

Mock Code Training to Improve Patient Outcomes

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The profession of nursing focuses on promoting quality and safety while incorporating best practice to promote optimal patient outcomes. As healthcare advances are being made and patients are becoming more acutely ill, the nurse must be prepared to respond effectively to any given situation. Education and preparation are the framework for the nurse to develop essential skills to implement safe, quality care.

Organizational Approval Letter

See attached Document

Preceptor Agreement

See attached document

Identified Gap in Current Nursing Practice

Caring for acutely ill patients in a Level I trauma center comes with a variety of disease processes and levels of care. Nurses must be prepared to respond quickly and efficiently to the changing needs of the diverse and complicated patient population. As the primary caregiver of the acutely ill patients, nurses are often the first to recognize and respond to rapid changes in patient status. Nurses of all educational and experience levels must be ready to implement best practice to increase the patient's chance of optimal outcomes.

An identified gap in nursing education is the lack of training of nurses to respond to a code situation. Practice scenarios and standard guides of initial response to promote best outcomes will provide a foundation for nurses to respond appropriately to the patient's changing needs. Failure to rescue is a deviation from expected practice and the organization's goal is to

have zero serious safety events. Utilizing evidence-based practice, education, and training will support the organizational goal. Nurse educators must stay current with technology and educational innovation to provide learning activities to support current learner needs (Banks & Trull, 2012). Using simulation experience in a mock code scenario will allow for the learners to practice critical thinking and explore a variety of outcomes related to their decisions (Huseman, 2012). Mock code simulation training is chosen in response to trends in nursing education and allows for an opportunity for the nurses to evaluate which techniques promote best patient outcomes. Joint Commission has standards set to foster patient safety and quality (The Joint Commission, 2017). These standards are evaluated on a regular basis. Identifying patient safety issues and implementing evidence-based practice in response to these issues, comply with accreditation standards (The Joint Commission, 2017). The organization is a Magnet designated facility which also requires adherence to nursing standards. The promotion of excellent nursing care is the foundation of the Magnet designation. The incorporation of a mock code scenario course designed to facilitate critical thinking and promote optimal outcomes aligns with the ANCC (American Nurses Credentialing Center) goals (ANCC, 2017). The mock code training course provides nurses with the foundation to provide excellent care which will directly impact patients. The education is patient-focused as the goal of the course is to provide an opportunity for nurses learn to adapt to the changing environment and needs of the patients. The educational innovation is relevant to nursing practice and patient-centered care.

Organizational Trends

The organization is committed to process improvement and began the initiative six years ago (Medical University of South Carolina, 2017.). The identified goal is to close gaps utilizing

the improvement process. The implementation of a designated MET (medical emergency team) and a rapid response team (code team) provide support for nurses and promote best outcomes for the declining patient. The organization's goal is to have zero serious safety events and has shown a positive trend in safety outcomes, however the goal has not been met (MUSC, 2017.). Key performance quality indicators show a trend in meeting the expectation of quality outcomes but has not yet exceeded (MUSC, 2017). Although the inpatient mortality index has been rated lower than expected, the continual mission and vision to achieve a zero on preventable harm has not been achieved (MUSC, 2017). The organization supports the use of technology to enhance patient safety and the use of innovative team-training techniques (MUSC, 2017). These facts offer support to the implementation of a mock code simulation training course.

Explanation of Causes

In the year 2000, the organization experienced a traumatic outcome for a young patient. The performance of a routine surgery ended in a failure to rescue event which led to a sentinel event. "Residents and young nurses were left alone to perform jobs for which they were inadequately trained, with no ability to recognize a declining patient and no one to turn to when questions arose." (Patient Safety Movement Foundation, 2017). The organization was affected in a multitude of ways and worked vigorously to improve processes which would promote best outcomes for all patients. Task forces, code teams, laws, and intense training began because of this identified event. Over the course of nearly two decades, process improvements and policies were implemented. The organization has since been recognized as a Magnet Hospital and has received many awards including the recognition of the Top 100 Hospitals in America (MUSC, 2017). Although many improvements have been made, the patients are increasingly complex and

the need for nurses to be adequately trained to meet these demands exists. Codes are emotionally, and physically demanding which requires advanced preparation to support best outcomes. Mock code simulation training provides a resource in a controlled environment which will benefit learners, ultimately leading to improved patient outcomes (Banks & Trull, 2012).

Identification of Target Audience

The immediate training will occur with the Clinical Expert Nurses of the organization. They will disseminate the course to the nurses in their specialty area. The goal is to properly train the Clinical Experts which will allow them to train the nurses of their specified care areas.

The implementation of a mock code simulation training course will provide support to all practicing nurses of the organization. Direct patient care and indirect patient care nurses are all included in the target audience. The expectation of safe, quality care is for all nursing professionals of the organization as patient encounters may occur at any moment which require immediate nursing interventions.

Characteristics of Target Audience

The target audience for the initial training is the Clinical Experts of the organization. Clinical Experts are Registered Nurses who are trained in a specialty area and work two days as a Charge Nurse in their care area and two days as an educational resource for their peers in their specialty area. The Clinical Expert must have a BSN (Bachelor of Science in Nursing) and must have a certification in their specialty care area. Clinical Experts are identified leaders on their units and have proven skills to promote best practice. They provide support for their peers in the clinical setting and provide direction when needed. Clinical Experts facilitate evidence-based

practice improvement projects and assist with identifying practice deficits. The Clinical Experts were chosen as the target audience as they will provide a foundation of support for their peers and implement the training course into their care areas. Essentially educating the educators on a critical component of nursing practice.

Professional Development

The mock code scenario training course will support the professional development of nurses in many ways. The course will provide an avenue for nurses to practice the required assessment skills and critical thinking applications of a code situation. The mock code provides a means to evaluate best practice and elicit feedback which enhances professional development. The course offers the nurses an opportunity to familiarize themselves with equipment and identifying crucial task to accomplish while awaiting the response of the code team. A briefing will occur after each scenario which fosters professional development through learning by outcomes. The Clinical Experts will have an opportunity to foster professional development by educating their peers through implementing the mock code training course. The course will develop improved communication skills and teamwork while providing best practice for the patients.

Proposed Solution

The identified gap in practice is the lack of formal training for nursing care during a critical patient event. The implementation of a mock code scenario training course is the proposed solution for the identified problem. Clinical Experts will facilitate the educational activity at designated intervals to foster skills in all nurses of the organization. The course will take place in the organization's simulation lab on campus to allow for ease of access to all nurses

of the organization. The proposal is consistent with The American Association of Colleges of Nursing (AACN) Standards

Essential VI: Interprofessional communication and collaboration for improving patient health outcomes among healthcare professionals to deliver high quality and safe patient care (AACN, 2008).

Intended Outcomes

The intended outcome of the proposed solution is to utilize evidence-based practice to create a simulation based learning curriculum to improve nursing performance while responding to medical emergencies in the healthcare organization which provides patients with best outcomes. The project proposal is a staff-development educational program, aimed at training the Clinical Experts to disseminate and educate nursing staff about effective response interventions. The training sessions include a mock code method that utilizes simulation scenarios to replicate the process of a rescue event through multiple practice scenarios. Practice in a simulation setting allows nurses to develop clinical and critical thinking skills in the code setting. The objectives for the proposed project are to implement mock code training that educates nurses to do the following:

- Apply critical thinking skills during the code scenarios
- Demonstrate effective communication skills during the code scenarios
- Implement collaboration to promote best outcomes for the patient

Evidence Summary A systematic review of databases of nursing and health-related literature was performed providing an evidence summary to support the project proposal. The literature provided evidence-based support that mock code training improved the knowledge levels and confidence in nursing staff in code blue scenarios (Reece, Cooke, Polivka, & Clark, 2016). Mock code experiences allow nurses to recall and utilize life-support skills, which reinforces knowledge and assists with improved performance and confidence during emergencies (Reece et al., 2016). Increasing knowledge and confidence through the proposed course will benefit the nurses, patients, and the organization. Quality improvement goals to improve RN competency and confidence during the code situations were supported by an educational intervention including mock code debriefings which provided the learner with feedback and reinforcement (Reece et al., 2016). Learning in a safe environment through the use of simulation promotes feedback and reinforcement of skills and critical thinking. Simulation training of code scenarios provided a realistic experience in the healthcare setting that recreated the psychological and physical conditions of emergent situations in the hospital setting (Clarke, Carolina Apesoa-Varano, & Barton, 2016). Nurses can experience and practice scenarios to provide a foundation of knowledge and skills to promote best patient outcomes. Collaboration and communication are essential to positive patient outcomes and may be practiced during the mock code scenarios. Effective code teams save lives quickly, efficiently, and safely by using knowledge, skills, and effective communication (Prince, Hines, Chyou, & Heegeman, 2014). The identified attributes of collaboration and teamwork are practiced and enhanced by mock code scenarios (Prince et al., 2014). The lack of formal training in the code situation, results in decrease confidence, knowledge and lack of comfort with emergency equipment. The use of

standard American Heart Association (AHA) courses provide learners with a tool to learn the concept, however the course concepts are difficult to translate into real-life practices (Prince et al., 2014). Changes such as the addition of mock code simulation courses would lead to improved team dynamics, faster, and safer interventions promoting more efficient life saving strategies (Prince et al., 2014). Implementing mock code scenarios using simulation significantly improved response times of caregivers during code situations (Huseman, 2012). Simulation offers valuable feedback and perspective to learners, and allows nurse educators to improve or expand on their programs (MacLean, Kelley, Geddes, & Della, 2016). Simulation provides an innovative approach to facilitate critical communication skills and effective techniques which are crucial to quality and safety during emergency situations (Kelley, Forber, Conlon, Roche, & Stasa, 2014).

Plan of Action

Utilizing evidence-based practice and a literature review, the course will be developed. Goals and objectives for the course will be identified and outlined using the standards of the American Heart Association and the organizational standards and policies. Learning activities such as simulation training will be incorporated into the new course curriculum. This will offer a broad range of educational benefits to the students. The course will take place in the organization's simulation lab on campus, allowing for accessibility of all nurses. Communicating the identified problem to management and presenting a proposal will occur. The cost associated with the project, including necessary equipment and resources required will be included in the proposal. An organizational agreement will be ascertained. A meeting with the Clinical Experts to discuss the proposal and the presentation of evidence-based support will provide a means for

communicating the proposed solution and intended outcomes. The Clinical Experts will become the facilitators of the new course once the initial training has occurred and competence has been established. The Clinical Experts will demonstrate competence in teaching the course using teach back method which will establish competence.

An initial meeting with management will occur to discuss the identified problem and elicit buy-in and agreement. The preceptor will sign the agreement and promote ideas and discuss establishing a timeline. A meeting informing Clinical Experts of the project proposal will be crucial to the success of the project. The Simulation Specialist and Information Technology Specialist will provide additional support in scheduling and use of the simulation lab. Management, Clinical Experts, and support personnel will receive frequent updates regarding the project proposal via emails to promote support and inclusion.

Timeline

Milestones and a general timeline of events include an estimation of time beginning from the identification of the problem through the completion of the proposal. Week one will require a meeting with management to discuss the identified gap and discuss implementing practice change. A meeting with the Clinical Nurse Specialist Preceptor will occur to discuss the identified gap and proposed solution during week one as well. Performing a literature search to acquire evidence-based support will be completed during week two. A draft of the project proposal utilizing the evidence-based literature and data will be completed during week three. During week three, a follow-up meeting with the Preceptor will occur to discuss the draft of the proposal and elicit any further ideas or necessary resources for the project. This draft will include initial estimates of financial needs, equipment, and other resources required. Week three will also

include acquiring Organizational Approval to support the project proposal. During week four, several meetings will be set to solicit support and buy-in from management, peer educators, Clinical Experts, and staff nurses. During week four, a meeting with the Simulation Educator Specialist will occur to identify available times for the use of the simulation lab. During week five, a meeting with the Simulation Information Technology (IT) Specialist will be completed. A meeting with management, the preceptor, and Clinical Experts will occur during week five to update stakeholders on the progress. The development of course objectives, outcomes and specific scenarios for the course design will be done during week five with the guidance of the preceptor. Week six will be focused on the completion of the final project proposal.

Resources and Personnel

Required resources for the implementation of the proposed project include financial support for acquiring simulation scenarios, scheduled time in simulation lab, printing costs of the draft and final proposal, equipment necessary for the specific simulation activities, and staffing costs to attend courses. The simulation lab space is the designated area for the course. This lab comes equipped with mannequins, code equipment, and scenarios that will all be utilized in the course. Specific training from the Simulation Specialist and IT will be necessary resources as well.

Management, the preceptor, Information Technology personnel, and the Simulation Specialist are all personnel involved in the project proposal. Personnel directly involved in the project are Clinical Experts to teach the courses once initial training and competence have been established. Staff nurses of the organization will be required to attend the courses for initial training and at three-month intervals to reinforce the educational objectives.

Proposed Change Theory

Lippitt's Change Theory will be chosen to provide a framework for the project proposal. Lippitt's theory is composed of four elements: assessment, planning, implementation, and evaluation (Mitchell, 2013). Lippitt's theory utilizes a combination approach including identifying a problem and conducting a literature review to bolster support for the proposed change (Mitchell, 2013). Lippitt's theory is consistent with the proposed project as identification of a problem will occur, and a literature search will be conducted to provide substantial support for the proposal. Phase one involves a detailed plan given to stakeholders and developing a timeline which is agreed upon (Mitchell, 2013). Meetings with key stakeholders discussing the identified problem will occur. The development of a drafted project proposal will be completed. Phase two involves communicating with those affected by the proposed change by using interviews and focus groups (Mitchell, 2013). Clinical Experts, management, the preceptor and other identified essential personnel will be informed through meetings and discussions. Facilitators and barriers are identified during this phase (Mitchell, 2013). Identification of barriers will occur and determining facilitators will also occur. Some examples of this phase in the current proposal include meetings with management, support personnel, and Clinical Experts.

Phase three of Lippitt's change theory includes assessment of the change agent's motive (Mitchell, 2013). In the current proposal ethical responsibility of nurses to promote quality and safety are the motivating factors for implementing change (ANA, 2017) Phase four is the planning stage where a final draft is completed, and a timeline is established (Mitchell, 2013). A plan of action, final draft, and timeline will be established in conjunction with the preceptor. Phase five requires the identification of the change agent's role in the project (Mitchell, 2013). In

the current project proposal, the change agent will develop, initiate, and train the educators to implement the practice change. Clinical Experts prove competence in the new course and then begin training staff RN's. Phase six consists of the implementation phase which focuses on communication, feedback, progress, and teamwork (Mitchell, 2013). This phase also corresponds with maintaining change through ongoing training. The proposed mock code simulation training course will be required every three months as to promote optimal practice and achieve quality outcomes. Phase seven in the final phase of Lippitt's theory includes evaluation and withdrawal of the change agent (Mitchell, 2013). In the current proposal, the change agent will withdraw from the project and allow the Clinical Experts to continue with the developed program. Communication is essential every step of the way and fosters a positive environment for change.

Barriers to Implementation

The identification of barriers in the implementation of the mock code simulation training include financial considerations, required staff training time, and a need for change in behaviors (McCluskey & Middleton, 2010). Regarding behaviors, barriers to meeting the course goals and objectives may be due to fear, lack of motivation, and inadequate knowledge and skills related to nurses providing emergency care. Financial considerations include the increased need for staffing during the designated course times and costs associated with mock code equipment. Availability of the simulation lab to accommodate all nurses will also present an obstacle. Barriers and obstacles have been identified and considered in the project proposal. Solutions for financial considerations will be to appeal to management regarding the need for the proposed training course to support organizational goals and missions and provide best outcomes for all patients. Evidence will be disseminated to offer support for the proposal and the financial

considerations associated with implementation. Staff training will be offered at various times and dates to accommodate all schedules and decrease the disruption of normal scheduled activities. Simulation lab availability will be discussed, and flexibility will be maintained with regards to scheduling. Behaviors, attitudes, and buy-in are all essential to the success of the project. Transparency and frequent communication with the stakeholders will promote support in addition to providing evidence-based support. The identification of barriers will provide a resource for overcoming identified obstacles.

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