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# Basic Organizational Skills and Structure for New Nurses: The BOSS Method. Using Simulation to Teach Management and Organizational Skills

Kathy W. Locklear

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Basic Organizational Skills and Structure for New Nurses: The BOSS Method. Using Simulation to Teach Management and Organizational Skills

by

Kathy W. Locklear

A DNP project submitted to the faculty of Gardner-Webb University Hunt School of Nursing in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice

Boiling Springs, NC

2019

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#### Abstract

The Bachelor of Science in Nursing (BSN) program had a deficiency in teaching graduating senior nursing students in the areas of managing and organizing care for an assigned group of patients. By the last semester of the senior year, most of the senior nursing students had no exposure to caring for more than one patient during clinical rotations. In 2017, the senior nursing students' performance in Team Nursing and Focused Care experiences, which occur during the last semester of the graduating year, demonstrated a lack of ability to care for more than one patient at a time. In 2018, there was a total of 46 BSN nursing students in the graduating semester. The total number of students able to manage and organize care for more than one patient was 11 out of 46, or 24% of the class. Several literature reviews identified that inconsistencies existed involving feelings of anxiety, lack of confidence, and unsafe practice when new nursing students transitioned to practice without having exposure to experiences modeling care for more than one patient in the clinical settings. The literature reviews also supported evidence that large numbers of new nurse graduates often leave their first nursing job or the profession altogether within six months to a year. An analysis of the literature supports the use of simulation experiences that relate to caring for multiple patients before entering the clinical setting. A simulation experience was developed and implemented for graduating BSN students during the last semester of nursing school. A guideline tool which is titled the BOSS method was developed that guided the students on which task should occur every hour of the day during patient care. These tasks focused on basic routine care such as head-to-toe assessments immediately after change of shift report, assessing vital signs, and labs during the first hour of the day before

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administering medications. The guideline tool instructed the students through routine and required care during a four-hour simulation experience. During the simulation experience each student portrayed the role of a registered nurse for four or more assigned patients. Faculty facilitated keeping the students' time on task with completing each piece of the BOSS guideline tool during the scheduled time frame. The simulation experience and guideline tool were developed using Kotter's Eight Stages of Change and Neuman's Systems Theory. Findings indicated a positive impact on the student's perception of being prepared to transition to the practice of managing and organizing care for four or more patients. Data outcomes which were collected from students and faculty throughout the phases of the project demonstrated that the students ability to manage and organize care for multiple assigned patients increased from 24% in 2018 to 90% in 2019. A faculty survey was also distributed in 2018 after the Focused Care experience and overall the faculty reported that out of 46 students only 26% were able to care for four or more patients before graduating that year. This outcome was compared to 75% of 44 students in 2019 who could care for four or more patients before graduating. These outcomes denote a significant improvement in the students' ability to care for multiple patients after the simulation experience and using the BOSS guideline tool during simulation, Team Nursing, and Focused Care experiences. The use of Kotter's Eight Stages of Change Model and Neuman's Systems Theory provided a structured science and theory timeline that allowed for the sustainability of this project as evidenced by the adoption of this simulation experience in the Leadership Nursing Course in the BSN program.

Keywords: theory, change, management, organization, collaboration, outcomes

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#### **SECTION I**

#### Introduction

In order for new graduate nurses to transition to practice without feeling overwhelmed, educational nursing programs must provide opportunities to prepare new nurses to care for a multiple case load of patients. The literature supports that new nurses often feel inadequate to care for multiple assigned patients. Better preparation in organizing and managing patient care is a valid component of pre-licensure education. Simulation experiences related to this type of practice can assist new graduate nurses with opportunities to practice in a setting that is less intimidating, which allows the prelicensure nursing student to reflect and critically think regarding managing and organizing patient care for at least four or more patients. The purpose of this project focused on a pre-licensure four-year nursing program in a university that currently does not provide this type of simulation experience to senior nursing students. The project utilized evidence-based practice through the Neuman's Systems Theory and Kotter's Eight Stages of Change Model to implement this project. The project was developed by following the guidelines of the International Nursing Association for Clinical Simulation and Learning (INACSL).

#### **Problem Recognition**

Our role as nurse educators is to ensure that new nursing graduates are prepared to enter the clinical environment after graduation. The new nursing graduates should be able to transition to their new role as registered nurses without stress and uncertainty of their job descriptions (Girija, 2012). Unfortunately, this is not the case. Many new nursing graduates find the transition to practice difficult and often leave their first job and hospital setting within the first six months of practice (Doody, Tuohy, & Deasy, 2012). Seasoned nurses complain that the new nurse graduate is inadequately prepared to work as a staff nurse due to insufficient clinical experiences and time management skills. Nurse educators are claiming that new nurse graduates are able to critically reflect on their new role but the literature does not support this finding (Missen, McKenna, & Beauchamp, 2016).

The new nurse graduate's first year experience is often described as being overwhelming and stressful. The new nurse is trying to apply newly acquired skills and deliver high quality care while trying to manage and organize their daily routine (Hussein, Everett, Ramjan, Hu, & Salamonson, 2017). This first year of practice includes attrition rates up to 27% for healthcare facilities, because the new nurses often leave the organization (Hussein et al., 2017). Most hospital settings agree that nursing educational programs should include preparatory education related to organizational skills, management of care skills, and simulations to develop the nursing role (Doody et al., 2012). The style and type of education received is most crucial in preparing new nurses on managing patients who are acutely ill and to help develop critical thinking skills (Smith & Rushton, 2018).

#### **Identified Problem in Current Area of Practice**

The nurse educator should teach time management skills so the new nursing graduate can handle the stress of the patient care environment when entering the workforce (Girija, 2012). The Bachelor of Science in Nursing (BSN) program at a local university does not include any type of teaching guidelines on how to organize the clinical day for full-time and adjunct clinical instructors. The problem with not having

these guidelines causes a disconnect of what to teach new nursing graduates in order to prepare them for their new role as registered nurses. This lack of knowledge of time management and organizational skills is relevant to the high turnover rates of new nursing graduates. According to Theisen and Sandau (2013), "nurse educators are realizing that nursing students need clinical skills that enhance critical thinking, communication, leadership, organization, and stress management" (p. 408). Although new nurses receive an organized orientation program at the places of employment, many programs consist of hours of passive information without engaging the student (Green, 2016). If the student came prepared with some learning on how to organize patient care, then issues with time management would be lessened and the new nurse graduate would feel more adequate to perform the job, instead of feeling overwhelmed with schedules, technology, case load, and peer pressure (Girija, 2012). The identified problem, as it relates to the evidence is: nursing faculty/educators need to teach time management/organizational skills before the student nurse enters the workforce, so the new nurse graduate can have some level of understanding of how to handle a case load of assigned patients. The preparation beforehand may lessen the feelings of stress and the desire to leave the clinical setting within such a short time frame because the emphasis of patient care has been introduced to the nurse graduate before leaving the program of study (Theisen & Sandau, 2013).

### **Problem Statement**

New nurses lack training related to management of care and organizational skills within the nursing educational settings. New nurses need training in how to manage and organize the daily and routine tasks of nursing care in order to provide safe, competent care which decreases the feelings of anxiety and lack of confidence.

#### **SECTION II**

#### **Needs Assessment**

#### **Literature Review for Best Practice**

Nursing has provided education to pre-licensure students through the use of classroom, lab, and clinical practice. Hands-on experiences with skills and client care help to provide active participation to the student nurse in the learning environment. Are these methods the best practice for teaching clinical organizational skills and management of care? The literature supports the use of simulation environments to provide the student with real-life experiences before entering the real world of nursing (Doody & Condon, 2013). Utilizing a structured simulation environment which follows the International Nurses Association for Clinical Simulation and Learning (INACSL) guidelines provides great potential opportunities for promoting competence and enhancing knowledge in relation to topics that are evident within the clinical environment (Doody & Condon, 2013).

Students usually learn skills quickly but have much difficulty dealing with management of care, organizational skills, critical thinking skills, and the day-to-day routine roles of the nurse. Once the new nurse has been released from their mentor and begins to work independently, reality quickly sets in. After receiving shift report the new nurse graduate has difficulty performing job duties that relate to routine care and flounders with what needs to be done every hour of a 12-hour shift (Doody & Condon, 2013).

Practical nursing skills are traditionally taught using face-to-face instruction and focus on skills but not so much on management of care and how to organize the day. The

traditional approach creates limitations because the method is time consuming. This type of method denies the student the opportunity to evaluate their own performance because these performances are not using video technology and playback (Doody & Condon, 2013). The ability to reflect on one's own performance provides an effective strategy for self-evaluation. Simulation related to management of care and organizational structure improves cognitive thinking, communication, and teamwork (Doody & Condon, 2013). When using role playing during simulation, the student begins to build critical thinking skills which enhances the ability to prioritize safe, competent care (Doody & Condon, 2013). Studies revealed that nursing students place a higher value on participating during a simulation experience versus passive information from lecture or modules (Doody & Condon, 2013). Warland (2011) explains that "nursing educational programs need to become more innovative with technology such as simulation when preparing student nurses for clinical practice" (p. 186). The concepts of time management and organization have been taught in the past through the use of theory via lecture. Students are expected to connect the concepts, but without hands-on experience and debriefing after the performance. The lecture method only provides information that is not retained by the student (Warland, 2011). Simulations can be designed to provide a real-world nursing experience through the use of live patients within a simulated environment that resembles a nursing medical unit within a hospital setting (Warland, 2011).

The simulated environment can be used to establish priorities related to management of care of multiple assigned real-life patients. These real-life patients can provide interaction plus feedback. This type of experience provides a controlled setting where the student nurse can practice within a safe environment (Warland, 2011).

Warland (2011) discusses a simulation workshop that utilized the mechanism of Jeffries' (2007) simulation concepts. The nursing students began the workshop by reviewing modules that focused on nursing teams, partnerships, time management and conflict resolution (p. 187). As the simulation began each nursing student was assigned a nurse role with a six-patient assignment. Each assigned patient had a different chronic condition. The focus of the simulation was to manage time, people, and circumstances that occurred with the patients and within the simulated hospital environment (Warland, 2011). The simulation began with a recorded report that provided detailed information regarding each client's condition. After the report, the nurses discussed the patients and began to perform assigned duties. The goal was to observe if the students knew what to do after receiving report and meeting with staff (Warland, 2011). The patients were given cue cards with certain information to relay to the nurse. The goal was to observe the nurse's response to the patients' requests and critical thinking/managing care skills. The priority for the simulation was to note if the students knew if rounding should occur first, or taking of vital signs, or documenting client care (Warland, 2011). The simulation occurred within real time and students were monitored for timeliness of their performance along with decision making. After the simulation a debriefing occurred using a question and answer time to discuss performance. The students were asked how they felt about their performance or what would they have done differently. Other questions included, "What did you do correctly", and "What did you do that was incorrect" (Warland, 2011). The overall conclusion of this type of simulation related to management of care and organization skills revealed that engaging the learner promoted better care for the patient and enhanced critical thinking skills for the student (Warland,

2011). The simulation experience provided an environment that was realistic which allowed the student to make mistakes but reflect on their performance and improve (Warland, 2011). This type of simulation revealed instruction of this type prepares students to work efficiently in the clinical setting (Warland, 2011).

Using simulation provides new opportunities to enrich leaning and address unique learning needs of students. Wright, Tinnon, and Newton (2018) relayed that data from the National Simulation Study and the National Council of State Boards of Nursing (NCSBN) reports have endorsed the use of high-quality simulation to produce clinical environments that compare closely to real clinical settings (p. 84). The mindset of simulation includes teaching-learning pedagogy which is a form of active learning. Being active through simulation challenges students to use application of theory to clinical settings and causes the student to constantly reflect on the decisions that are made related to client care. This form of simulation identifies strengths and weaknesses in performance areas through the use of debriefing throughout the simulation and postsimulation (Wright et al., 2018). Wright et al. (2018) explained that a study which used constructivism as defined by Kolb provides learning through an experiential method (p. 85). With Kolb's method, simulation provides the nursing faculty with the opportunity to provide constructive feedback in relation to the student's performance without being deemed as negative (Wright et al., 2018). Simulation is a way to enlighten understanding and knowledge of learning by the student. Application of learning is based on the experience and performance. The art of reflection is utilized to analyze and synthesize the performance (Wright et al., 2018).

This study used a virtual simulation which allowed students 24 hours to complete the scenarios. The student feedback with this type of simulation was positive. The students verbalized that the real-life experience of the simulation provided them with a better understanding of the role of the nurse when managing client care (Wright et al., 2018). One student commented, "I was critically able to think and learn from the scenario" (Wright et al., 2018).

Repetition helps increase knowledge, especially when providing scenarios that include active participation and reflection (Wright et al., 2018). The American Nurses Association (ANA, 2018) views simulation experiences as valuable pieces of learning to enhance the leadership abilities of the new nurse graduate and improve competencies (Gore, Johnson, & Wang, 2015). New nurse graduates are often placed in leadership roles too soon after graduating. The gold standard in preparing students to learn critical thinking skills and problem-solve is using simulation models that provide active participation, observation, and debriefing on performance (Gore et al., 2015). Simulations should include topics such as decision making and case load management. Simulation provides a place for immediate feedback (Gore et al., 2015).

#### **Population and Community**

The target population for this project was senior students in a leadership course within the final semester of nursing school. This was a pre-licensure Bachelor of Science in Nursing (BSN) program which involved clinical and simulation environments for learning. The data to support this project was collected through three surveys in 2018. Two of the surveys used a five-point Likert scale. The third survey was for faculty. All surveys assessed quantitative data from students and faculty. The first survey focused on senior nursing students (n=46) during the leadership course in 2018. The survey included two questions: (1) Did you feel that you were capable of managing and organizing care for five or more patients during the nursing leadership course, and (2) Did you feel you were capable of managing and organizing care for five or more patients during your focused care experience? The results revealed that 11 out of 46 students (24%) believed that they were capable of managing care for five patients during the leadership course, and 16 out of 46 students (35%) believed they were capable of managing care of five patients during the focused care experience.

The second survey focused on new nurse graduates from June 2018 to July 2018 on a medical-surgical unit within a local hospital setting who had been former nursing students in the leadership course. The survey contained two questions: (1) Do you feel you were capable of managing and organizing care for five or more patients after your orientation time when you were given an assignment on your own, and (2) Do you feel you were capable of managing and organizing care for five or more patients after graduating from nursing school? Out of the 25 nurses surveyed, only 13 (52%) felt they could manage five patients after their orientation program. Out of the 25 nurses, only eight (32%) felt they could care for five or more patients directly out of nursing school. The third survey focused on the nursing faculty of the leadership course and included two questions: (1) How many of your assigned students were able to handle more than four patients during simulation training in the leadership course in 2018, and (2) How many of your assigned students were able to handle more than four patients during the focused care experience before graduating in 2018? The results revealed for the first question that out of 46 students, only 11 (24%) could manage more than four patients. On question

two the results showed that out of 46 students, only 16 (38%) were able to manage four or more patients during the focused care experience.

The intervention to improve the students' performance was a proposed simulation related to management of care and organizational skills that provided the student nurse with a guideline of what tasks needed to be carried out on an hour-by-hour timeframe. The guideline tool was named the Basic Organizational Skills and Structure for New Nurses (BOSS guideline tool). The simulation occurred within the leadership course of the senior year in the spring semester of 2019. This course focused on management of care, critical thinking, and organizational skills. The theory was taught within the classroom and performance of these skills was in the clinical setting and simulation lab. The simulation contained four to five real-life patients who were portrayed by the student nurses. Two faculty were assigned to work in the simulation lab during the assigned experience. Students were assigned the role of registered nurse. The faculty facilitated and observed that the registered nurse performed all the duties on the BOSS guideline tool within the designated time frame.

The BOSS guideline tool listed routine duties of the nurse that occurred on an hourly basis. The students participated in a simulated report and then were observed as to what tasks should occur next. Each student who played the role of the patient had cue cards which guided them on what to say. The faculty observed how the student handled the situations. This performance was compared with the student performance during team nursing and the focused care experience which occurred after the leadership course in the spring of 2019. The outcome goal for each student during the focused care experience was to display the ability to manage and organize care for four to five patients and perform all duties listed within the BOSS guideline tool. The students were observed addressing any abnormal situations in a safe, competent manner. The time frame occurred during the last year of the BSN program within the leadership nursing course of spring 2019 and ended with the capstone course which is a focused care experience with an assigned nurse in a healthcare setting for a total of 120 hours. There was a total of eight simulations scheduled over a four-hour period for each experience. Each student portrayed the role of registered nurse and cared for four or more patients during this time.

#### **Sponsors and Stakeholders**

The members of this project team included the following: (1) Department Chair of Nursing, (2) leadership course faculty member, (3) Director of the Clinical Learning Center (CLC) and Simulation Lab Simulation Director, and (4) nursing leadership course coordinator. Also, the senior nursing students were asked to participate while in the nursing leadership course for the spring semester 2019. The facility has a simulation lab and a collaboration with local hospitals where the students engage in clinical experiences for team nursing and focused care.

Following are explanations as to why each of the above listed team members were chosen for this project. The Department Chair of Nursing was chosen because of leading the nursing program; therefore, any departmental changes had to be approved by the Chair. Also, this person has been in nursing for over 20 years and a nurse educator for 15 years. The Chair has a PhD in nursing and serves on numerous committees at the university. The Chair has been involved in numerous change projects within the nursing department and is therefore deemed an internal source because the outcomes of this simulation project affect the probability of the students receiving employment opportunities within local healthcare facilities.

The faculty member in the leadership nursing course was chosen because of being part of the nursing leadership course team. This faculty member has over 20 years of nursing experience and teaches in the master's program as well. This faculty member holds a Doctor of Nursing Practice (DNP) degree from Duke University and has completed the process of the DNP project. She has mentored several faculty members and has offered much input in initiating this project during the senior nursing leadership course. This faculty member has a vast background in geriatric nursing, is a certified Geriatric Nurse Specialist, and has been a nurse leader within this population. She has over 10 years of experience as a faculty member.

The Director of the Clinical Learning Center (CLC) and Simulation Lab was chosen because of her role in scheduling and conducting simulation lab opportunities. In order to implement any change related to simulation, faculty must correspond with the CLC Director to assist with developing scenarios to meet the course and program objectives and to meet the time requirements for the simulation experience. The CLC Director assisted with setting up the labs for the simulations, providing necessary equipment/supplies, and scheduling the simulations. The CLC Director is currently enrolled in a PhD program and is pursuing INACSL certification as a simulation specialist. The CLC Director is also a Certified Nurse Educator (CNE). She is considered an internal source because of her role with developing and engaging in the actual presentation of the simulation experiences. The coordinator of the nursing leadership course has a master's degree in nursing education and over 15 years of nursing experience, with seven of those years as a nurse educator. The faculty member agreed to allow the simulation to occur during the leadership course. This faculty member is in an FNP program, has presented at numerous nursing events and has a vast understanding of nurse transition due to work in NCLEX-RN preparation for nursing graduates.

After interviewing all of the stakeholders, all agreed that organizational skills and time management are needed to improve students' confidence, safety, and competency. It was also noted by the faculty that improvement of critical thinking would enhance the NCLEX-RN pass rate for the department of nursing. Faculty also agreed that simulation on organization and time management would allow the students to visualize and understand areas of weakness before going into practice.

#### **SWOT** Analysis

A strength of the nursing program was a nine-room high tech simulation lab. Each lab was set up with a different theme and equipment pertinent to the theme. Each room had video capability and monitoring of students for faculty through a two-way mirror. All the simulation labs encompassed low and high-fidelity mannequins with the ability to change the patient's situation at any time. The simulation lab employed a fulltime Clinical Learning Center and Simulation Lab Director (CLC Director), who has been trained by Laerdal on managing and operating the equipment. Recently Laerdal conducted a study on the simulation lab (2018) and made suggestions for improvement, such as using a debriefing model. The Debriefing for Meaningful Learning (DML) model was adopted by the nursing program. All faculty were trained on this debriefing model and this model was incorporated in all simulation experiences. All simulation experiences were prepared following the INACSL standards.

The weaknesses of the simulation include several areas. First, the Laerdal study recommended that the CLC director conduct all simulations, but currently she also teaches in courses each semester. Therefore, the faculty often had to develop scenarios. The faculty needed to be educated on the INACSL guidelines in all courses. Some of the barriers included lack of interest by faculty to run simulations because creating the scenarios is quite time consuming. Another barrier included a lack of a debriefing model until June 2018. The faculty needed more education on this model. Students are often not on board with simulation and believe the better experience is within the hospital clinical setting (Warland, 2011).

The positive opportunities included training for the CLC Director to obtain the INACSL certification. The literature supported the use of simulation to provide a safe environment for performance and self-reflection (Doody & Condon, 2013). Other external conditions included placing the simulation experience in local hospitals during new nurse graduate orientation programs. This would give more support and practice for the new nurses before going to their assigned units. Other opportunities included training for faculty and seeking certification in simulation use. The simulation program has received \$50,000 in donations from a private benefactor. This money was used to maintain and expand the usage of the simulation lab.

Some of the grant funding was allocated for the simulation lab in faculty development training sessions. The National Council of State Boards of Nursing (NCSBON) recommended that simulation can be substituted for clinical hours if the 15

INACSL guidelines are followed. No more than 50% of simulation can be substituted for actual clinical experiences (2018).

The threats included the outside forces such as lack of faculty support for simulation experiences. Not every faculty believed that simulation was a positive experience for clinical preparation. The educational environment was the only university in the area, but the university was surrounded by numerous community colleges which use simulation. These programs spend more time in the actual clinical setting which provided more hands-on experiences for pre-licensure nursing students. As stated earlier, governing bodies such as the National League for Nursing (NLN) and the National Council of State Boards of Nursing (NCSBON) (2018) have set guidelines which limit how much simulation can be used within a nursing course with a clinical component. Lack of certified faculty to conduct proper simulation is definitely a deterrent to this process (Warland, 2011).

#### **Available Resources**

The resources available for this simulation project were included within the course of nursing leadership. The course was allocated for four full-time faculty (FTE) positions. Each faculty member had \$500.00 available per semester to spend on continuing education which included training in simulation. If adjunct faculty were used, then part-time pay was awarded. The nursing department had approximately five adjunct faculty. The materials for the project were already available within the nursing simulation. The budget for the simulation included low and high-fidelity mannequins, electronics, procedural skill supplies, etc. The Department Chair is the only faculty who oversees the budget and shares with faculty which resources are available for supplies.

Copies of the simulation objectives, scenarios, and performance check-off guidelines were posted on the course webpage and students printed these documents and brought them to the simulation lab.

#### **Desired and Expected Outcomes**

The desired and expected outcome for a simulation related to management of care and organizational skills was to facilitate learning of these concepts in a safe environment. The students were expected to complete care that was on the BOSS guideline tool within the specified time frame by the end of the simulation which was projected to span over a four-hour time period. By the end of the leadership and capstone course, the senior nursing students were expected to manage the safe care of four to five patients within the hospital setting before graduating.

#### **Team Selection**

The simulation team consisted of the Project Leader, CLC Director, coordinator of the nursing leadership course, and a faculty member in the leadership course. The Department Chair of the nursing program provided approval for the use of this simulation within the nursing leadership course during the spring semester of 2019. Faculty members from the University provided advice and guidance for the project.

#### **Cost and Benefit Analysis**

The cost and benefit analysis identified resources needed to initiate and complete this project. The project costs pertained to a total of four faculty members and the CLC Director. The use of the clinical simulation lab included a total of eight four-hour simulations with use of two faculty members with a total of 44 senior nursing students. The faculty evaluated the effectiveness of the Basic Organizational Skills and Structure (BOSS) method guideline tool during team nursing which totaled 48 hours. The simulation experience was also available as an open lab for a total of 24 hours with the use of one faculty member coordinating so the students could have extra practice sessions. The simulation lab director assisted with allocating the appropriate amount of equipment necessary to complete the simulation. The simulation experience was scheduled in the simulation lab which contained hospital beds, linens, vital sign equipment, medication carts, and other supplies that needed to be replaced after the scenario was complete. The nursing department budget already allowed for some of this equipment so no charge was necessary for the project. Table 1 illustrates approximate cost to conduct the simulation with the faculty members. Because this simulation enhanced student learning outcomes for the department of nursing, approval was granted to utilize the in-kind equipment within the simulation lab. The department of nursing budget covered the cost because the simulation has been adopted and incorporated into the actual curriculum which has already been budgeted for simulations.

## Table 1

Cost and Benefit Analysis

Benefit	Cost of Intervention	Site	Total Used
Analysis			
Faculty	Approximately \$37.00 per hour for a total of: 3 Faculty = \$2,072.00 1 Faculty = \$2960.00	Simulation Lab	48 hours Simulation Lab 48 hours Team Nursing 120 hours Focused Care
Equipment	Vital Sign Machine Medication Cart Oxygen equipment Foley Catheters Intravenous Needles Hospital Beds/Linens Computer Equipment Simulation Lab All items included in In-Kind budget	Simulation Lab	Vital Sign Equipment Medication Cart Oxygen Equipment (10) Foley Catheters (10) Intravenous Needles (10) Hospital Beds/Linens (10)
Copies	.06 cents per copy \$5.88	Department of Nursing	Objectives Handout (44) Simulations (10) BOSS Tool (44)

#### **Scope of the Problem**

Surveys that were collected displayed data that supported a need for nursing students to engage in activity that enhanced their ability to care for five or more patients before graduating the nursing educational program. The literature review supported the problem statement that new nurse graduates have difficulty caring for five or more patients after orientation and often leave their job within six months to a year after being employed. The literature on best practice promoted utilizing simulation to train nurses in the areas of management of care and organizational skills (Doody et al., 2012).

The expected outcomes included that each student before graduating would be able to care for and complete basic routine nursing skills for four or more patients during a simulation experience in the leadership course and the completion of the focused care experience. The boundaries of the project included the location of the simulation experience occurring within the simulation lab at the university and utilizing the faculty on hand.

#### **SECTION III**

#### **Goals, Objectives, and Mission Statement**

#### Goals

A goal can be defined as a broad statement that focuses on the future outcomes of the project. The goals provide direction and guidance for the project and always are reflective of the expected outcomes (Zaccagnini & White, 2017). The overall goal for this project was that student nurses would manage and organize routine care for four to five simulated patients while completing tasks in the scheduled time frame. This simulation provided a basis for patient care and assisted the student nurses in preparation for the focused care experience and transitioning into practice. The project occurred during the spring semester of the senior year 2019 in the pre-licensure Bachelor of Science in Nursing (BSN) program.

#### Objectives

When establishing objectives, the acronym SMART was utilized to explain the who, what, when, how, and why of the project. The objectives were specific (S), measurable (M), attainable (A), realistic (R), and timely (T) (Zaccagnini & White, 2017). The senior nursing students completed the following objectives for the management of care and organizational skills simulation:

- Define the terms time management and organizational skills during the preconference phase of the simulation through the use of verbalization within a tenminute time frame.
- Demonstrate the time management and organizational skills as evidenced by performing all duties on the simulation guide tool during the four-hour simulation.

- Complete routine care as described in the guideline tool within the four-hour simulation.
- Demonstrate the ability to work as a team member in the role of a registered nurse during the four-hour simulation.
- Return demonstration of giving and receiving a change of shift report during the first hour of the simulation.
- Return demonstration of providing skills as identified in the guideline tool such as head-to-toe assessments, medication administration, documentation, wound care, oxygen therapy, turning and positioning, communicating with the interdisciplinary team when a change in condition occurs to the assigned patient, and reviewing labs during the four-hour simulation.
- Demonstrate the ability to document nursing notes every two hours during the four-hour simulation.
- Role-play the ability to notify a physician when a change in patient condition occurs during the four-hour simulation.
- Explain and demonstrate how to delegate duties to RNs, LPNs, and Assistive Personnel during the four-hour simulation.
- Properly utilize all necessary equipment and materials to effectively and safely care for the four to five assigned patients during the four-hour simulation.
- Actively participate in the debriefing activity for a minimum of one hour at the conclusion of the simulation.

- Document a reflective statement according to the guidelines provided after the simulation and complete by the set deadline as established by the faculty for the course.
- Perform all tasks from the management of care/organizational guideline tool with 100% accuracy during the four-hour simulation.
- Demonstrate during the course the ability to manage and organize care for four to five patients by completing all the tasks listed on the organizational/management of care guideline tool with 100% accuracy by the end of the 120-hour focused care experience.

#### **Mission Statement**

This project related to management of care and organizational skills was conducted to serve as a core experience for the pre-licensure BSN student to achieve mastery of the BSN Essentials. Additionally, this project afforded the course faculty leaders an opportunity to effectively measure students' success with management of care and organizational skills before the nurse graduate transitioned into practice. The goal of the project was to prepare the new nurse graduate to manage and organize care for a case load of four to five patients after completing the new nurse graduate orientation program within an acute care healthcare setting. The simulation provided an infrastructure for students, faculty, and practicing nurses to focus on critical thinking and priority setting situations within the real-world of nursing practice. This simulation was designed so the new nurse graduate could sustain the highest level of practice before transitioning into the healthcare settings. This prior exposure to management of care and organizational skills simulation experiences provided the new nurse with the knowledge of how to perform the daily routine tasks of nursing care for the assigned patient population.

### **SECTION IV**

#### **Theoretical Underpinnings**

#### Kotter's Eight Stages of Change Model

Kotter's Eight Stages of Change Model (1996) was used to direct the theoretical underpinnings of this project. It begins with a sense that the status quo is not working. Outside factors are usually the driving forces that lead to an internal sense of urgency and motivation to change the process currently in place (Cooper et al., 2016). Kotter's Model includes eight different stages that are a vision for a change process and a series of steps to achieve an organizational change (Pollack & Pollack, 2015). The eight stages of the model include: (1) establishing a sense of urgency, (2) creating the guiding coalition, (3) developing a vision and strategy, (4) communicating the change vision, (5) empowering broad-based change, (6) generating short-term wins, (7) consolidating gains and producing more change, and (8) anchoring new approaches in the culture (Pollack & Pollack, 2015).

In Stage One, successful change efforts must begin with individuals and groups evaluating a performance (Appelbaum, Habashy, Malo, & Shafiq, 2012). In Stage One of this project, the performance of the BSN nursing students was evaluated in the spring of 2018. The results revealed that only 11% of the senior nursing class was able to manage and organize care for four or more patients by the end of the graduating semester. The nursing leadership course does not provide simulation experiences related to organizing and managing patient care. Therefore, nursing students are being sent to the team nursing and focused care experience and transitioning into practice without prior knowledge of how to organize and manage care for a case load of patients (Doody & Condon, 2013).

In Stage Two, the creation of a guiding coalition must be established. In order to make change happen, more than one person is required and should possess positions of power, expertise, credibility, and leadership skills to drive the change process (Appelbaum et al., 2012). The guiding coalition for this project included the faculty instructors for the nursing leadership course, simulation director, and partners from the local healthcare facility where the BSN students engage in clinical experiences. The faculty were seasoned nurses in the areas of managing and organizing patient care through many years of clinical expertise and teaching. The simulation director was currently training for the INACSL certification. The BSN program had seven simulation labs with high-tech equipment that mirrored a valid hospital setting in a medical-surgical environment. The hospital's education staff provided feedback on what type of training is necessary in the new nurse graduate orientation program.

In Stage Three, developing a vision and strategy for change is imperative. The importance of a well-defined vision for the change process was based on evidence-based practice. A clearly defined vision makes it easy for everyone involved to understand the plan of change (Appelbaum et al., 2012). The literature supports that new nurses struggle with managing a caseload of patients and often feel overwhelmed and frustrated in the healthcare setting. There was evidence to support that nursing education programs need to provide extensive training in managing and organizing patient care before the student nurse graduates. The use of simulation can assist with providing a real-world patient care experience before entering the clinical setting (Doody & Condon, 2013). In order to

address the issue of poor management of care and organizational skills for new nurses, the vision of this project was to maximize the pre-licensure nursing student's ability to manage and organize patient care for four or more patients before transitioning into practice. The strategy to meet the goal of this vision was to provide numerous simulation experiences that focus on managing and organizing client care before the nursing student graduates. The number four or more was chosen because the average case load of patient assignments on a typical medical-surgical unit is four to seven patients (Doody & Condon, 2013).

In Stage Four, the vision of the project has to be communicated to all parties involved in order for change to occur (Pollack & Pollack, 2015). After reviewing the results of the BSN students' performance from spring of 2018, the faculty of the nursing leadership course communicated this information to the BSN Director and BSN Department Chair through face-to-face meetings that included evidence-based practice information from the literature and results of the survey that identified that BSN students could not manage or organize care for a group of patients. The vision of the project was presented in a faculty meeting by the Project Leader who presented the INACSL template for simulation related to managing and organizing patient care. The nursing leadership course faculty met on numerous occasions to discuss the project guidelines, time frames, schedules, and evaluation of the student's performance.

In Stage Five, empowering broad-based change occurs by removing obstacles to change and changing structures or systems that undermine the vision (Pollack & Pollack, 2015). Once the evidence of the 2018 survey data outcomes was presented to the faculty regarding the students' performance, the faculty realized a need to provide opportunities

for students to prepare for clinical in a manner that included managing and organizing patient care. Evidence-based practice was presented that supports using simulation experiences to build clinical performance in a safe environment before entering actual patient care areas (Doody & Condon, 2013). The survey that was provided to the students in 2018 revealed that participating in some type of simulation experience is beneficial for competent practice before clinical performance. This information was presented to faculty in support of change (Doody & Condon, 2013).

In Stage Six, short-term wins will help to demonstrate the viability of the change and build momentum (Pollack & Pollack, 2015). The short-term wins for this project were evident during the students' performance in the simulation lab. The performance in team nursing and focused care, where the expectation was to care for more than four patients by the end of the course, also provided opportunities for the students to meet that goal. These short-terms wins provided the needed confidence and experience before the students transitioned to practice.

In Stages Seven and Eight, consolidating gains and producing more change along with anchoring new approaches will increase the visibility of the program (Pollack & Pollack, 2015). The identification of gains and change will take more than one semester of simulation experiences to provide support that the project is successful. The results of the simulation experiences were positive, and hopefully will lead to the introduction of simulation opportunities in more courses beyond the leadership course in earlier semesters within the BSN program. The leadership faculty have agreed to keep the simulation experience and the BOSS guideline tool as part of the leadership nursing course for spring of 2020.

### **Neuman's Systems Theory**

Neuman's Systems Theory focuses on the client's wellness and environmental stressors that promote a threat to the overall function of the client's system (Fawcett, 2017). The system identifies the client/client system as an open system that has interactions with the internal/external environment. This concept includes four dimensions: (1) individual person, (2) family as a type of group, (3) community as a type of group, and (4) social issues which refer to a policy or any concern of major importance to society (Fawcett, 2017). The theory includes interacting variables that function harmoniously with the internal and external environmental stressors such as, physiological, psychological, sociocultural, developmental, and spiritual (Fawcett, 2017). The theory also includes many other components such as, normal lines of defense, flexible lines of defense, lines of resistance, internal environment, external environment, created environment, stressors, health/wellness, illness, and reconstitution (Fawcett, 2017). Three levels of prevention included in the theory are: (1) primary prevention which prevents stress and reduces risk factors, (2) secondary prevention which focuses on symptom management and treatment, and (3) maintenance of wellness by supporting the client system's strengths and energy reserves (Fawcett, 2017).

In using a Conceptual/Theoretical/Empirical (CTE) Structure to align Neuman's Systems Theory with the project, the concepts of the theory included the individual, physiological variables, psychological variables, developmental variables, internal/external environment, stressors, and prevention as intervention (Fawcett, 2017). For the theory component of the project, each variable was utilized to guide a conceptual framework for change. The individual was the pre-licensure nursing student who was in the nursing leadership course, which prepared the students for the team nursing and focused care experience. In this experience the student was expected to manage and organize care for four or more patients before graduation. The physiological barriers related to the student's inability to perform patient care due to a lack of clinical experience in prior courses and limited experience within the hospital setting before the nursing leadership course. The psychological variables were related to the student's cognitive level, self-esteem of the performance, and learning style. The hands-on component of the simulation experiences was not the only factor that best identified the student's performance was competent. The critical thinking demonstrated by the student was also considered a factor in learning how to manage and organize care but this piece was not part of the surveys.

The developmental variables were related to the student's prior experiences before entering the BSN program as they related to any previous experience within a healthcare setting and the maturity level of the student. The internal environment was the student's ability to handle the stress of patient care and being evaluated by the faculty member. The internal stress was also related to the student's self-esteem and own insights into the ability to perform. The external environment was the student's ability to prepare for the simulation experience and manage the stress of being a college student with multiple classes. Other external forces included the student's wellness level and perception of peer evaluations. The last component of the theory was the prevention intervention phase. In primary prevention, the faculty helped reduce stress by prebriefing the students prior to the simulation experience on the expectations of the simulation performance through the use of simulation objectives, guidelines, verbal communication, and feedback through the use of question and answer time during the pre-briefing stage before the simulation begins. The secondary prevention phase reduced symptoms of stress by providing information related to the simulation experience in advance, which allowed the students time to read the scenarios, expectations, and evaluation methods. The tertiary prevention was intervention utilized through the debriefing process after simulation which supported the student's strengths and weaknesses of performance. Also, the student was allowed open lab time to practice the simulation scenarios on their own as many times as they desired.

### **SECTION V**

#### Work Planning

#### **Executive Summary**

The lack of training for new nurses has hindered their ability to transition into practice with confidence in managing and organizing client care with accuracy and safety. Most new nurses receive minimal opportunities or experiences during nursing school with managing a group of clients (Doody et al., 2012). Nursing education programs have not provided clinical experiences resembling managing and organizing client care before the student graduates. These missed opportunities leave the new nurse feeling overwhelmed and unable to transition to a practicing registered nurse. Many new nurses leave their first nursing position within six-months to a year, and some leave the nursing profession altogether (Doody et al., 2012). The nursing program where the project was initiated partners with four different hospitals for clinical experiences in team nursing and focused care. All four institutions have voiced to the Project Leader that students are not prepared for patient care. In a literature review, the evidence supported that new nurses lack preparation for client care (Thiesen & Sandau 2013). The nursing program provided little simulation experience which would have allowed nursing students to practice managing and organizing client care before entering the clinical site and before graduating. The senior nursing class from spring 2018 was surveyed regarding clinical performance. Only 11% of the nursing students were able to manage care for four or more clients before the last semester course ended which was a 120-hour focused care experience.

The scope of this project was to provide simulation experiences related to managing and organizing client care for four or more clients in the clinical learning lab during the spring semester of 2019, during the nursing leadership course. During the simulation experience the students were given a guideline tool which is the Basic Organizational Skills and Structure for New Nurses: The BOSS Method. This tool provided hour by hour directions which included tasks required for a nurse to perform client care. This tool was also used in team nursing and the focused care experience. After the simulation experiences, the nursing students engaged in team nursing and a 120-hour focused care experience before graduating. The students had several opportunities to practice with an assigned group of clients. After each simulation, a debriefing occurred using the Debriefing for Meaningful Learning (DML) Model which follows the INACSL guidelines. The desired outcome was for each nursing student to manage and organize care for at least four or more clients before graduating while completing the tasks on the BOSS guideline tool within a four-hour time frame. In order to obtain data outcomes, student surveys were collected before simulation, after simulation, after team nursing, and after focused care. The faculty involved in the focused care experience was surveyed after the experience to identify if the simulation helped the students' performance during team nursing and focused care. The cost of the project was minimal. The simulation lab and all the equipment within the lab was already available through the nursing department and was considered an indirect expense. The faculty salaries are within the nursing school's budget and were provided through state funding. The cost of printing materials came from the department of nursing budget. The nursing department covered the costs since the simulation was a required

component of the nursing leadership course and was considered a quality improvement project for the nursing program. The cost of printing the surveys was the responsibility of the Project Leader and was covered from out-of-pocket monies. Project tasks are illustrated in Figure 1, with timeline for completion of tasks shown in Table 2.



Figure 1. Work Breakdown Structure Diagram

# Table 2

Task Completion Table

Task	Estimated Start	Estimated Length to Completion	Sequential or Parallel	Dependent Upon
1.1.	1 Dec. 10 <sup>th</sup> , 2018	Feb. 12 <sup>th</sup> , 2018	Sequential	None
1.1.	2 Dec. 10 <sup>th,</sup> 2018	Jan. 7 <sup>th</sup> , 2018	Sequential	None
1.1.	3 Jan. 7 <sup>th,</sup> 2018	Jan. 7 <sup>th</sup> , 2018	Sequential	None
2.1.	1 Feb. 18 <sup>th,</sup> 2018	Feb. 18 <sup>th</sup> , 2018	Sequential	Task 1.1.0
2.1.	2 Feb. 19 <sup>th</sup> , 2018	March 16 <sup>th</sup> , 2018	Parallel	Task 1.1.0
2.1.	3 March 17 <sup>th</sup> , 2018	March 17 <sup>th</sup> , 2018	Sequential	Task 1.1.0
3.1.	1 April 1 <sup>st</sup> , 2018	April 1 <sup>st</sup> , 2018	Sequential	Task 2.1.0
3.1.	2 April 1 <sup>st</sup> , 2018	May 4 <sup>th</sup> , 2018	Parallel	Task 2.1.0
3.1.	3 April 1 <sup>st</sup> , 2018	May 4 <sup>th</sup> , 2018	Sequential	Task 2.1.0

### **SECTION VI**

#### **Planning for Evaluation**

#### Using a Quantitative Design for Evaluation

When planning for evaluation, the Project Leader may use quantitative or qualitative designs. The tools necessary for quantitative data collection include: (1) surveys, (2) health factors, (3) laboratory tests results, and (4) chart reviews (Zaccagnini & White, 2017). This project used a quantitative design in the form of surveys. There was a total of four different student surveys throughout the project and each survey was distributed according to a timeline. The surveys used the Likert-Scale format that scored the responses on a scale of one to five. A score of one represented strongly disagree and a score of five represented strongly agree with the statements. The surveys were developed by the Project Leader. Each survey was distributed via paper and pencil format.

The first survey was a pre-simulation survey for students. This survey was distributed during spring of 2019 prior to the beginning of the simulation experiences, team nursing experience, and focused care experience. There was a total of five survey questions asked. The survey questions included: (1) I feel prepared to manage and organize care for four to five patients, (2) I feel simulation related to management of care and organizational skills will help prepare me for the team nursing experience, (3) I feel a tool with management of care and organizational guidelines will assist me with managing four to five patients, (4) I feel simulation would be a useful tool in the current nursing program, and (5) Pre-briefing and debriefing during a simulation experience are effective means to enhance the learning of management and organizational nursing skills. The

goal was to assess the nursing student's current ability to care for assigned patients before beginning simulation experiences, team nursing experience, and focused care experience.

The second survey assessed the student's ability to care for four to five assigned patients after the simulation experience had occurred. The survey was distributed at the end of all the scheduled simulation experiences during the spring semester 2019. There was a total of four survey questions. The survey questions included: (1) I feel prepared to manage and organize care for four to five patients after the simulation experience, (2) I feel the simulation experience related to management of care and organizational skills helped me prepare for team nursing and focused care experiences, (3) I feel the BOSS method tool guideline assisted me with managing four to five patients during the simulation experience, and (4) I feel the simulation experience on management of care and organizational skills and the use of the BOSS method tool guideline is a useful experience to prepare me to transition to practice. The goal of this survey was to identify if the students believed the simulation experiences and the use of the Basic Organization Skills and Structure for New Nurses (BOSS) guideline tool assisted with being more prepared to begin patient care during team nursing and focused care.

The third survey assessed the student's ability to manage and organize care for four to five patients after the team nursing experience. The survey was distributed after the completion of team nursing. There was a total of four questions for this survey. The survey questions included: (1) I feel prepared to manage and organize care for four to five patients after the team nursing experience, (2) I feel the team nursing experienced related to management of care and organizational skills helped me prepare for the focused care experience, (3) I feel the BOSS method tool guideline assisted me with managing four to five patients during team nursing, and (4) I feel the team nursing experience and the use of the BOSS tool guideline have prepared me to transition to practice. The goal of this survey was to identify if the student was ready for the 120-hour focused care experience. During this experience the student was expected to be able to manage and organize care for at least four patients and complete all the items listed on the BOSS guideline tool.

The fourth survey assessed the student's ability to manage and organize care for at least four or more patients after the focused care experience and if the use of the BOSS guideline tool enhanced the student's ability to stay organized with basic patient care. This survey consisted of four questions. The questions included: (1) I feel prepared to manage and organize care for 4 to 5 patients after the focused care experience, (2) I feel the team nursing experience related to management of care and organizational skills helped me prepare for the focused care experience, (3) I feel the BOSS tool guideline assisted me with managing four to five patients during the focused care experience, and (4) I feel the simulation experience on management of care and organizational skills, team nursing experience, focused care experience, and the use of the BOSS tool guideline have prepared me to transition to practice. The ultimate goal of this survey was to identify if the focused care experience and use of the BOSS guideline tool prepared the students to transition to practice.

After all surveys were completed, the Project Leader entered all survey results from each survey into a Qualtrics database and obtained the outcome data. The data was used to identify if the students felt a positive outcome was received from the simulation and use of the BOSS guideline tool. The percentage outcomes were identified to

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determine if the preparation and participation were effective in preparing new nursing graduates for transition into practice. Future implications for this information are to follow-up with the nursing graduates at six months and then one year after graduation to assess retention rates of the new nurse graduate within the same institution of employment.

#### **Logic Model Design**

The purpose of using a logic model is to display a picture of how the Project Leader believes the proposed project improvement plan will work to promote effectiveness of the design (Zaccagnini & White, 2017). A logic model is a summary diagram which maps out interventions and links between the interventions and expected outcomes. The aim of a logic model is to identify assumptions which underpin links between interventions, and the intended short and long-term goals and broader impacts (Baxter et al., 2014). There are many benefits to using logic models which include: (1) identification of different understandings or theories about how an intervention should work, (2) clarification of which interventions lead to which outcomes, (3) providing a summary of the key elements of an intervention, and (4) the generation of a testable hypothesis (Baxter et al., 2014). A logic model for this project is presented in Figure 2.

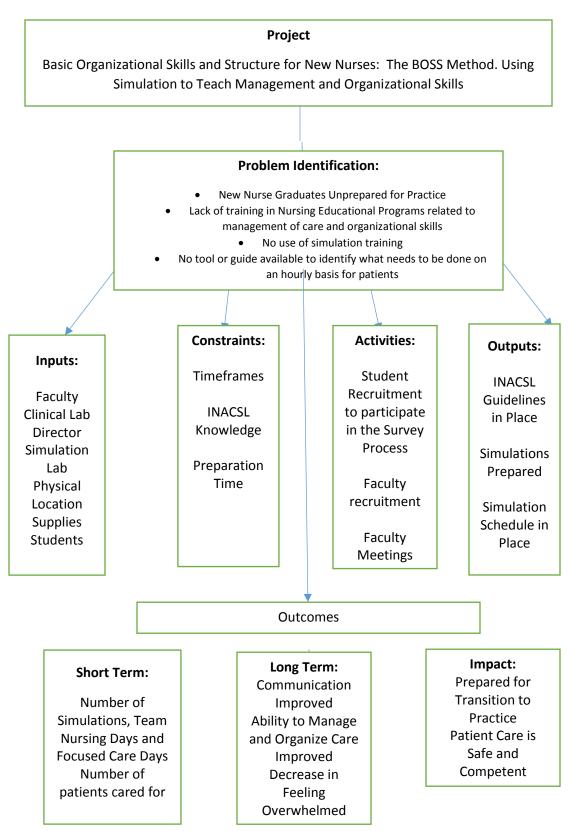


Figure 2. Logic Model

#### **Plan Do Study Act**

The Plan-Do-Study-Act (PDSA) format is a useful tool for documenting a test of change. During the planning stage, state the question to answer is stated and a prediction is made regarding what will happen. A plan is developed to test the change. The who, what, when, and where in the plan are addressed and data that needs to be collected is identified (Institute for Healthcare Improvement, 2017). The next phase is the "Do" stage. The components for this stage include: (1) run the test on a small scale, (2) carry out the test, (3) document problems and unexpected observations, and (4) collect and begin to analyze the data (Institute for Healthcare Improvement, 2017). The third stage is the "Study" phase. This stage includes: (1) analyze the results and compare them to your predictions, (2) complete as a team, if possible, the analysis of the data, (3) compare the data to the prediction, and (4) summarize and reflect on what was learned (Institute for Healthcare Improvement, 2017). The last step of the PDSA includes: (1) based on what was learned from the test, make a plan for the next step, (2) adapt (make modifications and run another test), adopt (test the change on a larger scale), or abandon (don't do another test on this change idea), and (3) prepare a plan for the next PDSA (Institute for Healthcare Improvement, 2017).

*Plan:* Will the use of simulation, team nursing, and a 120-hour focused care experience related to management and organizing patient care improve the new nurse's ability to care for four or more clients before graduating nursing school? The prediction was that the stated measures or preparation allowed a new nurse graduate to manage and organize care for four or more patients without feeling overwhelmed. The plan was to schedule eight simulations which were four hours

in length and six team nursing clinical experiences which were eight hours in length. During team nursing, the student nurse had the opportunity to act as a charge nurse and was assigned at least four patients during the clinical experience. The plan included structured clinical scenarios using the INACSL guidelines, the Basic Organizational Skills and Structure (BOSS) Guideline Tool, and the DML debriefing model. The simulations and team nursing days occurred on Tuesday's beginning in the spring semester 2019. The students completed the objectives stated in the INACSL template and the tasks on the BOSS Guideline Tool. Data was collected during the post-conference time-frame which was one hour using the DML debriefing model. After the 12 weeks of simulation and team nursing, the student nurse participated in the focused care experience and completed 120 hours of clinical with an assigned preceptor. The student nurse utilized the BOSS Guideline Tool which assisted with completing required nursing tasks for patient care on an hour-by-hour time frame.

• *Do:* During this phase a description of what happened during the simulation, team nursing, and focused care was identified. Each student was assigned four patients during simulation, team nursing, and focused care and performed the tasks from the BOSS guideline tool within the specified time frame. At the end of the experiences the students displayed more confidence in providing care for multiple patients. If issues were identified during the performance the student nurse had the opportunity to practice again during open lab time. The overall observations and data were represented by the student completing all tasks during

each experience safely and competently with critical thinking regarding the performance.

- *Study:* In this stage the student's performance was analyzed and compared to the predictions. The prediction was that simulation assisted the student to perform as required during team nursing and focused care and manage and organize care for four or more patients by the time the student graduated. The prediction was that one simulation experience is not enough, therefore, needing the opportunities of team nursing and focused care. The student nurse needed more than one practice experience in managing and organizing patient care for multiple patients. The extra time was worthwhile and beneficial to the student's performance. The faculty team was able to identify if a student needed more practice with managing and organizing patient care before entering team nursing and focused care and especially before transitioning into actual real-world practice.
- *Act:* In this phase, the faculty team determined which modifications needed to be adapted, adopted, or abandoned. The hope was that this experience was beneficial and continued in the nursing leadership course within the nursing program as a permanent part of the course. If this experience proved to be beneficial, the Project Leader plans to share and implement this program during the new nurse graduate orientation programs within the four local hospitals that are used for clinical sites for the nursing program. Two of the local hospitals have already requested to use the BOSS guideline tool during the new nurse graduate orientation.

## **SECTION VII**

#### Implementation

The implementation phase of the project began with submitting the project proposal to the Institutional Review Board (IRB). The proposal was also submitted to the learning environment where the simulation was implemented for IRB approval. After several months of review and revisions to the IRB document, final approval was obtained and the implementation phase began.

In phase one the Project Leader met with the team to review the project and BOSS tool and select a date for implementation. The BOSS Guideline Tool Clinical Checklist is presented in Table 3 and the BOSS Guideline Tool is presented in Table 4. The simulation experience included the following:

- Location: Medical-Surgical Simulation Lab at the educational facility used for the project
- Total of 44 BSN senior nursing students and 4 faculty members and the Clinical Learning Center and Simulation Lab Director (CLC Director)
- Four Case Scenarios which included a 68-year old cancer patient, 23-year old asthma patient, 92-year old Alzheimer's patient with a fractured hip and Stage III pressure ulcer, and an 18-year old new onset diabetic patient
- The simulation lab was set up to reflect a medical-surgical unit in an acute care hospital
- Simulation packet that included the scenario guidelines, the BOSS guideline tool, four case scenarios, Debriefing for Meaningful Learning (DML), Team Nursing packet which explained the different nursing roles, and the INACSL template.

After meeting with the team, the Project Leader met with the student participants and explained the simulation experience, how to complete the surveys and the consent form. All 44 students agreed to participate in the survey portion of the simulation experience, team nursing experience, and focused care experience. The next step in phase one was completion of a pre-survey by the students which determined the students' perception of being able to manage and organize care for four or more patients in a clinical setting. The completed surveys were collected by the Project Leader in a sealed envelope and stored in a locked cabinet in the Project Leader's office.

In phase two, eight simulation experiences were scheduled over an eight-week period. Each simulation experience was four hours in length. Two simulations were conducted per each scheduled day which allowed all students to perform the tasks in the simulation of managing and organizing care for four or more patients and complete the components of the BOSS guideline tool during this time frame. A pre-briefing was conducted before each simulation experience began. Next, each student was assigned four patients and given four hours to complete all the elements of the BOSS guideline tool within real time. The faculty gave verbal instruction when necessary, but otherwise observed the students' performance according to the BOSS guideline tool. At the end of the four-hour simulation a debriefing occurred using the DML debriefing model. Next, the students who portrayed the patients in the first four hours changed roles and were now the acting nurses and the first simulation students were now the patients. The scenario was conducted again following the same format. The simulation experience concluded with a total of 64 hours of simulation experience using the BOSS guideline tool.

# Table 3

# BOSS Guideline Tool Clinical Checklist

Note: Before beginning the Head to Toe Assessment:	Conduct a Thorough Room Check for Safety	Stop and Look Around the Room and Identify What Safety Needs are Present
Room Check Item	YES	NO
Introduce yourself to the patient Conduct a visual of the patient's room Is the patient in bed? Are there three bed rails up? Is the patient positioned properly according to the Turn Clock? Are the linens clean and is the bed made properly? Are there extra linens and trash in the room?		
Equipment	YES	NO
IV fluids: what kind, what rate, does the bag of fluids need to be changed? Any Drips: Insulin, Heparin, etc. How many pumps? Are Piggybacks hanging, if so are they capped with a Red Cap? Is the tubing hanging on the floor?		
Other Equipment	YES	NO
Suction: Is it on? What setting? What color, etc.? Oxygen: Is it properly positioned? What rate, what type of oxygen equipment? Humidified, mask, etc.? Foley catheter: What color is the urine? Is it red due to Heparin, if so what is your intervention? Room Temperature: Is it comfortable? Blinds: Does the patient want them opened or closed?		

Falls and Door Signs	YES	NO
Yellow socks, Oopsy Daisy Sign? NPO: Is there a sign on the door? Is the water pitcher empty and out of reach? Fluid restriction: Is there a sign on the door?		
Weights: Is there a sign on the door?		
Any other signs need to be on the door?		
Room Hygiene	YES	NO
Is the room clean?		
Are bed pans and wash pans stored properly?		
Does the patient have cups, straws, towels,		
wash cloths, etc.?		
Now You are Ready to begin the Head to		
Toe Assessment		

# Table 4

# BOSS Guideline Tool

TIME	DUTIES	COMPLETED
0630-0700	Pre-Clinical Conference Review Clinical Assignment Sheet Choose another patient if your patient is discharged Review chart for new order, labs, etc. Review chart for new medications Review chart for Finger Stick Blood Sugar (FSBS) Review chart for NPO, Diagnostic Test, etc.	
0700-0900	Receive SBAR report and use SBAR report form Once at patient door, observe patient, room environment, etc. Make patient comfortable Obtain "manual" vital signs and use the machine for pulse oximetry and temperature Obtain Finger Stick Blood Sugar (FSBS) as ordered Perform Head to Toe Assessment Prepare for Medication Administration: make sure you are at the yellow screen when you let your instructor know you are ready, have all necessary documentation in place. Document Assessment, vital signs, falls, neuros, etc. During this two hour time frame please make sure your patient is comfortable, clean and dry and the room is clean Review the chart for New Orders	
0900-1100	Prepare for 1000 Medication Administration Document 1000 Nursing note Complete AM care Turn and reposition patient Check for New Physician Orders Analyze EKG Strip if ordered	
1100-1300	Obtain vital signs if ordered Obtain Finger Stick Blood Sugar (FSBS) if ordered Prepare for 1200 Medication Administration Review chart for New Orders Turn and reposition patient Document 1200 Nursing Note and Vital Signs	

	Prepare for SBAR report Post Conference with Instructor
NOTE:	Document Falls every hour. Document Neuros as ordered Document TWEAKS as ordered Document ADLs and AM care is to be completed by 1100 Turn and reposition your patients every 2 hours or make sure the CNAs have completed this task

In phase three, the students were administered a post-simulation survey to identify if the simulation experience was helpful in managing and organizing care for four or more patients. The completed post-simulation surveys were collected by the Project Leader after completion in a sealed envelope. Once the simulation experiences were complete, team nursing began which was a total of 42 hours. During each assigned team nursing experience three students were assigned the role of team leader with two to three team members. Each team had a total of six or more patients assigned. The students used the BOSS guideline tool to complete the appropriate care for the assigned clients during real-time. Each team nursing experience was conducted within a rehabilitation facility with real patients. A pre-briefing was conducted from 6:30 am until 7:00 am and then report was received beginning at 7:00 am. Once report was complete, patient care began and the students had to complete all the assigned tasks from the BOSS guideline tool. The team nursing experience was conducted during a six-hour time frame. At the end of the team nursing experience a post-briefing was held using the Debriefing for Meaning Learning (DML) model. All 44 students participated in the team nursing experience and each student had the opportunity to perform the role of team leader and team member. Each student was observed by the faculty implementing the use of the

BOSS guideline tool to provide managed and organized care during the experience. At the completion of the team nursing rotation, a post-survey was administered to the students which addressed if the simulation experience and the use of the BOSS guideline tool were useful in preparing students for managing and organizing care for patients. The surveys were collected by the Project Leader in a sealed envelope.

In phase four, all 44 students were assigned to work in a hospital setting with a BSN-prepared registered nurse for a total of 120 hours of focused care experience. Before the experience, the faculty who were facilitating the focused care experience were given copies of the BOSS guideline tool by the Project Leader with instructions on how to use the tool. Each student had a copy from the prior simulation experience and shared the BOSS guideline tool with the assigned BSN nurse preceptor in the hospital settings. Each student was observed and monitored using the BOSS guideline tool by the assigned faculty during the experience. After the 120-hour experience, a post-survey was given to all 44 students and the faculty facilitators by the Project Leader to determine if the students were able to care for four or more patients during the focused care experience and to identify if the BOSS guideline tool was beneficial in guiding the students on managing and organizing care for four or more assigned patients. The surveys were collected by the Project Leader in a sealed envelope.

#### **Threats and Barriers to the Project**

The project was scheduled to begin at the beginning of the spring semester of the senior year for the BSN students, but was delayed due to the IRB process. The IRB process took approximately five months to complete. The IRB application was sent to the review board in the prior semester with numerous revisions. Final approval was

received two months after the spring semester began. Therefore, the simulation schedule had to be revised. Other barriers included lack of lab space. The original plan was to have multiple simulations occurring simultaneously to decrease the number of students in each lab session. The simulation actually occurred in one assigned lab with two faculty members present. This limited space did not allow for individual performance but each assigned team leader had to share the same assigned patients during the allotted time.

Another barrier was clinical space for team nursing. The original plan was to conduct team nursing in a hospital medical-surgical setting, but due to limited clinical space, the team nursing experience had to be scheduled in a rehabilitation facility, but the residents there were high acuity and a large number of patients were available to the students for assignments. During focused care some of the 44 students were not assigned with a preceptor in a medical-surgical setting, which was the focus of the BOSS guideline tool, but were assigned in specialty areas such as intensive care and labor and delivery units. These clinical sites limited the number of assigned patients to the student.

## **Project Closure**

At the end of the focused care experience, the last student survey and faculty surveys were distributed and collected by the Project Leader. The Project Leader met with the team to discuss the overall success and shortcomings of the project. An overview of the success of the project was obtained through verbal feedback from the students and faculty involved. The verbal feedback was positive by the students who felt the simulation experience helped them prepare for team nursing and focused care with organizing and managing a patient case load. The students noted that this experience should be conducted in multiple semesters throughout the program and initiated earlier than the last semester of the senior year. The faculty feedback was positive as well and the BOSS guideline tool was well received. The shortcomings of the project were again due to delays in the IRB process which caused the project to begin later than planned. Also, the students voiced this type of experience should begin earlier in the program and be offered on more occasions. The limited lab space was also considered a shortcoming.

The project accomplishments focused on real-world experiences within a medical-surgical clinical setting and assisted the students with becoming more aware of their role in managing and organizing patient care. Another accomplishment focused on making faculty more aware that this type of instruction and learning experience enhanced the student's knowledge of patient care and is needed in the program. The important project data identified that nursing students are lacking in managing and organizing care experiences within this nursing program and the feedback from the students supported this type of instruction was valued and appreciated. Again, the changes in schedule delayed the beginning of the project but the schedule was arranged that allowed all students to encounter the simulation experience before beginning the team nursing experience. There were some issues that need further exploration such as lab space and scheduling of such experiences at an earlier time within the program. The ideal simulation experience would have been to have multiple labs occurring at the same time with a faculty member in each lab setting. This structure would have allowed for more exposure to the simulation before team nursing. The simulations could have occurred the semester before throughout a 16-week period and then the students would have had more than two practices with a case load of patients before team nursing and focused care. The team nursing experience could have occurred the following semester which would have

allowed the students more opportunity and exposure to real-life patient care loads with multiple patients. There were no issues with budget as all supplies were available during the simulation experiences. Overall the implementation went well even with the schedule changes. The students and faculty verbalized this was a positive experience.

### **SECTION VIII**

### **Interpretation of the Data**

#### **Survey Results Interpretation**

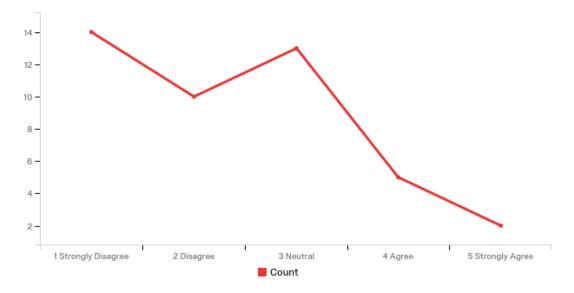
Data outcomes from the survey results are displayed below in Tables 5 through 9. One hundred and seventy-six paper and pen/pencil surveys were collected from students during the survey period. There was a total of five surveys collected from faculty using paper and pen/pencil instruments during the survey period. The instruments were collected at different time frames throughout the project. The surveys were distributed by the Project Leader. When the surveys were completed each one was placed in a sealed envelope and returned to the Project Leader.

Each survey used a Likert-scale of one to five, in which one represented strongly disagree, two represented disagree, three indicated neutral, four was agree, and five was strongly agree. In survey one (Table 5), which was a pre-simulation student survey, the overall results revealed that 54.55% of the 44 students surveyed did not feel prepared to manage and organize care for four or more patients. Individual survey questions are presented in Figures 3 through 7.

# Table 5

# Pre-Simulation Student Survey

Survey Questions	1: Strongly	/ Disagree	
	2: Disagree		
	3: Neutral		
	4: Agree	4: Agree	
	5: Strongl	y Agree	
	Results in Percentages		
1. I feel prepared to manage and organize	#1	31.82%	
care for 4 to 5 patients.	#2	22.73%	
	#3	29.55%	
	#4	11.36%	
	#5	4.55%	
2. I feel a Simulation experience related to	#1	4.55%	
management of care and organizational	#2	6.82%	
skills will help prepare me for the Team	#3	18.18%	
Nursing Experience.	#4	40.91%	
	#5	29.55%	
3. I feel a tool with management of care	#1	4.55%	
and organizational guidelines will assist me	#2	4.55%	
with managing 4 to 5 patients.	#3	9.09%	
	#4	47.73%	
	#5	34.09%	
4. I feel Simulation would be a useful tool	#1	4.55%	
in the current nursing program.	#2	6.82%	
	#3	9.09%	
	#4	40.91%	
	#5	38.64%	
5. Pre-briefing and debriefing during a	#1	9.09%	
Simulation experience are effective means	#2	4.55%	
to enhance the learning of management and	#3	22.73%	
organizational nursing skills.	#4	34.09%	
	#5	29.55%	



Q1 - I feel prepared to manage and organize care for 4 to 5 patients

Figure 3. Pre-Simulation Student Survey Question 1

Q2 - I feel a Simulation experience related to management of care and organizational skills will help prepare me for the Team Nursing Experience

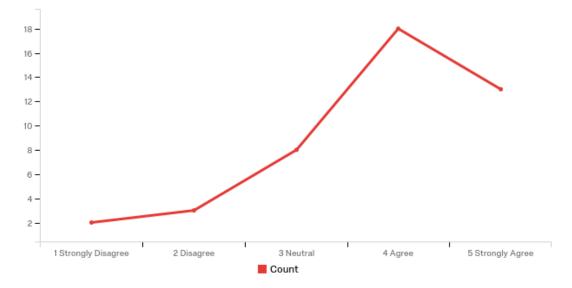
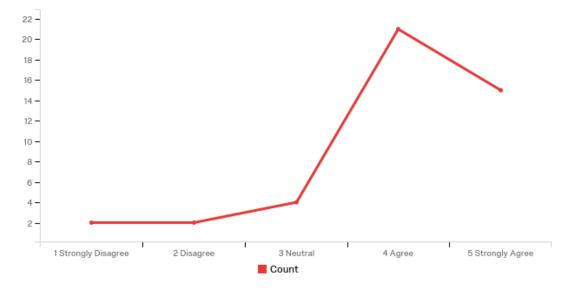
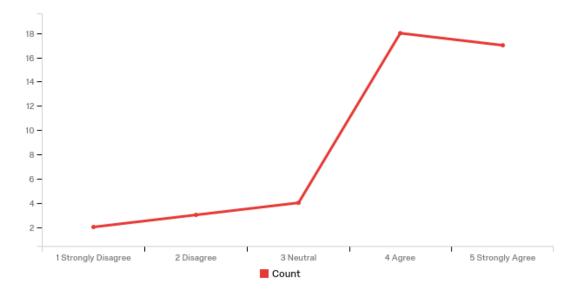


Figure 4. Pre-Simulation Student Survey Question 2



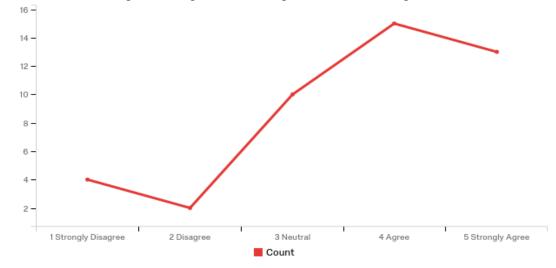
Q3 - I feel a tool with management of care and organizational guidelines will assist me with managing 4 to 5 patients

Figure 5. Pre-Simulation Student Survey Question 3



Q4 - I feel Simulation would be a useful tool in the current nursing program

Figure 6. Pre-Simulation Student Survey Question 4



Q5 - Pre-briefing and debriefing during a Simulation experience are effective means to enhance the learning of management and organizational nursing skills

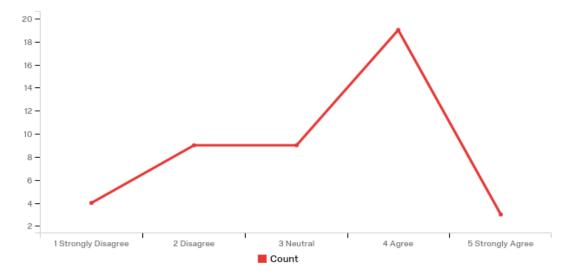
Figure 7. Pre-Simulation Student Survey Question 5

In survey two (Table 6), which was a post simulation student survey, the results indicated that 48% of the students believed that the simulation experience helped to improve their management and organization skills of four or more patients. Individual survey questions are presented in Figures 8 through 11.

# Table 6

Post-Simulation Student Survey

Survey Questions	<ol> <li>Strongly Disagree</li> <li>Disagree</li> <li>Neutral</li> <li>Agree</li> <li>Strongly Agree</li> <li>Results in Percentages</li> </ol>	
1. I feel prepared to manage and organize care for 4 to 5	#1	9.09%
patients after the Simulation experience.	#2	20.45%
	#3	20.45%
	#4	43.18%
	#5	6.82%
2. I feel the Simulation experience related to management of	#1	4.55%
care and organizational skills helped me prepare for Team	#2	6.82%
Nursing and Focused Care Experiences.	#3	9.09%
	#4	40.91%
	#5	38.64%
3. I feel the BOSS method tool guideline assisted me with	#1	2.27%
managing 4 to 5 patents during the Simulation experience.	#2	6.82%
	#3	18.18%
	#4	34.09%
	#5	38.64%
4. I feel the Simulation experience on management of care	#1	2.27%
and organizational skills and the use of the BOSS method	#2	4.55%
tool guideline is a useful experience to prepare me to	#3	4.55%
transition to practice.	#4	43.18%
-	#5	45.45%



Q1 - I feel prepared to manage and organize care for 4 to 5 patients after the Simulation Experience

Figure 8. Post-Simulation Student Survey Question 1

Q2 - I feel the Simulation experience related to management of care and organizational skills helped me prepare for Team Nursing and Focused Care Experiences

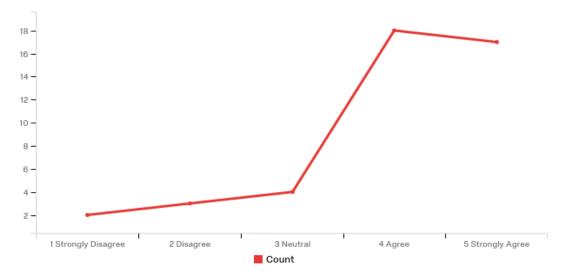
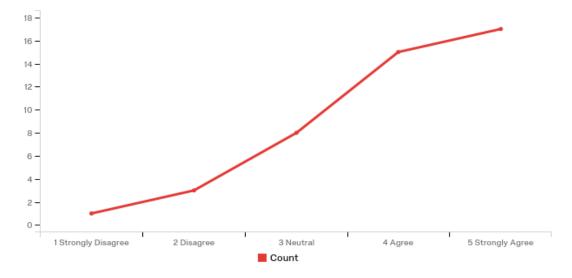


Figure 9. Post-Simulation Student Survey Question 2



Q3 - I feel the BOSS method tool guideline assisted me with managing 4 to 5 patients during the Simulation experience

Figure 10. Post-Simulation Student Survey Question 3

Q4 - I feel the Simulation experience on management of care and organizational skills and the use of the BOSS method tool guideline is a useful experience to prepare me to transition to practice

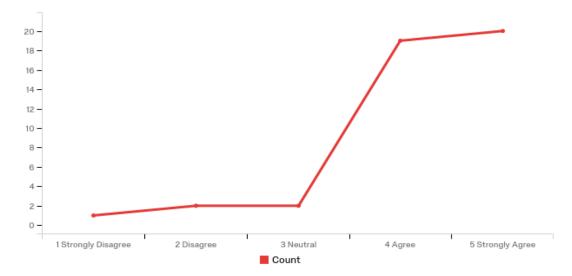


Figure 11. Post-Simulation Student Survey Question 4

In survey three (Table 7), which was a post team nursing student survey, 75% of

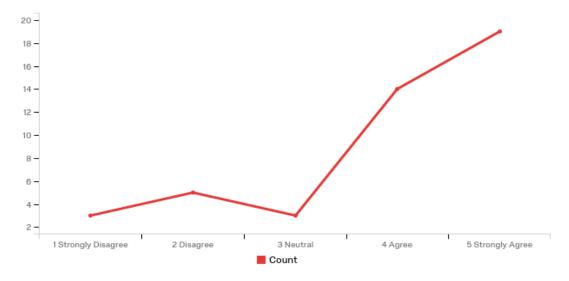
the 44 students surveyed indicated feeling prepared to care for four or more patients.

Individual survey questions are presented in Figures 12 through 15.

# Table 7

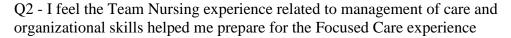
## Post-Team Nursing Student Survey

Survey Questions	1: Strongly l	Disagree
	<ul><li>2: Disagree</li><li>3: Neutral</li><li>4: Agree</li></ul>	
	Results in Percentages	
1. I feel prepared to manage and organize care for 4 to 5	#1	6.82%
patients after the Team Nursing experience.	#2	11.36%
	#3	6.82%
	#4	31.82%
	#5	43.18%
2. I feel the Team Nursing experience related to	#1	6.82%
management of care and organizational skills helped me prepare for the Focused Care experience.	#2	9.09%
	#3	9.09%
	#4	31.82%
	#5	43.18%
3. I feel the BOSS method tool guideline assisted me with	#1	4.55%
managing 4 to 5 patients during the Team Nursing experience.	#2	11.36%
	#3	9.09%
	#4	31.82%
	#5	43.18%
4. I feel the Team Nursing experience and the use of the	#1	4.55%
BOSS tool guideline have prepared me to transition into	#2	13.64%
practice.	#3	6.82%
	#4	31.82%
	#5	43.18%



Q1 - I feel prepared to manage and organize care for 4 to 5 patients after the Team Nursing experience

Figure 12. Post-Team Nursing Student Survey Question 1



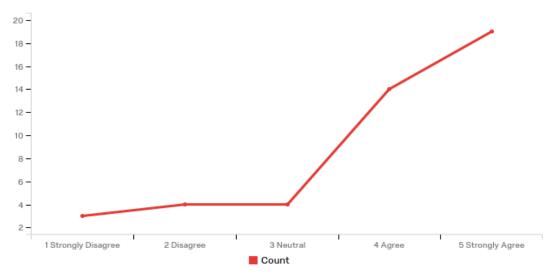


Figure 13. Post-Team Nursing Student Survey Question 2

Q3 - I feel the BOSS method tool guideline assisted me with managing 4 to 5 patients during the Team Nursing Experience

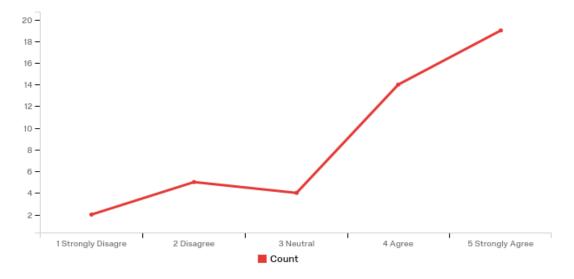


Figure 14. Post-Team Nursing Student Survey Question 3

Q4 - I feel the Team Nursing experience and the use of the BOSS tool guideline have prepared me to transition into practice

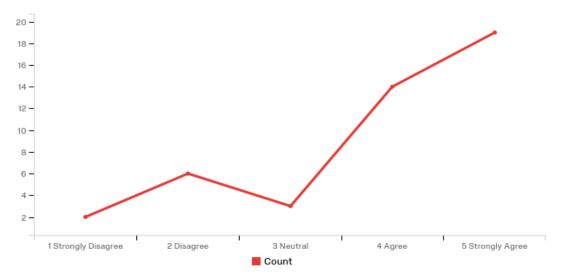


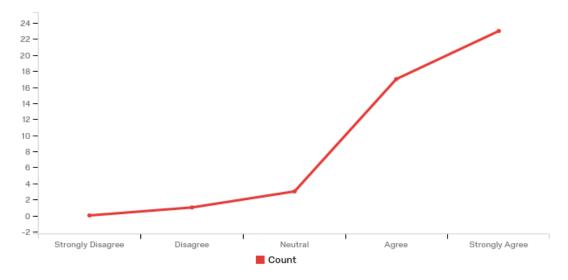
Figure 15. Post-Team Nursing Student Survey Question 4

In survey four (Table 8), which was distributed after the focused care experience, 90.91% of the students indicated feeling prepared to manage and organize care for four or more patients. The students also felt the simulation experience, team nursing experience and the use of the BOSS guideline tool prepared them to transition into practice with a score of 95.46%. Individual survey questions are presented in Figures 16 through 19. Overall, as the students progressed through each phase of the project, the satisfaction scores improved significantly as they relate to being prepared to transition to practice. Some of the comments by the students were, "I really enjoyed this method. I feel extremely prepared to take care of a full load of patients". "Very beneficial tools, experiences, and teaching. Excellent!!"

# Table 8

Post-Focused Care Student Survey
----------------------------------

Survey Questions	<ol> <li>Strongly Disagree</li> <li>Disagree</li> <li>Neutral</li> <li>Agree</li> <li>Strongly Agree</li> <li>Results in Percentages</li> </ol>				
			1. I feel prepared to manage and organize care for 4 to	#1	0.00%
			5 patients after the Focused Care Experience.	#2	2.27%
				#3	6.82%
				#4	38.64%
				#5	52.27%
2. I feel the Team Nursing Experience related to	#1	0.00%			
management of care and organizational skills helped	#2	0.00%			
me prepare for the Focused Care Experience.	#3	9.09%			
	#4	36.36%			
	#5	54.55%			
3. I feel the BOSS tool guideline assisted me with	#1	0.00%			
managing 4 to 5 patients during the Focused Care Experience.	#2	0.00%			
	#3	11.36%			
	#4	27.27%			
	#5	61.36%			
4. I feel the Simulation experience on management of	#1	0.00			
care and organizational skills, Team Nursing	#2	0.00			
experience, Focused Care Experience and the use of the	#3	4.55			
BOSS tool guideline have prepared me to transition to	#4	29.55			
practice.	#5	65.919			



Q1 - I feel prepared to manage and organize care for 4 to 5 patients after the Focused Care Experience

Figure 16. Post-Focused Care Student Survey Question 1

Q2 - I feel the Team Nursing experience related to management of care and organizational skills helped me prepare for the Focused Care Experience

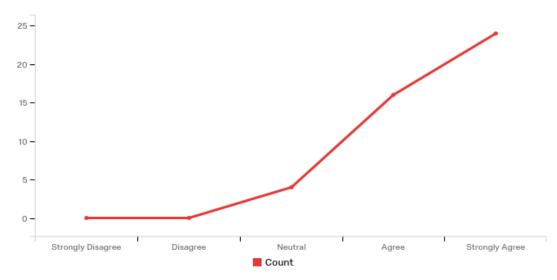
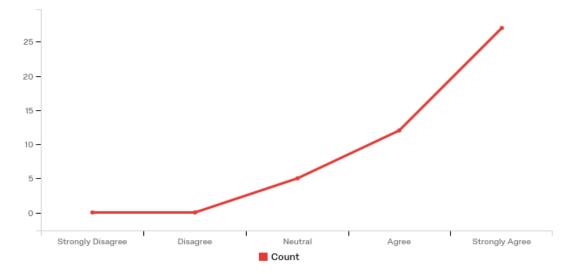


Figure 17. Post-Focused Care Student Survey Question 2



Q3 - I feel the BOSS tool guideline assisted me with managing 4 to 5 patients during the Focused Care Experience

Figure 18. Post-Focused Care Student Survey Question 3

Q4 - I feel the Simulation experience on management of care and organizational skills, Team Nursing experience, Focused Care Experience and the use of the BOSS tool guideline have prepared me to transition to practice

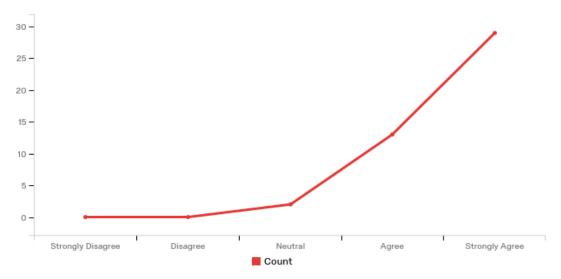


Figure 19. Post-Focused Care Student Survey Question 4

The fifth and final survey (Table 9) was distributed to the faculty who were involved in the focused care experience. A total of five faculty were surveyed. The results indicated that 60% felt that the students were not ready to care for four or more patients before the simulation, team nursing, and focused care experience. A total of 60% of faculty agreed or strongly agreed that simulation, team nursing and the use of the BOSS guideline tool prepared students for the focused care experience. The faculty believed that the students were ready to transition into practice after participating in simulation, team nursing and focused care experiences with a score of 60% agreeing or strongly agreeing. Individual survey questions are presented in Figures 20 through 23.

# Table 9

Post-Focused Care Faculty Survey

Survey Questions	1: Strongly	/ Disagree
	2: Disagre	e
	3: Neutral	
	4: Agree	
	5: Strongly Agree Results in Percentages	
before participating in Simulation, Team Nursing, and	#2	0.0%
Focused Care Experiences.	#3	40.00%
-	#4	0.0%
	#5	0.0%
2. Simulation related to management of care and	#1	0.0%
organizational skills helped the students to prepare for	#2	0.0%
the Team Nursing and Focused Care Experiences.	#3	40.00%
	#4	40.00%
	#5	20.00%
3. The BOSS method tool guideline and Simulation	#1	0.0%
experience assisted the students in managing and	#2	0.0%
organizing care for 4 to 5 patients during the Team	#3	60.00%
Nursing and Focused Care Experiences.	#4	0.0%
	#5	40.00%
4. The students are ready to transition into practice as it	#1	0.0%
relates to managing and organizing care after	#2	0.0%
participating in the Simulation, Team Nursing, and	#3	40.00%
Focused Care experiences.	#4	20.00%
	#5	40.00%

Q1 - The students were prepared to care for 4 to 5 patients before participating in Simulation, Team Nursing, and Focused Care Experiences

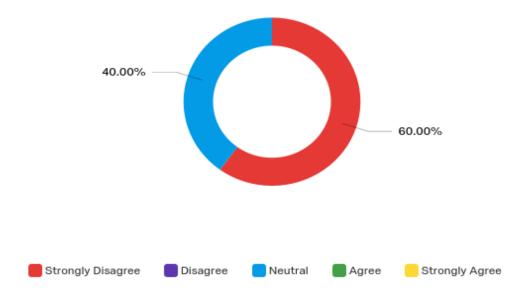


Figure 20. Post-Focused Care Experience Faculty Survey Question 1

Q2 - Simulation related to management of care and organizational skills helped the students to prepare for the Team Nursing and Focused Care Experiences

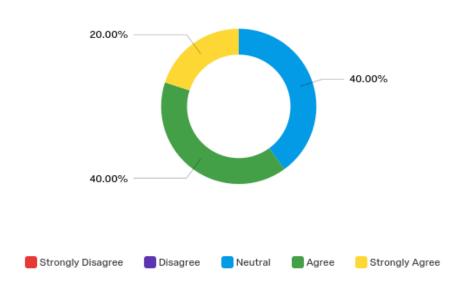


Figure 21. Post-Focused Care Experience Faculty Survey Question 2

Q3 - The BOSS method tool guideline and Simulation experience assisted the students in managing and organizing care for 4 to 5 patients during the Team Nursing and Focused Care Experiences

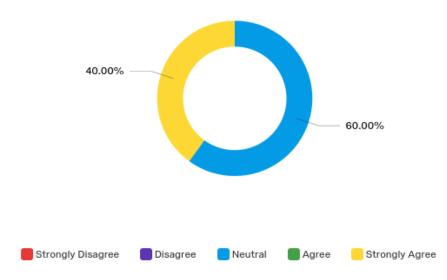


Figure 22. Post-Focused Care Experience Faculty Survey Question 3

Q4 - The students are ready to transition into practice as it relates to managing and organizing patient care after participating in the Simulation, Team Nursing, and Focused Care Experiences

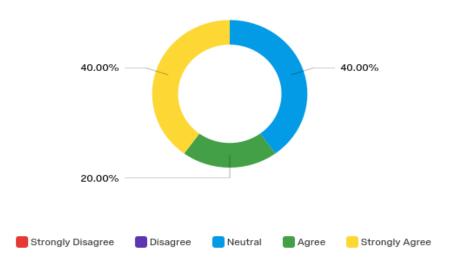


Figure 23. Post-Focused Care Experience Faculty Survey Question 4

PreSimulation Post Simulation Post Team Nursing Post Focused Care • Strongly Disagree • Disagree • Neutral • Agree • Strongly Agree

*Figure 24*. Comparison of Surveys: Pre-Simulation, Post-Simulation, Post-Team Nursing, Post-Focused Care

A comparison of student surveys illustrating change over time in perception of ability to manage and organize care for four to five patients is shown in Figure 24.

## **SECTION IX**

### **Utilization and Reporting of Results**

### **Interpretation of Findings**

The project outcomes displayed a positive improvement in the students' performance in managing and organizing care for four or more patients from presimulation exposure until post focused care experience. The practice change intervention that was initiated in the nursing student's performance in managing and organizing a case load of patients used a simulation format that was designed with the International Nursing Association for Clinical Simulation and Learning (INACSL) guidelines. In order to aid the nursing student in management and organizational skills, the Project Leader and team developed a Basic Organizational Skills and Structure (BOSS) for New Nurses guideline tool. The tool guided participants in which tasks/skills were necessary in performing patient care every hour during the assigned shift. The goals of the project focused on completing the tasks/skills on the BOSS guideline tool for four or more patients within a designated time frame. This simulation enhanced the nursing student's ability to complete basic skills during assigned patient care while promoting awareness of time. The overall goal of the project was to promote a sense of being organized which reduces feelings of being overwhelmed with a case load of patients. The results of the project demonstrated outcome data and evidence that nursing students felt prepared for transition into practice as it related to managing and organizing care for multiple assigned patients before graduating. The data outcomes also displayed that faculty felt the simulation experience was valuable to students' transitioning into practice.

### **Summary Review of Problem**

New nurse graduates find the transition to practice difficult and often leave the nursing profession within six months to a year after their first job experience (Doody et al., 2012). More experienced nurses often voice concerns that new nurses are not prepared to manage and organize care for a caseload of patients (Missen et al., 2016). Nursing educational programs need to provide more preparatory situations related to organizing and managing client care before the nursing student graduates. Attrition rates for many hospital settings is as high as 27% for new nurses leaving their first nursing job within a year (Hussein et al., 2017). This Bachelor of Science in Nursing (BSN) program does not have any type of pre-clinical experiences in managing and organizing patient care. Scheduled simulation experiences related to managing and organizing care for a group of clients does not exist in any clinical courses. The program does not provide any type of guidelines or structure for how a new nurse should manage and organize care for a set group of patients. Simulations can provide a real-world nursing experience through the use of live patients within a simulated environment that resembles a nursing medical unit (Warland, 2011). This type of simulation experience can provide an environment that establishes priorities related to managing and organizing care for multiple patients who can provide feedback during the simulation (Warland, 2011).

## **Key Findings**

In 2018, three surveys were developed by the Project Leader to support a need for the quality improvement project. The outcomes are supported by the literature review that promotes activities in managing and organizing care for multiple patients as a necessity for new nurse graduates. In the surveys from 2018, the results identified that low numbers of new nurse graduates are prepared for transition to practice during the first year (Table 10, 11, and 12).

The results from the graduating senior class from 2019 reveal that after simulation and the use of the BOSS guideline tool during team nursing and focused care experiences, the ability to care for multiple patient assignments increased significantly.

# Table 10

2018 Survey Question #1

Survey #1 Questions	Senior Nursing Students ( <i>n</i> =46)
	Responses
	Likert Scale:
	#1 Strongly Disagree
	#2 Disagree
	#3 Neutral
	#4 Agree
	#5 Strongly Agree
1. Did you feel that you were capable of	The results revealed that 11students out of
managing and organizing care for five or	46 (24%) believed that they were capable
more patients during the Nursing	of managing care for five or more
Leadership course?	patients.
2. Did you feel you were capable of	Only 16 students out of 46 (35%) felt they
managing and organizing care for five or	were capable of caring for five or more
more patients during your Focused Care	patients during the Focused care
Experience?	Experience.

# Table 11

# 2018 Survey Question #2

Survey #2 Questions	New Nurse Graduates from 2017 to 2018
	(n=25) Responses
	Likert Scale:
	#1 Strongly Disagree
	#2 Disagree
	#3 Neutral
	#4 Agree
	#5 Strongly Agree
1. Do you feel you were capable of	The results revealed that 13 out of 25
managing and organizing care for five or	(52%) felt they could manage five patients
more patients after your orientation time	or more after their orientation.
when you were given an assignment on	
your own?	
2. Do you feel you were capable of	The results revealed that 8 out of 25
managing and organizing care for five or	(32%) felt they could manage five or more
more patients after graduating from	patients directly out of nursing school.
nursing school?	patients uncerty out of nursing school.
nursing senoor:	

## Table 12

2018 Survey Question #3

Survey #3 Questions	Nurse Faculty $(n=5)$ Responses
1. How many of your assigned students were able to handle more than four patients during Simulation in the Leadership course?	The results were 11 out of 46 students (24%) could manage more than four patients.
2. How many of your assigned students were able to handle to more than four patients during Focused Care before graduating?	The results were 16 out of 46 (38%) students could manage four or more patients during Focused Care.

This quality improvement project was implemented to provide best practice for managing and organizing client care in order for new nurse graduates to transition to practice without feeling overwhelmed, which is deemed unsafe practice. The project was developed using Kotter's Eight Stages of Change Model (1996). In this model the mindset was the status quo does not work and outside factors are driving forces that lead to an internal sense of urgency and motivation to change the process that is currently in place (Cooper et al., 2016). Neuman's Systems Theory was used as the basis to align with the quality improvement project to promote the change. The concepts of Neuman's Systems Theory focus on: (1) individual person which was represented by the nursing students, (2) the physiological barriers which were the student's inability to perform client care for a multiple load of patients, (3) psychological variables related to the student's cognitive level, self-esteem of individual performance and learning style, and 4) internal and external variables which focused on the student's normal lines of defense, lines of resistance, stressors, health/wellness, illness, and reconstitution which all fell under the lack of training for managing and organizing patient care (Fawcett, 2017).

Key findings of the quality improvement project include:

- Simulation with use of the BOSS guideline tool related to managing and organizing care for multiple patients had a positive impact on the student's ability to care for multiple patients and complete routine tasks during the Focused Care Experience before graduating
- The students' survey results identified that the simulation experience and the BOSS guideline tool were believed to have assisted with staying organized with four or more assigned patients as evidenced by the survey outcome scores which displayed an increase from pre-simulation to post simulation, team nursing and focused care experiences from 2018 through 2019 (Table 13).
- The use of Kotter's Eight Stages of Change and Neuman's Systems Theory were guides for the quality improvement project and had a positive impact on the student's perception of being able to care for multiple assigned patients without feeling overwhelmed when transitioning to practice, the likelihood of sustainability of the project, and transition to practice as evidenced by the project data outcomes.
- The use of a change model, conceptual nursing theory, and a structured time-line allowed the students and faculty sufficient time to prepare and successfully implement the project in three phases which denoted sustainability. The project has been adopted by the faculty into the nursing leadership course for the graduating semester.

## Table 13

## Comparison of 2018 to 2019 Surveys

Pre-Lab Case Study Experience	Post-Simulation/Team Nursing/Focused
2018 ( <i>n</i> =46) Students	Care 2019 ( <i>n</i> =44) students
Post-Lab Case Study Experience: 11	After Simulation: 35 students felt
students felt prepared (24%)	prepared (79.55%)
Post-Medical-Surgical Clinical Rotation: 11 students felt prepared (24%)	After Team Nursing: 33 students felt prepared (75%)
Post-Focused Care Experience: 16 students felt prepared (35%)	After Focused Care: 40 students felt prepared (90.91%)

## **Sustainability**

The simulation project used the BOSS guideline tool and focused on a clinical practice change that related to managing and organizing patient care in a manner that reduced feelings of being overwhelmed in the new nurse graduate. This project was implemented over a five-month timeline which used methods from Kotter's Eight Stages of Change Theory and Neuman's Systems Theory through a simulation experience with hands on practice of caring for four or more patients in real time. The outcomes indicated that student engagement in the simulation experience with the BOSS guideline tool as a guide prepared students to care for four or more assigned patients in the actual clinical setting during a team nursing experience and a focused care experience before graduating. The outcome data from 2018 indicated poor performance in managing and organizing a case load of patients in comparison to the survey results outcome data from 2019, which indicated a significant improvement in the students' performance of managing a group of patients. In order to maintain sustainability, nursing faculty must

continue to incorporate the simulation experience within courses with a clinical requirement. The project must be used consistently and focus on the model of change and systems theory in order to change the culture of patient care. The sustainability of this project will be maintained because the project has been adopted by the faculty to continue within the nursing leadership course in the graduating semester.

## **Implications for Practice/Future Recommendations**

Utilizing a structured simulation environment by incorporating the INACSL guidelines provided great opportunities for promoting confidence and enhancing knowledge in relation to topics that are evident within the clinical environment (Doody & Condon, 2013). Simulation experiences related to managing and organizing care for a patient caseload assisted with improving the new nurse graduate's critical thinking skills, and day to day routine roles of the nurse as evidenced by the student's performance in the simulation experience, team nursing and focused care. All 44 students were successful in team nursing and focused care and graduated the program. When using role playing during simulation, the students began to build prioritization skills and competence in care (Doody & Condon, 2013). Nursing educational programs need to use more simulation experiences in order to provide experiences with dealing with real patients (Warland, 2011).

A National Simulation Study and the National Council of State Boards of Nursing (NCSBN, 2018) have endorsed the use of high-quality simulation experiences with structured debriefing sessions, which enlightens the student's understanding and knowledge of patient care (Wright et al., 2018). As the student became more aware of how to manage and organize patient care before transitioning into practice, the ability to

provide safe, competent care improved. The new nurse graduate, after participating in this type of experience, felt more confident in the performance which reduced feelings of being overwhelmed in team nursing and focused care as evidenced by the increase in the data outcome percentages. This feeling of confidence decreased the chance of the new nurse graduate in making errors in patient care. The new nurse graduate retention rates improved as well (Wright et al., 2018).

For future recommendations, more research is needed in the areas of the positive effects of using simulation before transitioning to practice. The research needs to continue to show that simulation does provide an environment that improves critical thinking, safety, competence, and performance for the new nurse graduate. For this project, the recommendation is to continue to use the simulation experience with the BOSS guideline tool before team nursing and focused care experiences. The BOSS guideline tool would be an appropriate model to share with the clinical hospitals used by the learning institution in the new nurse graduate programs. The Project Leader has communicated with two hospital facilities regarding using the BOSS guideline tool during new nurse graduate orientation and mentorship programs.

The recommendations for the Department of Nursing are as follows:

• Continue to use the simulation experience in the Leadership course during the last semester before graduation and earlier clinical courses. Share with local hospitals educational departments for possible use in the new nurse graduate training programs.

- Possibly introduce the simulation experience during the junior year in the Adult Medical-Surgical course as a practice and preparation tool before transition to senior status.
- Continue to collect data on how the students feel the simulation helps them improve performance with managing and organizing patient care in order to provide continued support for the simulation experience.
- Continue to base the simulation experience on the INACSL guidelines, DML debriefing guidelines, Kotter's Eight Stages of Change Model, and Neuman's Systems Theory so the focus remains on the internal and external factors that affect the environment of the student nurse.

## **Lessons Learned During the Project**

The following list identifies lessons that were learned during the development and the implementation of the project:

- Faculty education was necessary for the involved persons in the project/simulation experience on how to incorporate Kotter's Eight Stage of Change Theory and Neuman's Systems Theory. This education is a key component of the success of the project
- 2. The Project Leader had to take a strong leadership role with the faculty involved on the importance of the simulation through evidence-based practice, survey results from students, and communication regarding their role in the experience.
- Providing continuous feedback to the students and faculty involved related to their performance and any changes that need to be made to the simulation experience/BOSS guideline tool was important.

- 4. Incorporating this experience before the student nurse graduates had a positive impact on improving the student's performance with patient care.
- Continuous feedback from the students supports the project is effective in improving managing and organizing patient care, improved critical thinking, and increased confidence levels.

### Limitations

Even though the project included a total of 44 BSN students, the number of students was limited to one cohort. The project was conducted in one course in the last semester before graduating. The simulation experience lab space was limited to one room. The students who portrayed the role of the nurse had to share patients with their classmates, which caused more than one charge nurse taking care of the same four patients during the four-hour experience. Space was limited along with time and length of each scheduled simulation. In order to curtail these limitations, more lab space needs to be available so each student has their own "nursing unit" to practice instead of sharing patients with classmates. More faculty is necessary which would provide a faculty per lab practice setting to provide individualized feedback to students. Making these changes will strengthen the project which will lead to further positive outcomes.

### Dissemination

The continuation of the project and data collection will provide further evidence about the effectiveness for preparing new nurse graduates to manage and organize patient care before transitioning into practice. The use of the BOSS guideline tool will provide direction for the new nurse on which tasks/skills are absolutely necessary during routine care of assigned patients. Further expansion of the project into other courses and with local hospitals that are used for clinical experiences is indicative of future plans for this project. Two local hospitals have requested permission from the Project Leader to use the BOSS guideline tool during the new nurse graduate program. A presentation of the project and outcome results will be provided to the nursing educational program and the hospital education departments. The Project Leader will seek publication opportunities of the project in nursing leadership publications, nursing education publications, and nursing publications that support change theory and systems theory. Opportunities will be sought to present this project at local, state, and national nursing events.

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