

## [PILOT]

# NMNEC Policy on Calculating and Reporting Simulation Hours as Clinical Substitution

### Problem Statement

As NMNEC programs adapt to the educational delivery changes sparked by the COVID crisis, it has become apparent that programs are measuring the percentage of simulation activities administered in nursing clinical courses inconsistently.

- Some programs calculate the percentage based on a subset of contact hours that were identified by the program to be associated with direct patient care.
- Some programs calculate the percentage based on total number of lab contact hours (by college definitions of lab) for the course as a whole.

Program directors verbalized further confusion associated with how simulated activities for skills acquisition (skills performance competence) versus simulated activities that mirror more comprehensive patient care activities (cognitive/psychomotor synthesis) are calculated into or out of the simulation formulas.

This document serves to clarify the issue and provide overarching guidance so that NMNEC schools can speak more consistently to internal and external stakeholders about how our programs utilize and report programmatic simulation activities.

### Definitions

- Academic credit hours: The total number of contact hours assigned to a particular class based on college, accreditation, and USDOE rules. This number is used to award credits, qualify students for federal financial aid programs, and to pay faculty.
- Didactic credit hours: Lecture classes are usually 1:1, meaning that for every one hour spent in class per week that one academic credit hour is awarded.
- Clinical credit hours: The total number of contact hours associated with delivery of nursing skills lab activities and clinical/practicum learning experiences.
  - Clinical classes for community colleges is typically 3:1 – for every three hours in lab/clinical/preceptorship one academic credit hour is awarded.
  - Clinical classes for universities is typically 2:1 – for every two hours in lab/clinical/preceptorship one academic credit hour is awarded.
- Nursing Skills Lab Learning Experiences: Learning experiences which focus on acquisition of nursing skills needed to perform professional nursing tasks.
- Clinical/Practicum Learning Experiences: Direct, hands-on, planned learning activities with patients across the lifespan, interaction with the interprofessional team, and interaction with the patient's family and friends that are sufficient and appropriate to achieve the end-of-program student learning outcomes, program outcomes, and/or role-specific professional competencies, and are overseen by qualified faculty who provide feedback to students in support of their learning.

Clinical/practicum learning experiences are required for all nursing students enrolled in any undergraduate or graduate program, including all students enrolled in post-licensure undergraduate programs, graduate programs, all program options in any undergraduate and graduate programs, and/or certificate program options. (ACEN, 2020, retrieved from <https://www.acenursing.org/for-programs/glossary/>)

- Simulation: A technique that creates a situation or environment to allow persons to experience a representation of a real health care event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions (Society for Simulation in Healthcare) *Source: Lioce L. (Ed.), Lopreiato J. (Founding Ed.), Downing D., Chang T.P., Robertson J.M., Anderson M., Diaz D.A., and Spain A.E. (Assoc. Eds.) and the Terminology and Concepts Working Group (2020), Healthcare Simulation Dictionary—Second Edition. Rockville, MD: Agency for Healthcare Research and Quality; January 2020. AHRQ Publication No. 20-0019. DOI: <https://doi.org/10.23970/simulationv2>.*

### Simulation Usage

Simulation can be used in two ways:

- Skills acquisition
  - Formal and informal scenarios used to demonstrate skills and provide context to the learner so that they view the skill through the nursing scope of practice and responsibility. Can also be used to reinforce skills learned in previous semesters.
  - Provides psychomotor practice incorporating nursing-based decision making associated with the specific skill (planning, teaching, implementation, evaluation, documentation, delegation, etc.).
- Nursing clinical competency development
  - Formal scenarios where students demonstrate clinical reasoning and develop clinical judgement while incorporating their nursing knowledge and nursing skill into care for a simulated patient.

Simulation equipment of any type (high, mid, low, standardized patient, virtual, etc.) can be used separately or in multiple combinations for both skills acquisition and nursing clinical competency development.

- High-fidelity simulation equipment: Full-body computerized patient simulators that mimic the patient's responses to student's actions
- Mid-fidelity simulation equipment: Computerized patient simulators with basic physiologic functions
- Low-fidelity simulation equipment: Mannequins or task-trainers
- Simulated (standardized) patients: Persons who act as patients
- Virtual simulation equipment: Inclusive of computer-based clinical simulation programs and learning activities, virtual worlds, virtual reality equipment, etc.

### Assumptions

1. Nursing programs are committed to delivering high quality education while keeping students, staff, patients, families, and communities safe.
2. While NMNEC programs are aligned to a common curriculum, programs have the ability to determine for themselves how much time is spent between nursing skills lab and clinical/practicum learning experiences.

3. The New Mexico Board of Nursing (NMBON) does not prescribe how many lab, clinical/practicum hours are required by programs.
4. The NMBON allows substitution of simulation for up to 50% of total clinical/practicum experiences in pre-licensure RN curriculums.
5. The Accreditation Commission for Education of Nurses (ACEN) and the Commission on Collegiate Nursing Education (CCNE) are also not restrictive or prescriptive on lab, clinical/practicum hours.

### **Calculating and Reporting Simulation Hours as Clinical Substitution**

NMNEC nursing programs recognize Nursing Skills Lab and Clinical/Practicum learning experiences as a primary means of developing professional nursing competence with our students. Simulation is utilized in both Nursing Skills Lab and Clinical/Practicum learning experiences.

The following guidelines outline which simulation hours should be applied towards clinical substitution percentages:

- Simulation primarily focused on skills acquisition
  - Counted as Nursing Skills Lab Learning Experiences and are not calculated into clinical substitution percentages.
- Simulation primarily focused on nursing clinical competency development
  - Meet board of nursing requirements as well as accreditation and simulation standards as outlined in the *NMNEC Key Components of Computer-Based (Clinical) Simulation [CBCS] in Place of Clinical/Simulation* document and checklist (attached).
  - Counted as Clinical/Practicum Learning Experiences on a 1:1 ratio (1 hour of simulation = 1 hour of clinical) and are calculated into the clinical substitution percentages.

## Key Components of Computer-Based (Clinical) Simulation [CBCS] In Place of Clinical/Simulation

Online computer-based simulation activities (commonly referred to as virtual simulation activities) are being used in place of face-to-face clinical or simulation activities while nursing programs are unable to have their students in clinical settings or simulation labs. Consistency in what is considered a computer-based simulation activity is needed in order to meet program objectives as well as board of nursing requirements and accreditation and simulation standards. The New Mexico Nursing Education Consortium (NMNEC) is recommending the following key components when computer-based simulation activities are used in place of in-person clinical or simulation.

### Definition

**Computer-Based (Clinical) Simulation [CBCS]:** A simulation-based learning activity designed to provide an experience through the use of an alternative medium. Learners can complete specific tasks in a variety of potential environments, use information to provide assessment and care, make clinical decisions, and observe the results in action. Feedback can be provided during and after the interaction. (Also Known as Computer-Assisted Simulation, Virtual Reality)

Source: INACSL Standards of Best Practice: SimulationSM Simulation Glossary. (2016). *Clinical Simulation in Nursing*, 12, S39–S47.

<https://doi.org/10.1016/j.ecns.2016.09.012>

### Overall goals for Computer-Based Clinical Simulation

- Faculty is moving the student to new ways of thinking and to clinically problem-solve
- Faculty is facilitating the student to meet the course/level objectives and competencies
- Faculty are meeting simulation, accreditation, and state board of nursing standards.

### Requirements

- Clear expectations (student learning objectives) for the computer-based clinical simulation
  - Facilitate clinical decision making/clinical judgment
  - Align with meeting a course/level objective and competency
  - Align with curricular concepts
- Pre-briefing activity (synchronous or asynchronous)
- Computer-based clinical simulation
- Faculty facilitated debriefing (synchronous)
  - Faculty engagement with students to know what the students understand and don't understand as a result of the computer-based clinical simulation
- Evaluation of student (Use of Formative or Summative Clinical Evaluation tools recommended)
- Evaluation of the computer-based clinical simulation

(Sources: INACSL Standards; INACSL Glossary; *Clinical Hour Replacement in Face of COVID-19 Pandemic* Webinar on 03/19/2020; *Aligning Simulation within COVID-19 Contingency Plans* Webinar on 03/24/2020; Foronda, C. L., et al., (2020). *Virtual Simulation in Nursing Education: A Systematic Review*; NM Board of Nursing Rules & Regs; Benner, P. (2020, March 20). *Finding Online Clinical Replacement Solutions during the COVID-19 Pandemic*)

## Model for Computer-Based Clinical Simulation (CBCS) Checklist

<b>Title of CBCS</b>	
<b>Date of CBCS</b>	
<b>Level</b>	
<b>Course Number/Name</b>	
<b>School</b>	
<b>Clinical Hours for this CBCS</b>	
<b>Summary Description of CBCS</b>	
<b>Student Learning Objectives of CBCS</b>	
<b>Corresponding Course or Level Objectives that CBCS aligns with</b>	
<b>Corresponding Course Competencies that CBCS aligns with</b>	
<b>Concepts/Exemplars Addressed in CBCS</b>	
<b>Brief Description of Pre-Briefing Activity for CBCS</b>	
<b>Faculty-Facilitated Debriefing Conducted (Yes/No)</b>	
<b>Evaluation of the Student Conducted (Yes/No)</b>	
<b>Evaluation Summary of the CBCS</b>	
<b>Faculty Person Completing this Checklist</b>	