OKLAHOMA BOARD OF NURSING
2915 North Classen Boulevard, Suite 524
Oklahoma City, OK 73106
(405) 962-1800

Simulated Patient Care Experience (SPCE) for
Registered and Practical Nursing Programs Guidelines

I.   Purpose: Fully approved nursing programs-may substitute up to 30% of simulated patient care experiences (SPCE) for clinical hours for each clinical course consistent with Oklahoma Board of Nursing (OBN) Rule OAC 485:10-5-4.1(i). This guideline is applicable to students enrolled in nursing education programs leading to licensure as a Registered Nurse or Licensed Practical Nurse.

II   Process: Programs not on full approval status must submit and receive approval for a curriculum change request using the *Special Reports from Nursing Education Programs to the Board Policy* (OBN Policy/Guideline #E-06) prior to initiating simulated patient care experiences (SPCE) for clinical hours.

III.   Definitions:

        A.   Assessment – Refers to processes that provide information or feedback about individual students, groups, or programs by observations of progress related to knowledge, skills, and attitudes.

        B.   Clinical Learning Experience – A faculty-planned and guided activities designed to assist students to meet stated program and course outcomes and to safely apply knowledge and skills when providing nursing care to clients across the lifespan as appropriate to the role expectations of the graduates. These experiences occur in a variety of affiliating agencies or clinical practice settings including, but not limited to acute care facilities, extended care facilities, long-term care facilities, clients' residences, and community agencies (OAC 485:10-1-2).

        C.   Clinical Skills Laboratory – A designated area in which equipment and supplies are provided to simulate a clinical facility, allowing skills and procedures to be demonstrated and practiced (OAC 485:10-1-2).

        D.   Clinical Judgment – The art of making a series of decisions to determine whether to take action based on various types of knowledge. The student recognizes changes and salient aspects in a clinical situation, interprets their meaning, responds appropriately, and reflects on the effectiveness of the intervention. Clinical judgment is influenced by the student's previous experiences, problem-solving, critical-thinking, and clinical reasoning abilities (Elsevier Inc., 2013).

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 1 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

E. Clinical Reasoning – The ability to gather and comprehend data while recalling knowledge, skills (technical and nontechnical), and attitudes about a situation as it unfolds. After analysis, information is put together into a meaningful whole when applying the information to new situations (Elsevier Inc., 2013).

F. Clinical Scenario – The plan of an expected and potential course of events for a simulated clinical experience. The clinical scenario provides the context for the simulated patient care experiences, which can vary in length and complexity, depending on the objectives. The clinical scenario design includes:
    1. Student preparation;
    2. Prebriefing (briefing): review of objectives, instructions prior to implementation of scenario, questions, or other resources used in the scenario;
    3. Patient information describing the situation to be managed;
    4. Student objectives;
    5. Environmental conditions, including manikin, setting, or standardized patient preparation;
    6. Related equipment, props, and tools or resources for assessing and managing the simulated experience to increase the realism;
    7. Roles, expectations, or limitations of each role to be played by students;
    8. A progression outline including a beginning and an ending;
    9. Debriefing of experience; and
    10. Evaluation criteria (Elsevier Inc., 2013).

G. Coaching – A method of directing or instructing a person or group of people in order to achieve a goal or goals, develop a specific skill or skills, or develop a competency or competencies (Elsevier Inc., 2013).

H. Competence – Standardized requirement for an individual to properly perform a specific role. It encompasses a combination of discrete and measureable knowledge, skills, and attitudes that are essential for patient safety and quality patient care. (Elsevier Inc., 2013).

I. Constructivist learning theory – A theory that explains the nature of learning as a process through which learners create their own learning (Giddens, Caputi, & Rodgers, 2015).

J. Critical Thinking – A process that entails purposeful, goal-directed thinking and is based on scientific principles and methods (evidence) rather than assumptions or conjecture (Elsevier Inc., 2013).

K. Cueing (prompting) – Information that redirects the student to progress through the clinical scenario to achieve student learning outcomes (Elsevier Inc., 2013).

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 2 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

L.   Debriefing – The purpose of debriefing is to move toward assimilation and accommodation to achieve student learning outcomes. Debriefing follows a simulation experience and is led by trained faculty facilitator. Students' reflective thinking is encouraged, and feedback is provided regarding the students' performance (Elsevier Inc., 2013).

M.   Evaluation – A broad term for appraising data or placing value on data gathered through one or more measurements. It involves rendering a judgment and using formative and summative feedback to identify strengths and weaknesses. Evaluation measures quality and productivity against a standard of performance.

N.   Faculty Facilitator – OBN qualified nursing faculty employed by the nursing education program who provides guidance, support and structure during the SPCE. The faculty facilitator has specific simulation education provided by formal academic coursework, continuing education offerings, and/or targeted work with an experienced mentor.

O.   Feedback – Information given or dialogue between faculty facilitator, scenario role players, simulator, or peer with the intention of improving the understanding of concepts or aspects of performance.

P.   Simulation Fidelity – The degree to which a simulated experience approaches reality; as simulation fidelity increases, realism increases. The level of simulation fidelity is determined by the environment, the tools and resources used, and many factors associated with the students. Simulation Fidelity can involve a variety of dimensions, including (a) physical factors such as environment, equipment, and related tools; (b) psychological factors such as emotions, beliefs, and self-awareness of students; (c) social factors such as student and faculty motivation and goals; (d) culture of the group; and (e) degree of openness and trust, as well as students' modes of thinking (Elsevier Inc., 2013).
1.   Low Simulation Fidelity – partial task trainers, and/or static mannequins used for low level or basic skills training and not to be used in SPCE (See III.FF.);
2.   Medium Simulation Fidelity – SPCE with focused objectives to allow students to problem solve, perform a skill, and make decisions using simulator mannequins having programmable breath sounds, heart sounds, and/or pulses.
3.   High Simulation Fidelity – SPCE using full scale computerized human patient simulators or standardized patients that are extremely realistic and provide a high level of interactivity and realism for the student which allows for sequential decision-making events within an environment that mimics a clinical setting.

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 3 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

Q. <u>Guided Reflection</u> – Process used by the faculty facilitator during debriefing that reinforces the critical aspects of the experience and encourages insightful learning, allowing the student to assimilate theory, practice, and research in order to achieve student learning outcomes (Elsevier Inc., 2013).

R. <u>High-Stakes Evaluation</u> – An evaluation process associated with a simulation activity that has a major academic, educational consequence (such as a grading decision, including pass or fail implications; a decision regarding competency or progression) (Elsevier Inc., 2013).

S. <u>Human Patient Simulator</u> – A highly sophisticated, technologically advanced mannequin in adult, child, or infant size that integrates with computer software and supports the development of preplanned scenarios which mimic a wide variety of clinical situations (Simulation Task Force to Review the Use of simulation in Nursing Education, 2009).

T. <u>Moulage</u> – Techniques used to simulate injury, disease, aging, and other physical characteristics specific to a scenario. Moulage supports the sensory perceptions of students and supports the fidelity of the simulation scenario through the use of makeup, attachable artifacts (e.g., penetrating objects), and smells (Elsevier Inc., 2013).

U. <u>Pedagogy</u> – The art or science of instructional methods. The study of teaching methods, including goals of education and the ways those goals can be achieved.

V. <u>Prebriefing (Briefing)</u> – An information or orientation session held prior to the start of a simulated patient care experience in which instructions or preparatory information is given to the students. The purpose of the prebriefing or briefing is to set the stage for a scenario and assist students in achieving scenario objectives. Suggested activities in a prebriefing or briefing include an orientation to the equipment, environment, mannequin, roles, time allotment, objectives, and patient situation (Elsevier Inc., 2013).

W. <u>Psychological Safety</u> – A feeling (explicit or implicit) where in a simulation-based learning activity, students can speak up, share thoughts, perceptions, and opinions without risk of retribution or embarrassment (Elsevier Inc., 2013).

X. <u>Reflective Thinking</u> – The engagement of self-monitoring that occurs during or after a simulation experience. Considered an essential component of experiential learning, it promotes the discovery of new knowledge with the intent of applying this knowledge to achievement of student learning outcomes (Elsevier Inc., 2013).

Y. <u>Remediation</u> – The act or process of correcting a performance gap (Elsevier Inc., 2013).

Board Approved: 9/20/2016
Board Reviewed w/o Revision:
Board Revised:
OBN Policy/Guideline #E-11
Page 4 of 13
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

Z. Return demonstration/Competency check-off – Faculty evaluated performance of a skill/ competency at required level of performance as prerequisite for the SPCE.

AA. Safe Learning Environment – A conducive learning environment where students feel at ease taking risks, learning from mistakes, or extending themselves beyond their comfort zone.

BB. Scenario – See Clinical Scenario.

CC. Scenario Role Player – (also known as embedded participant/actor, such as family member, healthcare provider, standardized patient, patient, student, etc.) an individual who participants in the scenario. The participation may be assigned as positive, negative, neutral or as a distracter, depending on the objective(s), the level of the students, and the scenario. Although the scenario role player is part of the situation, the underlying purpose of the role may not be revealed to the students in the scenario or simulation.

DD. Simulation Learning Environment – A physical location which can be included within or ancillary to the clinical skills laboratory which has current, appropriate, and adequate financial support, equipment, supplies and resources to meet student learning outcomes within established budget.

EE. Simulation – A learning experience which replicates some or all essential aspects of clinical experiences using one or more typologies to promote, improve and/or validate student achievement of student learning outcomes.

FF. Simulated Patient Care Experience (SPCE) – Pertaining to or founded on simulated assessment and care of individuals, families, or groups in health care settings, as distinguished from theoretical. Learning in simulated clinical environment(s) permits opportunities for application of nursing practice during prebriefing (briefing), simulation, debriefing, and evaluation of the simulation. Standardized patients, medium or high simulation fidelity mannequins are required for SPCE. The experience allows the students to incorporate critical thinking, nursing processes, and nursing actions to meet student learning outcomes and manage the situation in a safe simulation learning environment.

GG. Skill/competence – Nursing intervention performed safely to a given standard.

HH. Standardized Patient – A person trained to consistently portray a patient or other individual in a scripted scenario for the purposes of instruction, practice, or evaluation.

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 5 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

II. <u>Student</u> – One who engages in a simulation-based learning activity for the purpose of gaining or demonstrating mastery of knowledge, skills, and attitudes needed to achieve student learning outcome (Elsevier Inc., 2013).

JJ. <u>Student Learning Outcome (SLO)</u> – A measurable result of the student's progress toward meeting a set of objectives. Expected outcomes are the change in knowledge, skills, or attitudes as a result of the simulated patient care experience.

KK. <u>Virtual Computer-Based Simulation</u> – Computer-based simulation or online resource that guides learning in a virtual healthcare environment where the patients and conditions are constantly changing are not synonymous with SPCE.
Assumptions:
1. The program uses policies and procedures to assure quality consistent simulation experiences for the students.
2. The educational institution identifies annual budget for faculty to participate in simulation-related professional development such as webinars, conferences, journals, clubs, readings, and certifications with a focus on simulation.
3. Each educational institution is dedicated to providing and sustaining simulation opportunities by providing adequate facilities, personnel, educational and technological resources, and equipment to meet the intended objectives.
4. The simulation learning, assessment, and evaluation environments will be areas where mutual respect among students and facilitator(s) is expected and supported (Elsevier Inc., 2013);
5. Professional integrity will be exemplified (Elsevier Inc., 2013);
6. Multiple methods of facilitation are available, and use of a specific method is dependent on the learning needs of the student(s) and the expected outcomes (Elsevier Inc., 2013);
7. Return demonstration/Competency check-off of all skills included within the SPCE are completed prior to the SPCE. Skill acquisition and task training alone, as in the traditional skills lab, do not qualify as SPCE and therefore does not meet the requirement for clinical learning experience/clinical hours (Virginia Board of Nursing, 2013);
8. Nursing programs will document the number and type of SPCE used to replace clinical hours on an annual basis; and
9. Virtual computer-based simulations provided through algorithms and predefined patient findings may be used up to **0%** of the 30% of allowable SPCE.

IV. The following established OBN guidelines must be met in order to substitute simulated patient care experience for clinical experiences.

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 6 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

A. One hour of SPCE, from prebriefing to the end of the exercise, to include student time in preparing on-site or off-site, is equal to one hour of clinical learning experiences in the clinical setting. (For example, if a current course has 300 clinical hours; then simulated patient care experiences = up to 90 hours and traditional clinical = 210 clock hours.)

B. Programs on conditional or provisional approval status must seek OBN approval to substitute simulation for clinical hours [(OAC 485:10-5-4.1(i)].

C. Simulated patient care experience student learning outcomes (SLO)
   1. Addresses the educational pedagogy and domains of learning (Elsevier Inc., 2013)
      a. Written using evidence-based concepts of cognitive, affective, and psychomotor domains, which challenge the student to become competent and confident through experience and self-assessment;
      b. Directly related to achievement of clinical objectives for which this SPCE is replacing;
      c. Are utilized to drive the simulation scenarios; and
      d. Contain measureable outcomes.

   2. Corresponds to the student's knowledge level and experience (Elsevier Inc., 2013)
      a. Based on the expected level of the student performance;
      b. Reflects intended outcomes of the experience;
      c. Includes components of client care (i.e., therapeutic communication, cultural competence, or establishing priorities); and
      d. Are designed to elicit clinical judgment and reasoning.

   3. Remains congruent with overall program outcomes (Elsevier Inc., 2013)
      a. Promote knowledge and application transference; and
      b. Includes skill performance and effective mastery to increase self-confidence.

   4. Incorporates evidence-based practice (Elsevier Inc., 2013)
      a. Evidence-based practice should be incorporated into simulated patient care experience scenario development, implementation, and debriefing using appropriate student learning outcomes.

   5. Incorporates holistic care principles (Elsevier Inc., 2013)
      a. Physical assessment and clinical skills;
      b. Therapeutic communication;
      c. Mental health assessment;
      d. Spiritual care;

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 7 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

> e.   Cultural sensitivity and competence (i.e., cultural cues, artifacts, and use of a language interpreter); and
>
> f.   Includes reflection on holistic and culturally competent care during the debriefing.

6.   Achievable within an appropriate timeframe (Elsevier Inc., 2013)

> a.   Completion of student leaning outcomes should be achievable within the designated timeframe.

D.   Model for Simulated Patient Care Experience

1.   Preparation is the responsibility of the faculty facilitator and includes:

> a.   Return demonstration/Competency check-off of all skills included within the SPCE are completed prior to the SPCE. Skill acquisition and task training alone, as in the traditional skills lab, do not qualify as SPCE and therefore does not meet the requirement for clinical learning experience (clinical hours) (<u>Virginia Board of Nursing</u>, 2013);
>
> b.   All simulation-based learning experiences begin with development of clearly written student objectives, which are available prior to the experience (Elsevier Inc., 2013);
>
> c.   Simulated patient care experience learning outcomes are used to guide preparation before the simulation, facilitation during simulation, and feedback or debriefing after simulation;
>
> d.   The experiences must include preparing the scenario, setting expectations, and considering how the scenario fits within curriculum or practice context;
>
> e.   Simulated patient care experience set up includes moulage and environmental staging to give a realistic feel to the scenario;
>
> f.   Equipment and technology must be in the clinical skills laboratory/ simulation learning environment and in working order before beginning the experience;
>
> g.   Simulated patient care experience must be current, specific, peer reviewed and based on evidence based practices;
>
> h.   A list of expected behaviors to ensure student learning outcomes must be developed and provided to students;
>
> i.   A list of potential cues to support students during a scenario must be developed (Elsevier Inc., 2013);
>
> j.   Students must be familiar with equipment and technology before the experience begins;
>
> k.   Students must have demonstrated competence on any skill required for the SPCE;
>
> l.   Scenario role players are determined and coached; and
>
> m.   Appropriate time allotment must be designated and maintained.

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 8 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

2. Prebriefing includes:
   a. An orientation or information session in which instructions or preparatory information is given to the students to set the stage for a scenario and assist students in achieving scenario objectives, the length of which can vary depending on the complexity of the simulation-based learning experience must occur.
   b. Providing ground rules to maintain a psychologically safe, noncompetitive environment, which provides for student confidentiality.
   c. Communicating student learning outcomes, including psychomotor competencies (Elsevier Inc., 2013).

3. Facilitation methods during simulation includes:
   a. Allowing the clinical scenario to progress without interruption, allowing the students to problem solve independently;
   b. Observing simulations and monitoring for appropriateness of students' interventions;
   c. Maintaining a constructivist instructional style, where facilitators provide opportunities for students to incorporate content and context through critical thoughts;
   d. Cueing (prompting) to redirect the scenario and guide students down the path of discovery;
      i) Examples of cueing includes laboratory results, phone calls from providers or other health care departments, directions from a family member, or equipment available in the room;
      ii) May be from the patient, via a live verbal stream, to alert the students to symptoms and direct assessment or attention to a particular problem;
      iii) Should coach the student to achieve key outcomes;
      iv) Should not distract from the student- focused simulation; and
   e. Coaching students to achieve the expected outcomes, if appropriate (Elsevier Inc., 2013).

4. Debriefing after the simulation includes:
   a. All simulation-based learning experiences should include a planned debriefing session aimed toward promoting reflective thinking (Elsevier Inc., 2013);
   b. Engaging students in debriefing;
   c. Acknowledging students' feelings and perspectives;
   d. Creating transparency in the communication and helping students achieve key student learning outcomes;
   e. Exploring students' decisions and actions and linking the simulation experience to authentic patient care;
   f. Facilitating feedback from standardized patients or peers;

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 9 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

g. Encouraging students to evaluate what they did well, what they need to improve, and offering suggestions on how students can improve their care in the future (Elsevier Inc., 2013);
h. Providing feedback and remediation directions;
i. Facilitation by a trained faculty facilitator competent in the process of debriefing;
j. Student guided reflection by faculty facilitator;
k. Facilitation by a person(s) who observes the simulation experience;
l. An environment that supports confidentiality, trust, open communication; self-analysis, and reflection;
m. A structured framework for debriefing; and
n. Congruence with the students' learning outcomes and outcomes of the simulated patient care experience.

E. Assessment or Evaluation of Student
1. Formative assessment
a. Used to provide information to students for improving performance and behaviors associated with the three domains of learning: cognitive (knowledge), affective (attitude), and psychomotor (skills);
i) Based on developmental objectives that are designed to (1) meet student outcomes, (2) provide feedback, and (3) remedy errors in thinking and practice;
ii) Accommodates students who need extra learning time;
iii) Appropriate for the level of experience of the students; and
iv) Specific to provide supplemental strategies for achieving student outcomes (Elsevier Inc., 2013).

2. Summative evaluation
a. Used to focus measurement of outcomes or achievement of student learning outcomes.
i) Standardized in format and in scoring methods;
ii) Accompanied by specific students' objectives;
iii) Appropriate in its level of fidelity to achieve student outcomes;
iv) Explained before the start of the evaluation process;
v) Held in an environment with equipment to which the student has been oriented;
vi) Based on pre-established guidelines pertaining to student errors;
vii) Conducted by trained objective observers or raters (Elsevier Inc., 2013);

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 10 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

viii) An evaluation of simulated patient care experience should occur using evaluation methods that can be analyzed and trended;

ix) Faculty facilitator establishes and obtains evaluation data regarding the effectiveness of the simulation experience; and

x) High-stakes evaluation with high-risk consequences is not recommended for SPCE.

F. Faculty Facilitator(s)

1. Nursing faculty who are proficiently trained to manage the complexity of all aspects of simulation. Each facilitator has ongoing specific simulation education provided by formal coursework, continuing education offerings, and/or targeted work with an experienced mentor (Elsevier Inc., 2013).

2. Each faculty facilitator clearly communicates the student learning outcomes and expected outcomes to the student(s) through:

a. Creating a psychological safe learning environment that supports and encourages active learning, repetitive practice, and reflection;

b. Maintaining realism of SPCE;

c. Using facilitation methods appropriate to the students' level of learning and experience;

d. Assessing and evaluating the acquisition of knowledge, skills, attitudes, and behaviors;

e. Using tools that have been tested for reliability and validity in a similar population or situation, when possible;

f. Using knowledge of best practice to identify knowledge and performance gaps;

g. Modeling professional integrity;

h. Fostering student learning by providing appropriate support throughout the simulation activity, from preparation through reflection; and

i. Providing constructive feedback and facilitating debriefing with the students by encouraging student self-evaluation and reflection, facilitating peer-to-peer evaluation, analyzing the simulation to provide meaningful feedback to allow the students to enhance their practice and using objectives and expected outcomes to frame feedback about students' performance (Elsevier Inc., 2013).

3. Each faculty facilitator has established a method of sharing student performance with clinical faculty.

G. Evaluation of the SPCE occurs after each SPCE using a standardized measure:

1. Quality of the course/SPCE event

2. Student satisfaction and self-confidence in learning

3. Appropriateness of educational practices

4. Accomplishment of student learning outcomes

5. Usefulness of technology, equipment and supplies

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 11 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

6.   Effectiveness of Faculty Facilitator

    H.   Documentation
        1.   The following documentation must be maintained for all SPCE:
            a.   Course syllabus
            b.   SPCE student learning outcomes as they relate to the clinical objectives.
            c.   Type of simulation
            d.   Number of SPCE hours substituted for clinical learning experiences
            e.   Methods of debriefing (Elsevier Inc., 2013)
        2.   Maintains documentation of simulation training and or mentorship from qualified vendor training, formal education in approved education, or other qualified training program (Clinical Simulation Laboratory Experience Evaluation and Faculty Competency in the Clinical Simulation Experience, 2009).
        3.   Documentation of the SPCE evaluations

V.   References

(2009, May). *Simulation Task Force to Review the Use of Simulation in Nursing Education.* Oklahoma City: Oklahoma Board of Nursing.

Berndt, J. (2014). Patient safety and simulation in prelicensure nursing education: An integrative review. Teaching and Learning in Nursing, 9, 16-22.

Clinical Simulation Laboratory Experience Evaluation and Faculty Competency in the Clinical Simulation Experience. (2009, August 26). Retrieved February 6, 2015, from Colorado Department of Regulatory Agencies: http://cdn.colorado.gov/cs/Satellite/DORA-Reg/CBON/DORA/1251631690394

Elsevier Inc. (2013). Standards of Best Practice: Simulation[SM]. *International Nursing Association for Clinical Simulation and Learning., 9*(6), Sii-Siii. doi: http://dx.doi.org/10.1016/j.ecns.2013.05.008

Fisher, D. & King, L. (2013). An integrative literature review on preparing nursing students through simulation to recognize and respond to the deteriorating patient. Journal of Advanced Nursing, 2375-2388.

Foronda, C., Liu, S. & Bauman, E.B. (2013). Evaluation of simulation in undergraduate education: An integrative review. Clinical Simulation in Nursing, 9, e409-e416.

Gaba, D. (2004). The future vision of simulation in health care. Quality and Safety in Simulation, 13 (suppl 1), i2-i10.

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 12 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines

Giddens, J. F., Caputi, L., & Rodgers, B. (2015). *Mastering Concept-based Teaching a Guide for Nurse Educators* (1 ed.). St. Louis: Elsevier Mosby.

Hayden, J.E., Smiley, R.A., Alexander, M., Kardong-Edgren, S., & Jeffries, P.R., (2014). The NCSBN National Simulation Study: a longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. *Journal of Nursing Regulation*, 5(2 Supplement), S4-S67.

Lapkin, S., Levett-Jones, T., Bellchambers, H., & Fernandez, R. (2010). Effectiveness of patient simulation manikins in teaching clinical reasoning skills to undergraduate nursing students: A systematic review. Clinical Simulation in Nursing, 6(6), e207-e222.

Nielson, JA, Maloney, C., Robison, R. (2003). *Internet-based standardized patient simulation with automated feedback.* Retrieved August 17, 2016, from: http://www.ncbi.n.m.nih.gov/pubmed/14728457

Oklahoma Board of Nursing Rules {Title 485}. (2015, August 27). Retrieved August 17, 2016 from: http://nursing.ok.gov/rules15.pdf

Organization, W. H. (2010). *Framework for Action on Interprofessional Education & Collaborative Practice.* Retrieved February 6, 2015, from Interprofessional Education Collaborative. org: https://ipecollaborative.org/About_IPEC.html

Sportsman, S., Schumacker, R.E. & Hamilton, P. (2011). Evaluating the impact of scenario-based high-fidelity patient simulation on academic metrics of student success. Nursing Education Perspectives, 32(4), 259-265.

Standards of Best Practice: Simulation [SM]. *International Nursing Association for Clinical Simulation and Learning. (2013).* Elsevier, Inc. Retrieved from: INACSL.org at http://www.inacsl.org/i4a/pages/index.cfm?pageID=3407

The Effect of High-Fidelity Simulation on Nursing Students' Knowledge and Performance: A Pilot Study. (2009, June). Retrieved August 9, 2016, from NCSBN research brief, Volume 40 at: https://www.ncsbn.org/09_SimulationStudy_Vol40_web_with_cover.pdf

The Use of Simulation in Nursing Education. (2013, March 19). Retrieved February 6, 2015, from Virginia Board of Nursing Guidance Documents: http://www.dhp.virginia.gov/nursing/nursing_guidelines.htm

Board Approved: 9/20/2016   OBN Policy/Guideline #E-11
Board Reviewed w/o Revision: Page 13 of 13
Board Revised:
P:/Administration/Executive/Policies/Education/E-11 Simulated Patient Care Experiences (SPCE) for Registered and Practical Nursing Programs Guidelines