** Cultural competence module in GNO.	
	YA, MA, OA, G, M,F	**A, B**		**Age Appropriate Care** **K –** Described how social-cognitive development function to provide patient-centered care. **K –** Discussed Erikson's stages of human development and associative nursing implications. **K –** Identified common barriers to active involvement of patients in their own health care processes. **K –** Compared different human and social-cognitive developmental theories and implications for nursing practice (i.e., Freud, Piaget, Kohlberg). **S –** Communicated patient's values and preference according to their stage of development. **A –** Values understanding generational and developmental difference in providing patient-centered care. **TR:** Erikson's Stages of Development; Age Appropriate care module in GNO	

	YA, MA, OA, G, M,F	**A, B, E, N (policy review)**		**Comfort/Pain Management** **K –** Demonstrated comprehensive understanding of the concepts of pain and suffering including physiologic models of pain and comfort. **K** – Described pain assessment/reassessment & documentation of patients' level of pain using a Verbal Descriptive, Numeric Rating (0-10), Wong-Baker Faces, or Cognitive Impairment scales based on individual patient needs including character, location, duration, origin, severity, alleviating factors, and exacerbating factors. **K** – Described the elements of a WILDCATS pain assessment. **K** – Explained the importance of providing timely pain interventions. **S –** Demonstrated accurate documentation of pain assessment in CPRS using a simulated patient test account. **S** – Demonstrated documentation of patient/family education in CPRS regarding pain using a simulated patient test account. **A** - Appreciates the need to provide pain management in relation to patient's values, preferences, psychological, spiritual and social needs. **A** - Recognizes personally held values and beliefs about the management of pain or suffering. **A –** Recognizes that patient expectations influence outcomes in management of pain or suffering. **TR:** Management of the patient with pain #011-25; VA Pain Directive #2009-053; 5th Vital Sign Tool Kit; PRN effectiveness report (CPRS and BCMA). Pain management of the veteran module in GNO.
	YA, MA, OA, G, M,F	**A, B**		**Ethical and legal implications of patient-centered care** **K –** Described the boundaries of therapeutic relationships **K -** Identified the nurses role in assuring coordination, integration, and continuity of care **K –** Demonstrated knowledge of procedure for identifying patient's resuscitative/code status. **S –** Recognized inappropriateness of developing any personal or financial relationships with patients by self or co-workers. **S** – Described the process of obtaining informed consent by the patient for nursing care. **S** – Described strategies to ensured patient's/family's wishes are congruent with treatment plan and code status. **A** – Respects patient preferences of degree of active engagement in care process. **A** – Acknowledges tension may exist between patient rights and the organizational responsibility for professional, ethical care. **A** – Appreciates shared decision-making with empowered patients and families **TR:** Employee/Patient Relationships policy # 00-23, ANA Code of Ethics for Nursing Practice, Attends Ethical Issues module in GNO. Patient Abuse policy # 00-78

	YA, MA, OA, G, M,F	**A, B, H, N (policy review)**		**Skin and Wound Care** **K-** Explored the resources available for skin and wound care. K- Described the elements of a pressure ulcer risk assessment. K- Applied knowledge of pressure ulcer staging for documentation in CPRS test patient account. S- Demonstrated documentation of skin assessment/re-assessment in CPRS test patient account. A– Values personal responsibility and accountability for pressure wound prevention **TR:** VACO Handbook 1180.2 Pressure Ulcer Prevention and Treatment; ECHCS Pressure Ulcer Prevention and Treatment, ECHCS Negative Pressure Wound Therapy, Wound Care Module.
	YA, MA, OA, G, M,F	**A, B**		**Glycemic Control and Management** **K** - Identify 3 challenges in achieving good glycemic control in hospitalized veterans with diabetes. **K** - Describe how to prevent and manage hyperglycemia and hypoglycemia. **K** - Identify a common deviation from best practice of hyperglycemia and hypoglycemia management in the hospital **S –** Demonstrates correct glucometer use **S** – Demonstrates critical lab documentation in CPRS test patient account **A** – Appreciates the importance of glycemic control and management and special needs of the Veteran population. **TR:** Glucometer class with lecture, demonstration and return demonstration – GNO
	YA, MA, OA, G, M,F	**A, B, N (policy review)**		**Nutrition and Enteral Feeding/ Medication Administration/ASPEN Guidelines** **K** - Identified patient safety issues associated with enteral feeding and medication administration **K** - Discussed disease states and conditions that may require enteral feeding and medication administration **K** - Recognized the various types of tubes and their indications of use for enteral feeding and medication administration **K** - Explored the 2009 ASPEN Guidelines with nursing implications to prevent enteral feeding and medication administration complications **S –** Demonstrated Set-up and use of Kangaroo pump (See Skills validation form). **A** – Values patient safety issues associated with enteral feeding. **A** – Appreciates the psychosocial aspect of enteral/tube feeding from the patient's perspective **A** – Values the patient safety aspect of the ASPEN Guidelines. **TR**: ECHCS Nutrition and Food Service Enteral Feeding Manual, American Society for Parental and Enteral Nutrition (ASPEN) Guidelines, 2009.

TEAMWORK AND COLLABORATION				Definition: Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision making.
	YA, MA, OA, G, M,F	**A, B, C L, N (Policy review)**		**Collaboration/Communication** **K –** Analyzed differences in communication style preferences among patients and families, nurses and other members of the health team. **K –** Explored the impact of own communication style on others. **S –** Utilized effective strategies for communicating and resolving conflict. **S** - Demonstrated communication practices that minimize risks associated with handoffs. **S** - Employed communication techniques to coordinate care for patients, and acknowledges/responds to unit-based clinical practice information during table-top communication simulation exercise. **S –** Adapted own style of communicating to needs of the team and situation during table-top communication simulation exercise. **A –** Values teamwork and the relationships upon which it is based. **A –** Contributes to resolution of conflict and disagreement. **A –** Appreciates the risks associated with handoffs among providers and across transitions in care.
	YA, MA, OA, G, M,F	**A, B, C L, N (Policy review)**		**Teamwork** **K** - Described the impact of team functioning on safety and quality of care. **K –** Described scope of practice and roles of interdisciplinary, licensed and unlicensed team members. **S –** Demonstrated awareness of own strengths and limitations as a team member. **S -** Acted with integrity, consistency and respect for differing views during table-top communication simulation exercise. **A –** Values the influence of system solutions in achieving effective team functioning
	YA, MA, OA, G, M,F	**A, B, C L, N (Policy review)**		**Situation-Background-Assessment-Recommendations (SBAR)** **K –** Listed each component of SBAR **K –** Discussed the correlation between utilizing an effect communication tool with the interdisciplinary healthcare team and safe, quality care. **S –** Followed communication practices during simulation exercise to minimize risks associated with handoffs among team members and across transitions in care. **S –** Asserted own position/perspective in discussions about patient care. **A –** Appreciates the risks associated with handoffs among providers and across transitions in care. **A –** Values different styles on communication used by patients, families and health care providers **A –** Values teamwork and the relationships upon which it is based. **TR:** Patient Care Handoff Communication Process #011-44, SBAR; GNO Module - Communication/SBAR/Crucial Conversations

EVIDENCE BASED PRACTICE (EBP)				**Definition:** Integrate best current evidence with clinical expertise and Veteran/family preferences and values for delivery of optimal health care.
	YA, MA, OA, G, M,F	**A, B, C, L**		**Evidence Based Practice** **K** – Explained the role of evidence in determining best clinical practice **K –** Differentiated clinical opinion from research and evidence summaries **K –** Described reliable sources for locating evidence reports and clinical practice guidlines **S** - Located the VA ECHCS modified Stetler/Rosswurm & Larrabee Model of EBP **S** - Located Comprehensive Index of Nursing and Allied Health Literature (CINAHL), on the VA Intranet Library (VALNET) **S –** Demonstrated the evaluation process to determine the strength and level of evidence in professional literature. **S** - Recognized the process for determining a practice issue. **S**: Formulated a practice issue question using PICO. **A –** Acknowledges own limitation in knowledge and clinical expertise before determining when to deviate from evidence-based practices. **A –** Appreciates Strengths and weaknesses of scientific bases for practice. **A –** Values the concept of EBP as integral to determining best clinical practice. **A –** Appreciates the importance of regularly reading relevant professional journals. **TR:** VA online library – CINAH; VA ECHCS EBP Model, Stetler Model of EBP, Rosswurm & Larrabee EBP model; GNO Module - EBP at ECHCS.
QUALITY/PERFORMANCE IMPROVEMENT				**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.
	YA, MA, OA, G, M,F	**A, B, C, L**		**Performance Improvement/Safety Goals** **K** –Explained the importance of variation and measurement in assessing quality of care. **K –** Described strategies for learning about the outcomes of care on the nursing unit or ward. **K** – Identified approaches for changing/improving processes of care. **K –** Discussed the role of nursing as a part of a system of care and care processes that affect outcomes for patients and families **K –** Describe examples of tension between professional autonomy and system functioning. **S -** Locates the Joint Commission *National Patient Safety Goals.* **S -** Identifies unit or service performance improvement activities. **S -** Identifies opportunities to improve patient care through monitoring, analyzing, and evaluating care outcomes. **A –** Appreciate that continuous quality improvement is an essential part of the daily work of all health professionals **A –** Value measurement/data and its role in quality patient care **TR**: GNO Module - Quality Improvement at the Bedside

SAFETY				**Definition**: Minimizes risk of harm to patients and providers through both system effectiveness and individual performance.
	YA, MA, OA, G, M,F	**A, B, E, N (policy review)**		**Dysphagia Swallowing Safety** **K –** Defines dysphagia. **S** – Describes the procedure to complete dysphagia screen within 24 hours of admission. **S –** Describes procedure to obtain an NPO order and SLP consult for patients with a positive dysphagia screen **A –** Appreciates the risk of aspiration for a dysphasic patient **A –** Values the importance of performing an early dysphagia screen **TR:** Management of Patients with Swallowing and Feeding Disorders #117-10. GNO Dysphagia module.
	YA, MA, OA, G, M,F	**A, B**		**Reusable Medical Equipment (RME)** **K –** Differentiates RME from single use only medical equipment and how to prevent nosocomial infection of patients by utilizing proper care and/or disposal. **S** - Reviews infection control policies/procedures for cleaning and reprocessing reusable medical equipment (RME). **A –** Values knowing proper cleaning technique of RME to prevent nosocomial infection. **TR:** Use and Reprocessing of Reusable Medical Equipment (RME) # 00-115
	YA, MA, OA, G, M,F	**A, B, H, L, N (policy review)**		**Peripheral Intravenous (PIV) Insertion** **K –** Identified upper extremity venous anatomy **K –** Described infection control principles associated with proper insertion technique and routine PIV care **S –** See PIV skills validation form **A –** Values personal accountability in prevention of infection and/or patient harm in PIV insertion and care **TS:** GNO Module - Vascular Access Team PIV; Intravenous Medication Administration Policy # 00-60
	YA, MA, OA, G, M,F	**A, B, H L, N (policy review)**		**Peripherally Inserted Central Catheter (PICC) and Central Line (CL) Dressing Change and Care.** **K –** Differentiated the various devices used for central vascular access. **K –** Described methods to prevent central line associated blood stream infection (CLABSI). **K –** Identified the components of the Central Line Bundle for infection prevention. **S –** See CL Skills Validation form **A –** Values the importance of personal accountability in the prevention of CLABSI. **TS:** GNO Module – Vascular Access Team PICC and CL Dressing Change and Care.

	YA, MA, OA, G, M,F	**A, B, N (policy review),**		**Infection Control** **K –** Describes the principles of infection prevention and control. **K –** Differentiates the types of infectious disease isolation. **K –** Explains the principle of hand hygiene. **K –** Differentiates infection from colonization. **S –** Selects correct isolation type based on the organism and mode of transmission **S –** Demonstrates procedure for identifying and containing bed bugs in the inpatient and outpatient setting **S –** Demonstrates procedure for obtaining nasal swab for MRSA (See skills validation form) **A –** Appreciates personal accountability in prevention of transmission of infectious disease. **TR:** Infection Control Manual, Environmental Services SOP on Bed Bug in the inpatient and outpatient areas.
	YA, MA, OA, G, M,F	**A, B, E, L, N (policy review)**		**Medication Administration Safety** **K –** Described the benefits and limitations of selected safety-enhancing technologies (such as BCMA, POE, Alaris® guardrails and alarm/alerts). **K –** Examined human factors and other basic safety design principles. **K –** Described unsafe practices (such as work-arounds and dangerous abbreviations). **K –** Described factors that create a culture of safety (i.e., open communication and safety/error reporting) **K** – Explored effective strategies to reduce reliance on memory **S -** Described 2 unique patient identifiers prior to medication administration **S -** Discussed workarounds as potential hazards leading to errors **S –** Described the patient safety reporting process for near miss and error reporting. **A –** Appreciates the cognitive and physical limits of human performance **A –** Values personal accountability in preventing errors **A –** Values the contributions of standardization/reliability to safety by using safety-enhancing technologies. **TR:** Medication error prevention and drug storage #119-08; Correct Veteran/Patient Identifiers #00-034; Bar Code Medication Administration #118-23; IV Medication Administration #00-60; Use of Intravascular (IV) Infusion Pump with Does Error Reduction Software #118-26

	YA, MA, OA, G, M,F	**A, B, E, L, N (policy review)**		**Automated Medication Delivery System (Omnicell® System)** **K -** Described the benefits and limitations of Omnicell® medication delivery safety-enhancing technologies. **K –** Examined human factors and other basic safety design principles associated with Omnicell® medication delivery system. **K –** Described the method of narcotic medication wastage via the Omnicell® medication delivery system **S –** See the Skills Validation form for Nursing Omnicell® Management **A –** Appreciates the value of narcotic medication safety in using Omnicell® medication delivery system. **A –** Values personal accountability in accurate narcotic wastage with a witness and documentation in the Omnicell® medication delivery system **A –** Values the contributions of standardization/reliability to safety by using safety-enhancing technologies. **TR:** Automated Medication Dispensing System #119-39; Bar Code Medication Administration #118-23;
	YA, MA, OA, G, M,F	**A, B, E, L, N (policy review)**		**IV Medication Administration/ IV Pump Guardrails/ Patient Controlled Analgesic (PCA) Pump/ETCO2** **K –** Explained IV "Smart Pump" concept and how proper use of this technology prevents medication errors. **K –** Described the Guardrail feature of the Alaris® IV pumps. **K –** Explained the benefit of ETCO2 monitoring versus SPO2 monitoring for patients on a PCA pump. **K –** Differentiated "standard" dose opioid concentration and "high dose" opioid concentration for PCA infusion and which menus to access the different concentration. **K-** Discussed important concepts to educate patients and family regarding PCA. **S –** See the Alaris® skills validation form. **A –** Appreciates the importance of the Guardrail® feature and avoiding "overriding" Guardrail® alerts as a means to increase patient safety. **A –** Values how accurate programing of the Alaris® pump, including second RN verification of high risk and opioid medications is correlated with prevention of medication error and preventable adverse events for patients. **TR:** GNO Module – Alaris® Pump/PCA/Guardrails®; Intravenous Medication Administration Policy #00-60;) Infusion Pump with Does Error Reduction Software #118-26

	YA, MA, OA, G, M,F	**A, B, E, L, N (policy review)**		**Patient Care Emergencies** **K –** Demonstrated recognition of patients**'** change of condition and initiation of nursing interventions to prevent further decline and possible cardio-pulmonary-arrest using table-top simulation technique. **K –** Identified the roles and responsibilities of members of the Code Team. **K –** Differentiated Code Blue, Rapid Response and Medical Assist Team and how to call each. **S** - Explained safe use and care of defibrillator and/or Automated External Defibrillator (AED) available in work area. **S** – Described airway distress in patients with assistive breathing device (e.g. tracheostomy, speaking valves, and ventilator). **S –** Differentiated conditions requiring defibrillation versus cardioversion. **A –** Values the personal role in preventing patient care emergencies. **A** – Appreciates the aspects of teamwork and collaboration if called upon to participate in a patient emergency. **TR:** Cardiopulmonary arrest and medical assistance teams policy #00-058, AED training; table top mock code, attends Code Blue/Rapid Response/Medical Assist Team module in GNO
	YA, MA, OA, G, M,F	**A, B, H, N (Policy review)**		**Falls Prevention, Safe Patient Handling (SPH) & Movement** **K –** Described the techniques used to prevent personal and patient injury in handling, moving and positioning patients. **K –** Explained the Falls prevention program at VA ECHCS **S** – Demonstrated fall risk assessment using the Morse Scale **S -** Located the Safe Patient Handling algorithm for lifting, moving, and repositioning patients per policy # 118-31. (see SPH skills validation form) **S** - Utilized proper ergonomic techniques (see SPH skills validation form) **S** – Demonstrated proper use of lifts and equipment for SPH (see SPH skills validation form) **S** – Demonstrated activating the equipment alarms and adjusted alarms based on specific needs of the patient (e.g. bed alarms, monitor parameters). **A –** Appreciates personal accountability in using safe techniques during patient handling, positioning and handling, to prevent injury to self, patient and others. **TR:** SPH-and Movement # 118-31, VHA 2009-004; Safe Patient Handling (SPH); VISN 8 SPH.

	YA, MA, OA, G, M,F	**A, B, H. N (policy review)**		**Physical Restraints/ Seclusion** **K –** Defined "Least Restrictive Environment" regarding restraint use in patient care. **K –** Described at least five injury risks to patients due to restraint use. **K –** Explained the rationale for frequent assessment of a patient in restraints **S –** Demonstrated applying and releasing a limb restraint with a Quick Release Knot. (See skills validation form). **A –** Appreciates the need to apply the principles of "least restrictive environment in utilizing restraints. **A -** Values patient's dignity and need to be assured in a calm, caring manner if restraints are needed to protect the patient from harm **TR:** Use of Restraints in Non-Behavioral Medical and Surgical Care, policy #00-24; Behavioral Health Care Restraint and Seclusion, policy # 00-28; Mosby's Quick Release Knot; GNO Patient Restraint Safety module.
	YA, MA, OA, G, M,F	**A, B, E, N (policy review)**		**Blood Banding** **K –** Identified the areas of risk if correct identification of patient in the blood banding procedure is not adhered to. **K –** Described the correct procedure for applying a blood band to the patient using two unique patient identifiers. **S –** Demonstrated correct procedure for labeling a blood specimen for Type and Screen or Type and Cross using a simulated patient using two unique patient identifiers (see blood banding skills validation form). **S –** Demonstrated applying a Typenex® blood band on a simulated patient (see blood banding skills validation form). **A –** Values the importance of complying with each step of the identification and verification process of blood banding and specimen collecting. **A –** Acknowledges personal accountability the risks associated with incorrect patient identification and blood banding procedure. **TR:** ECHCS Blood Transfusion and Procedures for Nurses and Physicians, 8th Edition; GNO Module – Blood Products and Transfusion; GNO Module-Blood Banding.
	YA, MA, OA, G, M,F	**A, B, E, N (policy review)**		**Blood Product Administration** **K –** Identified the types of blood products used at ECHCS and the indications for their use. **K –** Described the verification/identification procedure for safe transfusion of blood products. **K –** Explained the emergent circumstances and process for obtaining uncrossmatched blood from the Blood Bank **K –** Identified transfusion reactions and associated symptoms. **S –** Simulated two person verification processes in class. **A –** Values the importance of complying with each step of the identification and verification process of transfusing any blood product. **TR:** ECHCS Blood Transfusion and Procedures for Nurses and Physicians, 8th Edition; GNO Module – Blood Products and Transfusion; GNO Module-Blood Banding.

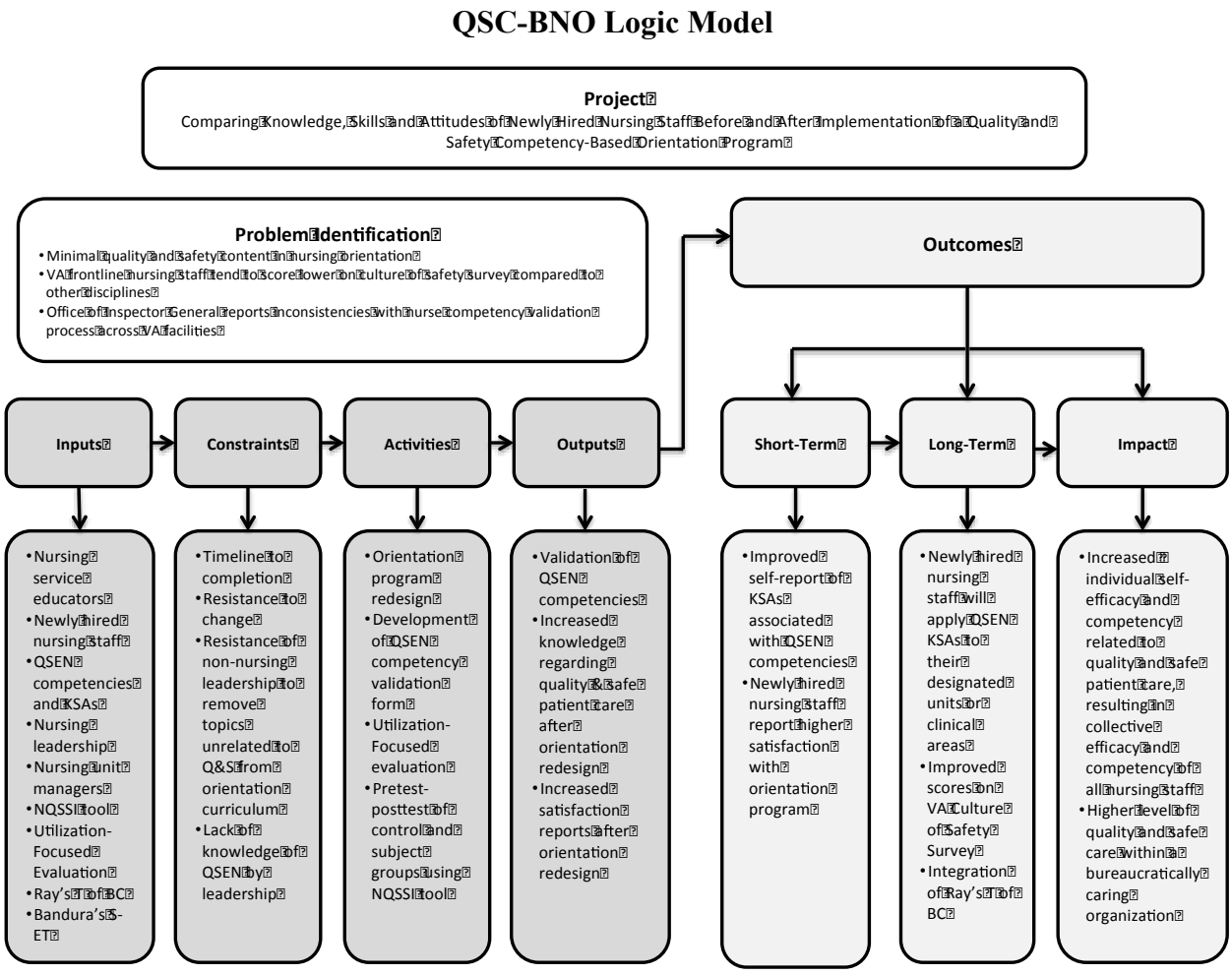
INFORMATICS				**Definition**: Use information and technology to communicate manage knowledge, mitigate error, and support decision making and critical thinking
	YA, MA, OA, G, M,F	**A, B, C, H**		**Technologies and information** **K –** Described examples of how technology and information management are related to the quality and safety of patient care **S -** Identified essential information, which must be available in the medical record to support patient care. **S –** Documented nursing admission and nursing progress successfully on test account patient **S -** Protected confidentiality of protected health information in electronic health records. **S -** Identified communication technologies to coordinate care for patients, and acknowledged/ responded to unit-based clinical practice information resources using simulation test patient account. (E-mails, consults, provider order entry, etc.) **A –** Appreciate the necessity for all health professionals to seek lifelong, continuous learning of information technology skills. **TR:** TMS-HIPAA; Privacy (Non-Federal- 11097); CPRS training, BCMA training;
	YA, MA, OA, G, M,F	**A, B, H, N (policy review)**		**Bar Code Medication Administration (BCMA) and BCMA Contingency Plan** **K –** Described process of medication administration using BCMA **K-** Verbalized knowledge of computer and BCMA contingency plan and conditions requiring activation of plan. **K –** Described the 2 unique patient identifiers correctly **K –** Explored the patient safety risk of making medication errors when practicing "workarounds" and/or overriding the safety features of BCMA **S –** Demonstrated use of Missed Medication Report in BCMA. **S –** Performed simulated medication administration using a BCMA patient test account **S –** Identified and locates the unit contingency computer and printer. **S -** Located the BCMA and Computer Downtime Contingency plan. **S -** Demonstrated procedure for implementation of contingency plan when activated. **A –** Appreciates personal responsibility in understanding the computer and BCMA contingency plan for safe medication administration and limiting delay in patient cares and treatments. **A –** Values the importance of utilizing BCMA safety features to prevent medication errors **TR:** Bar Code Medication Administration Policy and Procedure #118-23; BCMA unit specific contingency plan

Quality and Safety Education for Nurses (QSEN). **http://www.qsen.org**. The Quality and Safety Education for Nurses Education Consortium (QSENEC) is a national initiative of the American Association of Colleges of Nursing (AACN).

Validator INITIALS	**Validator SIGNATURE & TITLE**	**Validator INITIALS**	**Validator SIGNATURE & TITLE**

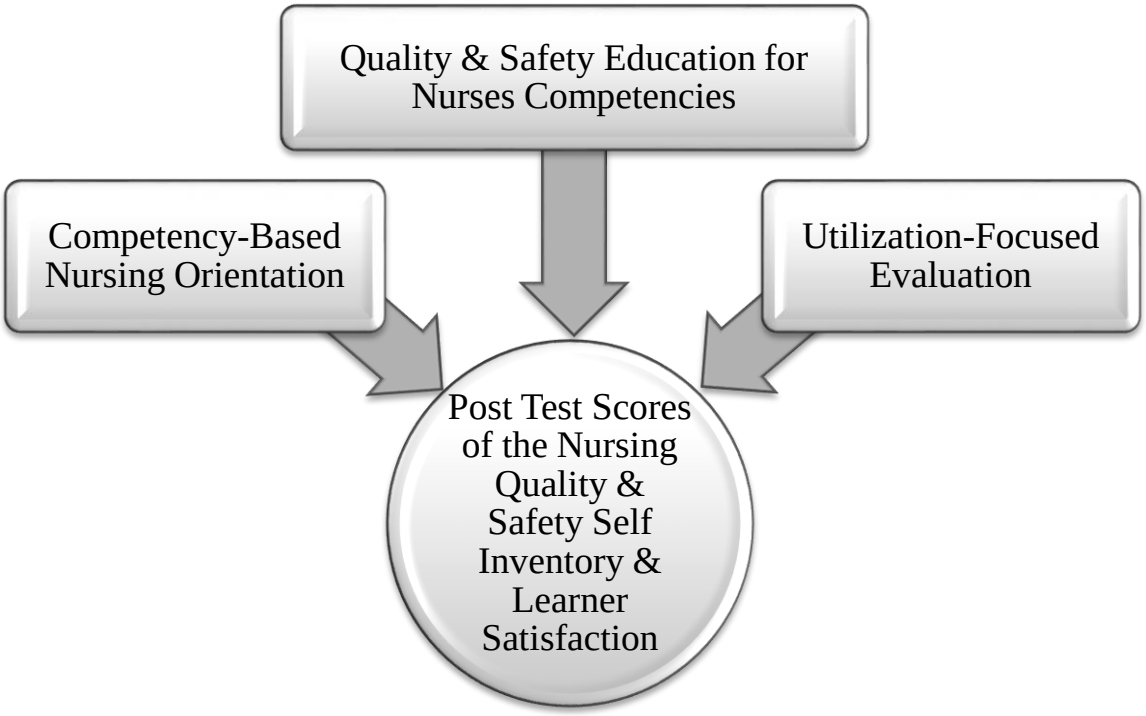
Appendix D

Logic Model



Appendix E

Conceptual Model for DNP Project



Appendix F

Nursing Quality and Safety Self-Inventory (NQSSI)

Demographics

1. Age: What is your age?

____18-24 years old
____25-34 years old
____35-44 years old
____45-54 years old
____55-64 years old
____65 years or older

2. Ethnicity origin (or Race): Please specify your ethnicity.

____White
____Hispanic or Latino
____Black or African American
____Native American or American Indian
____Asian / Pacific Islander
____Other

3. What is your gender?

____Male
____Female

4. Nursing education: Please specify you're highest nursing degree.

____LPN
____ADN
____RN to BSN
____BSN Traditional
____BSN Accelerated
____MS Nursing

5. How many years have you been a nurse?

_____Yrs.

6. When you were in nursing school, were the Quality and Safety Education for Nursing (QSEN) competencies and the associated knowledge, skills and attitudes (KSAs) used?

____Yes ____No ____I don't know

NQSSI Questionnaire

Please rate yourself on your knowledge, skills and attitudes of each of the six competencies using the following scale:

1-Strongly disagree; **2**-Disagree; **3**-Somewhat disagree; **4**-Neutral; **5**-Somewhat agree; **6**-Agree; **7**-Strongly agree

Patient Centered Care (PCC): 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 I have the necessary knowledge to practice patient-centered care.	1	2	3	4	5	6	7
2. I feel confident I have the necessary skills to practice patient-centered care.	1	2	3	4	5	6	7
3. I feel confident I have the necessary attitudes to practice patient-centered care.	1	2	3	4	5	6	7
Teamwork and Collaboration (T&C): 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 I have the necessary knowledge to ensure an effective nursing practice based on teamwork and collaboration.	1	2	3	4	5	6	7
5. I feel confident I have the necessary skills to ensure an effective nursing practice based on teamwork and collaboration.	1	2	3	4	5	6	7
6. I feel confident I have the necessary attitudes to ensure an effective nursing practice based on teamwork and collaboration.	1	2	3	4	5	6	7
Evidence-Based Practice (EBP): Integrate best practice with clinical expertise and patient/family preferences and values for delivery of optimal health care.							
7. I feel confident I have the necessary knowledge to achieve an evidence-based nursing practice.	1	2	3	4	5	6	7
8. I feel confident I have the necessary skills to achieve an evidence-based nursing practice.	1	2	3	4	5	6	7
9. I feel confident I have the necessary attitudes to achieve an evidence-based nursing practice.	1	2	3	4	5	6	7
Quality Improvement (QI): 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 I have the necessary knowledge to participate in quality-improvement in nursing practice.	1	2	3	4	5	6	7
11. I feel confident I have the necessary skills to participate in quality-improvement in nursing practice.	1	2	3	4	5	6	7
12. I feel confident I have the necessary attitudes to participate in quality-improvement in nursing practice.	1	2	3	4	5	6	7
Safety (S): Minimizes risk of harm to patients and providers through both system effectiveness and individual performance.							
13. I feel confident I have the necessary knowledge to deliver safe nursing care.	1	2	3	4	5	6	7
14. I feel confident I have the necessary skills to deliver safe nursing care.	1	2	3	4	5	6	7
15. I feel confident I have the necessary attitudes to deliver safe nursing care.	1	2	3	4	5	6	7
Informatics (I): Use information and technology to communicate, manage knowledge, mitigate error, and support decision making.							
16. I feel confident I have the necessary knowledge to integrate and use technology in nursing practice.	1	2	3	4	5	6	7
17. I feel confident I have the necessary skills to integrate and use technology and in nursing practice.	1	2	3	4	5	6	7
18. I feel confident I have the necessary attitudes to integrate and use technology in nursing practice.	1	2	3	4	5	6	7

Used with permission from R. Piscotty, PhD, RN (2013)

Appendix G

Permission to Use NQSSI Tool

From: piscotty@gmail.com [mailto:piscotty@gmail.com]
Sent: Saturday, October 26, 2013 9:22 AM
To: Lusk, Dana L
Subject: Re: Requesting permission to use the NQSSI

Hi Dana,

Yes, you are free to use the instrument. The instrument measures self-rated quality and safety competencies of nursing students, so I'm not sure it will answer your research question. You might need to revise the tool and your research question for use with other populations, but that is up to you and your chair. If you are going to use with Registered Nurses, I would recommend that you change the referent in the questions to co-workers. I wish you the best of luck.

Thanks, Ron Piscotty

Appendix H

Utilization-Focused Evaluation

VA ECHCS – General Nursing Orientation (GNO) Evaluation.

This evaluation is used for the continued quality improvement/assurance of the GNO program. Completing this evaluation is voluntary and your answers will be kept anonymous.

Thank you for taking the time to complete this evaluation!!!

In your opinion, General Nursing Orientation (GNO): (Circle your choice)

1.	Too short	Too long	Just right
2.	Was not helpful	Somewhat helpful	Very helpful
3.	Should be completely changed	Change some parts	Leave it as is

If you think there needs to be a change, what would you change? _____
_____

Please rate the following 5=Strongly Agree; 4=Agree; 3=Neither Agree or Disagree; 2=Disagree; 1=Strongly Disagree:

Overall, I would say the information in GNO will help me to perform my job.	1	2	3	4	5
The GNO Handbook was useful:	1	2	3	4	5
I will use the GNO Handbook as a reference later:	1	2	3	4	5
GNO met the learning objectives:	1	2	3	4	5
The classroom learning environment was conducive to learning (ie, room, space, lighting, acoustics, AV, handouts, etc)?	1	2	3	4	5

Welcome to VA ECHCS – Veteran First and Always!!

Appendix I

VA Eastern Colorado Health Care System (ECHCS)
Regis University

STUDY INFORMATION SHEET

TITLE: *Comparing Knowledge, Skills and Attitudes of Newly Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Orientation Program*

Dana Lusk, MS, RN, a Doctor of Nursing Practice (DNP) student at Regis University is conducting the study.

You were selected as a possible participant in this study because you are a newly hired nurse at VA ECHCS and a participant in General Nursing Orientation (GNO). **Your participation in this research study is voluntary and if you choose not to participate, it will not negatively impact you or your position at ECHCS.**

Why is this study being done?

This quality improvement project is measuring the effectiveness of a newly redesigned orientation program by comparing results of surveys before and after implementation.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- *Fill out a demographic sheet asking about your age, ethnicity, years of nursing and level of education.*
- *Fill out an 18-item survey, before general nursing orientation which you will rate yourself on a scale from 1-7 on knowledge, skills and attitudes regarding quality and safety based on six competencies.*
- *By completing and submitting the demographic questionnaire and the survey it will be considered your consent to participate in the study.*
- *You will be asked to fill out the survey again as a posttest at the end of orientation and then in 30 days after General Nursing Orientation.*
- *You will also be given an evaluation form to complete after orientation for you to provide your opinion of the effectiveness of nursing orientation in preparing you for your position.*

How long will I be in the research study?

Participation will take a total of 30 to 45 days for pretest, posttest and then posttest at 30-days.

Are there any potential risks or discomforts that I can expect from this study?

The questions and survey on the following pages should take about 20-30 minutes to complete.

- We hope that you will respond frankly and honestly. Please do your best to answer all of the demographic questions and survey items.
- There are minimal risks associated with participation except possible discomfort with some of the questions.
- Your identity will be protected and all efforts will be made to prevent connecting you with your responses. Despite these efforts a possibility of breach of confidentiality could occur.
- To protect respondents' privacy, no identifying information is being requested; the survey is anonymous. All data collected will be kept on a password-secure computer and the surveys will be kept in a secured location away from the collected data. Only summarized data will be used in reports, presentations, and publications; an individual's specific responses will not be included in these documents.
- Your completion and submission of the demographic questionnaire and survey indicates your consent to participate. Participation in the survey is strictly voluntary. There are no consequences for refusing to participate and you are under no obligation to take part in the study.
- You may withdraw from the study at any time without penalty or consequence to your position at VA ECHCS.
- There are no direct benefits or compensation to you for participating, but we hope you will experience satisfaction knowing that your information may help improve the quality of the nursing orientation program at VA ECHCS.

Will information about my participation and me be kept confidential?

Any information that is obtained in connection with this study and that has the potential to identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by keeping the questions and surveys secured and away from the study data, which will be maintained on a password protected VA computer.

What are my rights if I take part in this study?

- Consent to participate in the study is obtained by your completion and submission of the questionnaire and survey.
- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

- **The research team:**
  If you have any questions, comments or concerns about the research please contact:

  Student Investigator - Dana Lusk, MS, RN: 303-399-8020 x 4484
  VA ECHCS Faculty Investigator – Sarah Moscatel, PhD, RN 303-399-8020 x 3010
  Regis University DNP Capstone Chair - Alma Jackson, PhD, RN 303-964-6389

- **COMIRB and Regis University IRB:** If you have questions regarding your rights as a research subject, concerns or complaints about this research study, please call the Colorado Multiple Institutional Review Board (COMIRB) office at 303-724-1055. This is the Board that is responsible for overseeing the safety of human participants in this study. If you want to verify that this study is approved, please contact the VA Research Office at 303.399.8020, ext. 2755.

Appendix J

NQSSI Mann-Whitney *U* Results for Control and Intervention Groups

Ranks NQSSI for Patient Centered Care (PCC)

	Group	N	Mean Rank	Sum of Ranks
Pretest PCC Knowledge	Control	31	29.23	906.00
	Intervention	32	34.69	1110.00
	Total	63		
Pretest PCC Skills	Control	31	29.18	904.50
	Intervention	32	34.73	1111.50
	Total	63		
Pretest PCC Attitudes	Control	31	29.85	925.50
	Intervention	32	34.08	1090.50
	Total	63		
Posttest PCC Knowledge	Control	31	31.05	962.50
	Intervention	32	32.92	1053.50
	Total	63		
Posttest PCC Skills	Control	31	30.63	949.50
	Intervention	32	33.33	1066.50
	Total	63		
Posttest PCC Attitudes	Control	31	32.08	994.50
	Intervention	32	31.92	1021.50
	Total	63		
Post-Post PCC Knowledge	Control	25	22.82	570.50
	Intervention	27	29.91	807.50
	Total	52		
Post-Post PCC Skills	Control	25	22.96	574.00
	Intervention	27	29.78	804.00
	Total	52		
Post-Post PCC-Attitudes	Control	25	23.70	592.50
	Intervention	27	29.09	785.50
	Total	52		

Descriptive Statistics-Patient Centered Care (PCC)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest PCC Knowledge	63	6.35	1.065	1	7
Pretest PCC Skills	63	6.17	1.225	2	7
Pretest PCC Attitudes	63	6.54	.930	1	7
Posttest PCC Knowledge	63	6.59	.710	4	7
Posttest PCC Skills	63	6.51	.840	3	7
Posttest PCC Attitudes	63	6.68	.591	4	7
Post-Post PCC Knowledge	52	6.38	.796	4	7
Post-Post PCC Skills	52	6.35	.837	3	7
Post-Post PCC-Attitudes	52	6.50	.642	5	7
Group	63	.51	.504	0	1

Test Statistics[a] Patient Centered Care-Pretest and Posttest

	Pretest PCC-K	Pretest PCC-S	Pretest PCC-A	Posttest PCC-K	Posttest PCC-S	Posttest PCC-A
Mann-Whitney U	410.000	408.500	429.500	466.500	453.500	493.500
Wilcoxon W	906.000	904.500	925.500	962.500	949.500	1021.500
Z	-1.344	-1.325	-1.118	-.503	-.702	-.044
Asymp. Sig. (2-tailed)	.179	.185	.263	.615	.483	.965

a. Grouping Variable: Group

Test Statistics[a] Patient Centered Care-Post-Posttest

	PostPost PCC-K	PostPost PCC-S	PostPost PCC-A
Mann-Whitney U	245.500	249.000	267.500
Wilcoxon W	570.500	574.000	592.500
Z	-1.881	-1.793	-1.465
Asymp. Sig. (2-tailed)	.060	.073	.143

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Ranks NQSSI for Teamwork/Collaboration (T/C)

	Group	N	Mean Rank	Sum of Ranks
Pretest T/C Knowledge	Control	31	29.02	899.50
	Intervention	32	34.89	1116.50
	Total	63		
Pretest T/C Skills	Control	31	29.18	904.50
	Intervention	32	34.73	1111.50
	Total	63		
Pretest T/C Attitudes	Control	31	30.21	936.50
	Intervention	32	33.73	1079.50
	Total	63		
Posttest T/C Knowledge	Control	31	31.16	966.00
	Intervention	32	32.81	1050.00
	Total	63		
Posttest T/C Skills	Control	31	29.97	929.00
	Intervention	32	33.97	1087.00
	Total	63		
Posttest T/C Attitudes	Control	31	31.48	976.00
	Intervention	32	32.50	1040.00
	Total	63		
Post-Post T/C Knowledge	Control	25	25.60	640.00
	Intervention	27	27.33	738.00
	Total	52		
Post-Post T/C Skills	Control	25	24.70	617.50
	Intervention	27	28.17	760.50
	Total	52		
Post-Post T/C Attitudes	Control	25	25.12	628.00
	Intervention	27	27.78	750.00
	Total	52		

Descriptive Statistics-Teamwork and Collaboration (T/C)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest T/C Knowledge	63	6.29	1.069	1	7
Pretest T/C Skills	63	6.32	1.175	1	7
Pretest T/C Attitudes	63	6.52	.981	1	7
Posttest T/C Knowledge	63	6.60	.636	4	7
Posttest T/C Skills	63	6.56	.736	4	7
Posttest T/C Attitudes	63	6.68	.618	4	7
Post-Post T/C Knowledge	52	6.46	.699	4	7
Post-Post T/C Skills	52	6.40	.748	4	7
Post-Post T/C Attitudes	52	6.44	.698	5	7
Group	63	.51	.504	0	1

Test Statistics[a] Teamwork and Collaboration-Pretest and Posttest

	Pretest T/C-K	Pretest T/C-S	Pretest T/C-A	Posttest T/C-K	Posttest T/C-S	Posttest T/C-A
Mann-Whitney U	403.500	408.500	440.500	470.000	433.000	480.000
Wilcoxon W	899.500	904.500	936.500	966.000	929.000	976.000
Z	-1.413	-1.388	-.946	-.433	-1.045	-.290
Asymp. Sig. (2-tailed)	.158	.165	.344	.665	.296	.772

a. Grouping Variable: Group

Test Statistics[a] Teamwork and Collaboration-Post-Posttest

	PostPost T/C-K	PostPost T/C-S	PostPost T/C-A
Mann-Whitney U	315.000	292.500	303.000
Wilcoxon W	640.000	617.500	628.000
Z	-.467	-.920	-.711
Asymp. Sig. (2-tailed)	.640	.357	.477

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Ranks NQSSI for Evidence-Based Practice (EBP)

	Group	N	Mean Rank	Sum of Ranks
Pretest EBP Knowledge	Control	31	30.81	955.00
	Intervention	32	33.16	1061.00
	Total	63		
Pretest EBP Skills	Control	31	31.16	966.00
	Intervention	32	32.81	1050.00
	Total	63		
Pretest EBP Attitudes	Control	31	32.50	1007.50
	Intervention	32	31.52	1008.50
	Total	63		
Posttest EBP Knowledge	Control	31	33.45	1037.00
	Intervention	32	30.59	979.00
	Total	63		
Posttest EBP Skills	Control	31	33.11	1026.50
	Intervention	32	30.92	989.50
	Total	63		
Posttest EBP Attitudes	Control	31	35.87	1112.00
	Intervention	32	28.25	904.00
	Total	63		
Post-Post EBP Knowledge	Control	25	24.62	615.50
	Intervention	27	28.24	762.50
	Total	52		
Post-Post EBP Skills	Control	25	24.98	624.50
	Intervention	27	27.91	753.50
	Total	52		
Post-Post EBP Attitudes	Control	25	24.82	620.50
	Intervention	27	28.06	757.50
	Total	52		

Descriptive Statistics for Evidence-Based Practice (EBP)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest EBP K	63	5.89	1.094	2	7
Pretest EBP S	63	5.95	1.038	2	7
Pretest EBP A	63	6.24	.995	1	7
Posttest EBP K	63	6.49	.693	5	7
Posttest EBP S	63	6.38	.792	4	7
Posttest EBP A	63	6.59	.613	4	7
Post-Post EBP K	52	6.15	.849	4	7
Post-Post EBP S	52	6.25	.837	4	7
Post-Post EBP A	52	6.31	.729	5	7
Group	63	.51	.504	0	1

Test Statistics[a] Evidence-Based Practice-Pretest and Posttest

	Pretest EBP K	Pretest EBP S	Pretest EBP A	Posttest EBP K	Posttest EBP S	Posttest EBP A
Mann-Whitney U	459.000	470.000	480.500	451.000	461.500	376.000
Wilcoxon W	955.000	966.000	1008.500	979.000	989.500	904.000
Z	-.535	-.377	-.232	-.712	-.529	-1.962
Asymp. Sig. (2-tailed)	.593	.706	.817	.477	.597	.050

a. Grouping Variable: Group

Test Statistics[a] Evidence-Based Practice-Post-Posttest

	Post-Post EBP K	Post-Post EBP S	Post-Post EBP A
Mann-Whitney U	290.500	299.500	295.500
Wilcoxon W	615.500	624.500	620.500
Z	-.922	-.755	-.839
Asymp. Sig. (2-tailed)	.357	.451	.402

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Ranks NQSSI for Quality Improvement (QI)

	Group	N	Mean Rank	Sum of Ranks
Pretest QI Knowledge	Control	31	29.58	917.00
	Intervention	32	34.34	1099.00
	Total	63		
Pretest QI Skills	Control	31	29.55	916.00
	Intervention	32	34.38	1100.00
	Total	63		
Pretest QI Attitudes	Control	31	30.74	953.00
	Intervention	32	33.22	1063.00
	Total	63		
Posttest QI Knowledge	Control	31	31.68	982.00
	Intervention	32	32.31	1034.00
	Total	63		
Posttest QI Skills	Control	31	32.90	1020.00
	Intervention	32	31.13	996.00
	Total	63		
Posttest QI Attitudes	Control	31	33.16	1028.00
	Intervention	32	30.88	988.00
	Total	63		
Post-Post QI Knowledge	Control	25	22.48	562.00
	Intervention	27	30.22	816.00
	Total	52		
Post-Post QI Skills	Control	25	24.10	602.50
	Intervention	27	28.72	775.50
	Total	52		
Post-Post QI Attitudes	Control	25	23.46	586.50
	Intervention	27	29.31	791.50
	Total	52		

Descriptive Statistics for Quality Improvement (QI)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest QI Knowledge	63	5.87	1.100	1	7
Pretest QI Skills	63	5.84	1.167	2	7
Pretest QI Attitudes	63	6.19	1.045	1	7
Posttest QI Knowledge	63	6.40	.752	4	7
Posttest QI Skills	63	6.37	.829	3	7
Posttest QI Attitudes	63	6.56	.642	4	7
Post-Post QI Knowledge	52	6.06	.938	3	7
Post-Post QI Skills	52	6.17	.834	4	7
Post-Post QI Attitudes	52	6.21	.825	4	7
Group	63	.51	.504	0	1

Test Statistics[a] Quality Improvement –Pretest and Posttest

	Pretest QI K	Pretest QI S	Pretest QI A	Posttest QI K	Posttest QI S	Posttest QI A
Mann-Whitney U	421.000	420.000	457.000	486.000	468.000	460.000
Wilcoxon W	917.000	916.000	953.000	982.000	996.000	988.000
Z	-1.083	-1.096	-.581	-.153	-.428	-.581
Asymp. Sig. (2-tailed)	.279	.273	.561	.878	.668	.561

a. Grouping Variable: Group

Test Statistics[a] Quality Improvement-Post-Posttest

	Post-Post QI K	Post-Post QI S	Post-Post QI A
Mann-Whitney U	237.000	277.500	261.500
Wilcoxon W	562.000	602.500	586.500
Z	-1.962	-1.182	-1.504
Asymp. Sig. (2-tailed)	.050	.237	.133

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Ranks NQSSI for Safety (S)

	Group	N	Mean Rank	Sum of Ranks
Pretest S Knowledge	Control	31	31.48	976.00
	Intervention	32	32.50	1040.00
	Total	63		
Pretest S Skills	Control	31	31.26	969.00
	Intervention	32	32.72	1047.00
	Total	63		
Pretest S Attitudes	Control	31	32.29	1001.00
	Intervention	32	31.72	1015.00
	Total	63		
Posttest S Knowledge	Control	31	31.58	979.00
	Intervention	32	32.41	1037.00
	Total	63		
Posttest S Skills	Control	31	31.85	987.50
	Intervention	32	32.14	1028.50
	Total	63		
Posttest S Attitudes	Control	31	34.05	1055.50
	Intervention	32	30.02	960.50
	Total	63		
Post-Post S Knowledge	Control	25	23.24	581.00
	Intervention	27	29.52	797.00
	Total	52		
Post-Post S Skills	Control	25	23.26	581.50
	Intervention	27	29.50	796.50
	Total	52		
Post-Post S Attitudes	Control	25	24.24	606.00
	Intervention	27	28.59	772.00
	Total	52		

Descriptive Statistics for Safety (S)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest S Knowledge	63	6.40	1.009	1	7
Pretest S Skills	63	6.32	1.090	1	7
Pretest S Attitudes	63	6.49	.965	1	7
Posttest S Knowledge	63	6.57	.712	4	7
Posttest S Skills	63	6.56	.757	3	7
Posttest S Attitudes	63	6.70	.528	5	7
Post-Post S Knowledge	52	6.40	.823	3	7
Post-Post S Skills	52	6.44	.826	3	7
Post-Post S Attitudes	52	6.60	.569	5	7
Group	63	.51	.504	0	1

Test Statistics[a] Safety-Pretest and Posttest

	Pretest S-K	Pretest S-S	Pretest S-A	Posttest S-K	Posttest S-S	Posttest S-A
Mann-Whitney U	480.000	473.000	487.000	483.000	491.500	432.500
Wilcoxon W	976.000	969.000	1015.000	979.000	987.500	960.500
Z	-.251	-.355	-.147	-.218	-.075	-1.130
Asymp. Sig. (2-tailed)	.801	.722	.883	.827	.941	.259

a. Grouping Variable: Group

Test Statistics[a] Safety-Post-Posttest

	Post-Post S-K	Post-Post S-S	Post-Post S-A
Mann-Whitney U	256.000	256.500	281.000
Wilcoxon W	581.000	581.500	606.000
Z	-1.678	-1.694	-1.228
Asymp. Sig. (2-tailed)	.093	.090	.219

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Ranks NQSSI for Informatics (I)

	Group	N	Mean Rank	Sum of Ranks
Pretest I Knowledge	Control	31	32.35	1003.00
	Intervention	32	31.66	1013.00
	Total	63		
Pretest I Safety	Control	31	31.31	970.50
	Intervention	32	32.67	1045.50
	Total	63		
Pretest I Attitudes	Control	31	32.85	1018.50
	Intervention	32	31.17	997.50
	Total	63		
Posttest I Knowledge	Control	31	32.69	1013.50
	Intervention	32	31.33	1002.50
	Total	63		
Posttest I Safety	Control	31	32.27	1000.50
	Intervention	32	31.73	1015.50
	Total	63		
Posttest I Attitudes	Control	31	34.92	1082.50
	Intervention	32	29.17	933.50
	Total	63		
Post-Post I Knowledge	Control	25	24.40	610.00
	Intervention	27	28.44	768.00
	Total	52		
Post-Post I Safety	Control	25	24.34	608.50
	Intervention	27	28.50	769.50
	Total	52		
Post-Post I Attitudes	Control	25	24.58	614.50
	Intervention	27	28.28	763.50
	Total	52		

Descriptive Statistics for Informatics (I)

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest I Knowledge	63	6.06	.998	2	7
Pretest I Safety	63	6.00	.984	3	7
Pretest I Attitudes	63	6.27	1.003	1	7
Posttest I Knowledge	63	6.43	.777	3	7
Posttest I Skills	63	6.44	.778	3	7
Posttest I Attitudes	63	6.56	.736	3	7
Post-Post I Knowledge	52	6.35	.814	4	7
Post-Post I Safety	52	6.42	.723	4	7
Post-Post I Attitudes	52	6.46	.641	5	7
Group	63	.51	.504	0	1

Test Statistics[a] Informatics-Pretest and Posttest

	Pretest I-K	Pretest I-S	Pretest I-A	Posttest I-K	Posttest I-S	Posttest I-A
Mann-Whitney U	485.000	474.500	469.500	474.500	487.500	405.500
Wilcoxon W	1013.000	970.500	997.500	1002.500	1015.500	933.500
Z	-.161	-.312	-.399	-.333	-.133	-1.486
Asymp. Sig. (2-tailed)	.872	.755	.690	.739	.894	.137

a. Grouping Variable: Group

Test Statistics[a] Informatics- Post-Posttest

	Post-Post I-K	Post-Post I-S	Post-Post I-A
Mann-Whitney U	285.000	283.500	289.500
Wilcoxon W	610.000	608.500	614.500
Z	-1.063	-1.109	-.991
Asymp. Sig. (2-tailed)	.288	.267	.322

a. Grouping Variable: Group

K-Knowledge; S-Skills; A-Attitudes

Appendix K

Comparison Utilization-Focused Evaluation Results Between Control and Intervention Groups

Count – "Length of Orientation"

		Group		
		Control	Intervention	Total
Length of Orientation	Not Answered	3	2	5
	Too Short	1	1	2
	Too Long	13	3	16
	Just Right	8	23	31
Total		25	29	54

U-F Evaluation for Nominal Data – "Length of Orientation"

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	13.486[a]	3	.004	.001		
Likelihood Ratio	14.215	3	.003	.003		
Fisher's Exact Test	13.851			.001		
Linear-by-Linear Association	5.181[b]	1	.023	.026	.016	.009
N of Valid Cases	54					

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .93.

b. The standardized statistic is 2.276.

Symmetric Measures for "Length of Orientation"

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.500	.004	.001
	Cramer's V	.500	.004	.001
N of Valid Cases		54		

Count – "Was Orientation Helpful"?

		Group		
		Control	Intervention	Total
Was Orientation Helpful?	Not Answered	6	2	8
	Somewhat Helpful	8	3	11
	Very Helpful	11	24	35
Total		25	29	54

U-F Evaluation for Nominal Data– "Was Orientation Helpful"?

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8.854[a]	2	.012	.011		
Likelihood Ratio	9.101	2	.011	.014		
Fisher's Exact Test	8.608			.014		
Linear-by-Linear Association	6.281[b]	1	.012	.013	.008	.004
N of Valid Cases	54					

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.70.
b. The standardized statistic is 2.506.

Symmetric Measures for "Was orientation helpful?"

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.405	.012	.011
	Cramer's V	.405	.012	.011
N of Valid Cases		54		

Count – "Should Orientation be Changed"?

		Group		
		Control	Intervention	Total
Should Orientation be Changed?	Not Answered	7	2	9
	Change Some Parts	12	7	19
	Leave As Is	6	20	26
Total		25	29	54

Chi-Square Tests for Nominal Data - "Should Orientation be Changed?"

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	11.398[a]	2	.003	.003		
Likelihood Ratio	11.930	2	.003	.005		
Fisher's Exact Test	11.300			.003		
Linear-by-Linear Association	8.891[b]	1	.003	.003	.002	.001
N of Valid Cases	54					

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.17.

b. The standardized statistic is 2.982.

Symmetric Measures for "Should orientation be changed?"

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	.459	.003	.003
	Cramer's V	.459	.003	.003
N of Valid Cases		54		

Ranks for Utilization-Focused Evaluation of Ordinal Data

	Group	N	Mean Rank	Sum of Ranks
Orientation will help me to perform my job	Control	25	21.26	531.50
	Intervention	29	32.88	953.50
	Total	54		
The handbook was useful	Control	25	22.54	563.50
	Intervention	29	31.78	921.50
	Total	54		
I will use the handbook as a reference later	Control	25	22.00	550.00
	Intervention	29	32.24	935.00
	Total	54		
Met the learning objectives	Control	25	23.52	588.00
	Intervention	29	30.93	897.00
	Total	54		
The classroom was conducive to learning	Control	25	25.20	630.00
	Intervention	29	29.48	855.00
	Total	54		

Utilization-Focused Evaluation Test Statistics[a]

	Will Help Me Perform my job	Handbook Useful	Will Use Handbook as Reference	Met Learning Objectives	Classroom Conducive to Learning
Mann-Whitney U	206.500	238.500	225.000	263.000	305.000
Wilcoxon W	531.500	563.500	550.000	588.000	630.000
Z	-3.128	-2.623	-2.860	-2.157	-1.149
Asymp. Sig. (2-tailed)	.002	.009	.004	.031	.251

a. Grouping Variable: Group

Appendix L

Analysis of the NQSSI Results for the Variables of Interest

NQSSI Comparison by Level of Nursing Education

QSEN KSA	Kruskal-Wallis* Statistic	P Value	Pairwise Comparison	Result
Patient Centered Care: Knowledge	9.648	.140	N/A	Not significant
Patient Centered Care: Skills	9.881	.130	N/A	Not significant
Patient Centered Care: Attitudes	5.071	.535	N/A	Not significant
Teamwork/Collaboration: Knowledge	5.585	.471	N/A	Not significant
Teamwork/Collaboration: Skills	4.952	.550	N/A	Not significant
Teamwork/Collaboration: Attitudes	4.753	.576	N/A	Not significant
Evidence-Based Practice: Knowledge	6.190	.406	N/A	Not significant
Evidence-Based Practice: Skills	5.118	.529	N/A	Not significant
Evidence-Based Practice: Attitudes	5.047	.529	N/A	Not significant
Quality Improvement: Knowledge	6.990	.322	N/A	Not significant
Quality Improvement: Skills	7.940	.243	N/A	Not significant
Quality Improvement: Attitudes	4.138	.658	N/A	Not significant
Safety: Knowledge	10.551	.103	N/A	Not significant
Safety: Skills	9.199	.163	N/A	Not significant
Safety: Attitudes	11.538	.073	N/A	Not significant
Informatics: Knowledge	3.873	.694	N/A	Not significant
Informatics: Skills	3.164	.788	N/A	Not significant
Informatics: Attitudes	3.906	.689	N/A	Not significant

*df 6, N=63. No post hoc testing performed. No significance found in any result for the variable level of education.

NQSSI Comparison by Years of Experience

QSEN KSA	Kruskal-Wallis* Statistic	P Value	Pairwise Comparison	Mean Rank	Bonferoni Correction
Patient Centered Care: Knowledge	10.416	p=.064	N/A Not Significant	N/A	N/A
Patient Centered Care: Skills	7.277	p=.201	N/A Not Significant	N/A	N/A
Patient Centered Care: Attitudes	5.629	p=.344	N/A Not Significant	N/A	N/A
Teamwork/Collaboration: Knowledge	15.467	p=.009	No pairs showed significance	N/A	Not significant
Teamwork/Collaboration: Skills	8.470	p=.132	N/A Not Significant	N/A	N/A
Teamwork/Collaboration: Attitudes	4.957	p=.421	N/A Not Significant	N/A	N/A
Evidence-Based Practice: Knowledge	15.652	p=.008	No pairs showed significance	N/A	Not significant
Evidence-Based Practice: Skills	9.903	p=.078	N/A Not Significant	N/A	N/A
Evidence-Based Practice: Attitudes	16.697	p=.005	0-3 yrs to >20 yrs	23.4 vs. 45.25	p=.021
Quality Improvement: Knowledge	14.680	p=.012	0-3 yrs to >20 yrs	24.04 vs. 48.2	p=.010
Quality Improvement: Skills	15.896	p=.007	0-3 yrs to >20 yrs	23.48 vs. 47.5	p=.005
Quality Improvement: Attitudes	10.712	p=.057	N/A Not Significant	N/A	N/A
Safety: Knowledge	17.444	p=.004	0-3 yrs to 4-7 yrs	22.5 vs. 40.25	p=.005
Safety: Skills	14.367	p=.013	0-3 yrs to 4-7 yrs	23.04 vs. 39.78	p=.013
Safety: Attitudes	11.037	p=.051	N/A Not Significant	N/A	N/A
Informatics: Knowledge	15.682	p=.008	0-3 yrs to 4-7 yrs	23.54 vs. 43.17	p=.004
Informatics: Skills	11.877	p=.037	0-3 yrs to 4-7 yrs	24.42 vs. 41.78	p=.018
Informatics: Attitudes	7.049	p=.217	N/A Not Significant	N/A	N/A

*$df\ 5$, N=63. Post hoc testing with pairwise comparison using the Bonferroni correction of α=.008, found significant difference for those with 0-3 years of experience rated themselves lower.

NQSSI Comparison by QSEN in Nursing School

QSEN KSA	Kruskal-Wallis* Statistic	P Value	Pairwise Comparison	Mean Rank	Bonferoni Correction
Patient Centered Care: Knowledge	9.698	p=.008	QSEN to No QSEN	24.17 vs. 38.89	p=.010
Patient Centered Care: Skills	8.402	p=.015	QSEN to No QSEN	24.38 vs. 38.17	p=.015
Patient Centered Care: Attitudes	6.689	p=.035	QSEN to No QSEN	25.92 vs. 37.17	p=.048
Teamwork/Collaboration: Knowledge	5.750	p=.056	N/A Not Significant	N/A	N/A
Teamwork/Collaboration: Skills	11.007	p=.004	QSEN to No QSEN	23.54 vs. 37.56	p=.015
Teamwork/Collaboration: Attitudes	4.786	p=.091	N/A Not Significant	N/A	N/A
Evidence-Based Practice: Knowledge	3.768	p=.152	N/A Not Significant	N/A	N/A
Evidence-Based Practice: Skills	2.390	p=.303	N/A Not Significant	N/A	N/A
Evidence-Based Practice: Attitudes	3.253	p=.197	N/A Not Significant	N/A	N/A
Quality Improvement: Knowledge	15.215	p=.000	QSEN to No QSEN	22.42 vs. 43.56	p=.000
Quality Improvement: Skills	12.889	p=.002	QSEN to No QSEN	23.5 vs. 46.06	p=.002
Quality Improvement: Attitudes	9.753	p=.008	QSEN to No QSEN	23.85 vs. 42.08	p=.006
Safety: Knowledge	11.404	p=.003	QSEN to No QSEN	23.4 vs. 38.67	p=.007
Safety: Skills	12.921	p=.002	QSEN to Don't Know	22.79 vs. 39.78	p=.024
Safety: Attitudes	5.729	p=.057	N/A Not Significant	N/A	N/A
Informatics: Knowledge	6.032	p=.049	No pairs showed significance	N/A	Not significant
Informatics: Skills	9.929	p=.007	QSEN to Don't Know	23.25 vs. 38.05	p=.024
Informatics: Attitudes	5.554	p=.062	N/A Not Significant	N/A	N/A

*df 2, N=63. Post hoc testing with pairwise comparison using the Bonferroni correction of α=.008; found significant difference for those who had QSEN in nursing school rated themselves lower.

Appendix M

DNP Project Timeline

Project Timeline

Project Timeline

Initial problem identification and PICO development	8/2013
Project development and proposal presentation	8/2013
VA Research and Development IRB pre-screen	4/2014
IRB submission to COMIRB and Regis University IRB	5/2014
Begin control group data collection	7/8/2014
Begin intervention group data collection	11/7/2014
End data collection	4/2/2015
Compile and organize the data	5/30/15
Analyze the data	6/30/2015
Oral capstone defense	11/8/2015
Completion of final paper	01/21/2016

Appendix N

IRB Approval Letter From the Colorado Multiple Institutional Review Board

University of Colorado
Anschutz Medical Campus

Colorado Multiple Institutional Review Board, CB F490
University of Colorado, Anschutz Medical Campus
13001 E. 17th Place, Building 500, Room N3214
Aurora, Colorado 80045

303.724.1055 [Phone]
303.724.0990 [Fax]
COMIRB Home Page [Web]
comirb@ucdenver.edu [E-Mail]
FWA00005070 [FWA]

University of Colorado Hospital
Denver Health Medical Center
Veteran's Administration Medical Center
The Children's Hospital
University of Colorado Denver
Colorado Prevention Center

Not Human Subject Research

28-May-2014

Investigator:	Dana Lusk
Sponsor(s):	
Subject:	COMIRB Protocol 14-0875 Initial Application
Effective Date:	23-May-2014
Title:	Comparing knowledge, skills and attitudes of newly hired nursing staff before and after implementation of a quality and safety competency-based orientation program.

Not Human Research

Your research project submitted to COMIRB under protocol number 14-0875 has been reviewed and our determination is that it is not human research as defined by our policies and current regulations and in accordance with OHRP and FDA guidelines.

Therefore, you may proceed with the project strictly following the protocol as submitted and reviewed by COMIRB. No continuing review of the project will be required, however, you must resubmit the protocol to COMIRB for approval if any substantive changes are made to the protocol in question.

Review Comments:

COMIRB determined project to be Not Human Subject Research Quality Improvement.
Please note that any publications cannot use the term 'research' under DHHS regulations but must clearly indicate that this is a Quality Improvement project only and that its results are not generalizable.

These documents were reviewed for determination of Not Human Subject Research:
Application v. date 04/04/2014
Protocol, no date
Information Sheet, no date
NQSSI, no date
Mentor Form, dated 05/13/2014
Mentee Form, dated 05/13/2014

Please note that COMIRB will no longer be E-mailing final documents. Stamped documents indicating a determination of Non-human subject research can be retrieved in the eRA (InfoEd) system. Please click here to access instructions on finding these stamped documents.

Sincerely,

UCD Panel B

Appendix O

VA ECHCS Acknowledgement of Quality Improvement Project

VA Acknowledgement of a QA/QI/Program Evaluation Project

Date: April 10, 2014

To: VA ECHCS Staff/Primary Contact

From: VA Research Office, Eastern Colorado Health Care System (ECHCS)

Title:	Comparing the knowledge, skills and attitudes of newly hired nursing staff before and after implementation of a quality and safety, competency-based orientation program		
VA ECHCS Staff	Dana Lusk, MS, RN Sarah Moscatel, PhD	**Service**	Patient Focused Care Nursing Research
Primary Contact	Dana Lusk, MS, RN	**Service**	Patient Focused Care

This form serves to acknowledge the receipt of a project that the above ECHCS staff employee considers to be Quality Improvement and not research. If COMIRB determines this project as any category other than Quality Improvement, please inform the VA Research Office and a full VA pre-review of the project will be conducted.

Connie Steinbrunn, CCRP 4/10/14

VA Research Service Signature

Appendix P

IRB Approval-Regis University

REGIS UNIVERSITY
Academic Grants

3333 Regis Boulevard, H-4
Denver, Colorado 80221-1099

303-458-4206
303-964-5528 FAX
www.regis.edu

IRB – REGIS UNIVERSITY

July 11, 2014

Dana Lusk
17659 South Fillmore Way
Centennial, CO 80122

RE: IRB #: 14-234

Dear Ms. Lusk:

Your application to the Regis IRB for your project, "Comparing the Knowledge, Skills, and Attitudes of Newly Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Orientation Program," was approved as an exempt study on July 11, 2014. This study was approved per exempt study category of research 45CFR46.101.b(#2).

The designation of "exempt" means no further IRB review of this project, as it is currently designed, is needed.

If changes are made in the research plan that significantly alter the involvement of human subjects from that which was approved in the named application, the new research plan must be resubmitted to the Regis IRB for approval.

Sincerely,

Patsy Cullen

Patsy McGuire Cullen, PhD, PNP-BC
Chair, Institutional Review Board
Professor & Director
Doctor of Nursing Practice & Nurse Practitioner Programs
Loretto Heights School of Nursing
Regis University

cc: Dr. Alma Jackson

Appendix Q

CITI Training Certificate –University of Colorado, COMIRB

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)

CITI HEALTH INFORMATION PRIVACY AND SECURITY (HIPS) CURRICULUM COMPLETION REPORT

Printed on 05/16/2014

LEARNER	Dana Lusk (ID: 3222429) 1055 Clermont St Denver CO 80220 USA
DEPARTMENT	VA ECHCS
PHONE	303-399-8020 x 4484
EMAIL	dana.lusk@ucdenver.edu
INSTITUTION	University of Colorado Denver
EXPIRATION DATE	

CITI HEALTH INFORMATION PRIVACY AND SECURITY (HIPS) FOR CLINICAL INVESTIGATORS : This course for **Clinical Investigators** will satisfy the mandate for basic training in the HIPAA. In addition other modules on keeping your computers, passwords and electronic media safe and secure are included.

COURSE/STAGE:	Basic Course/1
PASSED ON:	05/16/2014
REFERENCE ID:	11763501

REQUIRED MODULES	**DATE COMPLETED**	**SCORE**
Introduction	05/16/14	No Quiz
About the Course	05/16/14	1/1 (100%)
Basics of Health Privacy	05/16/14	16/16 (100%)
Health Privacy Issues for Researchers	05/16/14	10/10 (100%)
Basics of Information Security, Part 1	05/16/14	No Quiz
Basics of Information Security, Part 2	05/16/14	5/5 (100%)
Completing the Privacy and Security Course	05/16/14	No Quiz
UCD	05/16/14	No Quiz
ELECTIVE MODULES	**DATE COMPLETED**	**SCORE**
Protecting Your Portable Devices	05/16/14	5/6 (83%)
Protecting Your Identity	05/16/14	5/7 (71%)

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Progam course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

CITI Collaborative Institutional Training Initiative at the University of Miami

Appendix R

CITI Training Certificate Regis University

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)

HUMAN RESEARCH CURRICULUM COMPLETION REPORT

Printed on 05/01/2014

LEARNER	Dana Lusk (ID: 3222429)
DEPARTMENT	Nursing
EMAIL	lusk066@regis.edu
INSTITUTION	Regis University
EXPIRATION DATE	11/28/2015

BIOMEDICAL RESEARCH INVESTIGATORS AND KEY PERSONNEL

COURSE/STAGE:	Basic Course/1
PASSED ON:	11/28/2012
REFERENCE ID:	9241912

REQUIRED MODULES	DATE COMPLETED
Avoiding Group Harms - U.S. Research Perspectives	11/27/12
Introduction	11/27/12
History and Ethics of Human Subjects Research	11/27/12
Basic Institutional Review Board (IRB) Regulations and Review Process	11/27/12
Informed Consent	11/27/12
Social and Behavioral Research (SBR) for Biomedical Researchers	11/27/12
Records-Based Research	11/28/12
Genetic Research in Human Populations	11/28/12
Research With Protected Populations - Vulnerable Subjects: An Overview	11/28/12
Vulnerable Subjects - Research Involving Prisoners	11/28/12
Vulnerable Subjects - Research Involving Children	11/28/12
Vulnerable Subjects - Research Involving Pregnant Women, Human Fetuses, and Neonates	11/28/12
International Studies	11/28/12
FDA-Regulated Research	11/28/12
Research and HIPAA Privacy Protections	11/28/12
Vulnerable Subjects - Research Involving Workers/Employees	11/28/12
Conflicts of Interest in Research Involving Human Subjects	11/28/12
Regis University	11/28/12

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid independent Learner. Falsified information and unauthorized use of the CITI Progam course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Program Course Coordinator

Collaborative Institutional Training Initiative at the University of Miami

Appendix S

Permission to Conduct Capstone Project at VA ECHCS

DEPARTMENT OF VETERANS AFFAIRS
EASTERN COLORADO HEALTH CARE SYSTEM
1055 Clermont Street
Denver, Colorado 80220
(303) 399-8020

Medical Center &
Community Living
Center
1055 Clermont St
Denver, CO 80220

Community Living
Center
2600 Oakshire Ln
Pueblo, CO 81001
(719) 295-7260

OUTPATIENT
CLINICS

622 Del Sol Dr
Alamosa, CO 81101
(719) 587-6800

13701 E Mississippi
Suite 200
Aurora, CO 80012
(303) 398-6340

25 N Spruce St
Colo. Springs, CO
80905
(719) 327-5660

320 E Fontanero St
Colo. Springs, CO
80907
(719) 866-6200

1100 Carson Ave
Suite 104
La Junta, CO 81050
(719) 383-5195

155 Van Gordon
Suite 395
Lakewood, CO 80228
(303) 914-2680

405 Kendall Dr
Lamar, CO 81052
(855) 779-0833
(719) 336-7155

4112 Outlook Blvd
Pueblo, CO 81008
(719) 553-1000

1177 Rose Ave
Burlington, CO 80807
(719) 346-5239

920 Rush Dr
Salida, CO 81201
(719) 539-8666

April 24, 2014

Alma Jackson, Ph.D, RN, COHN-S
Associate Professor
Loretto Heights School of Nursing
Regis University
3333 Regis Blvd (G-8)

Re: Dana Lusk, MS, RN's DNP Capstone Project

Dear Dr. Jackson:

Dana Lusk has permission from VA Eastern Colorado Health Care System, Denver, CO to conduct her DNP Capstone project titled: Comparing the Knowledge, Skills and Attitudes of Newly-Hired Nursing Staff Before and After Implementation of a Quality and Safety Competency-Based Nursing Orientation Program. Please contact me if you have any further questions regarding this matter.

Respectfully,

Sarah (Sarry) Moscatel, RN, Ph.D
Associate Chief Nurse/Research and Education
303-399-8020 x 3010