



## AMMENDED MEMORANDUM

TO: Regent Wade Norwood

FROM: Jeanine Santelli, PhD, RN, AGPCNP-BC, FAAN, Executive Director, ANA-NY in collaboration with:

Council of Associate Degree Nursing in New York State, Inc. (CADN)

Commission on Independent Colleges and Universities Clinical Practice Group

New York League for Nursing

New York Nursing Alliance

New York State Council of Deans of Baccalaureate and Higher Degree Nursing Programs

Simulation Educators of Eastern New York

DATE: January 31, 2020, Amended 7/10/20

RE: Simulation in New York State Nursing Education

### **OVERVIEW**

Nurse educators across New York State are facing challenges in finding quality, hands-on clinical experiences for nursing students. Clinical experiences are critical in nursing education. These experiences provide opportunities for students to assess, diagnose, plan, implement, and evaluate nursing care in a variety of practice settings. Nationwide nurse educators have noted that, in the evolution of the clinical environment, student experiences are increasingly curtailed in most health care settings (Hayden et al, 2014). Faculty report that the numbers of students permitted on clinical units are shrinking and the allowable activities are being restricted (i.e., starting IVs, taking blood sugar readings, passing medications, documenting in the health care record). It has even been reported that some settings are only permitting observation of nursing care with no direct patient contact, thus curtailing development of the clinical reasoning and decision-making skills needed to provide safe quality care. Key to any nursing education program is direct patient contact and direct practice and experience in providing nursing care.

Additionally, new nursing programs are being established in NYS, further limiting the number of available clinical placements. In some cases, nursing programs have limited their enrollment numbers based on the reduced availability of clinical placements. With these new limitations, faculty are forced to seek alternative settings and strategies, such as simulation, to provide high quality clinically focused learning experiences. As these challenges continue to escalate, we must explore the appropriate role of simulation pedagogy, particularly throughout pre-licensure nursing programs. There is precedent for, and research to support, this direction.

### **ADDITIONAL IMPACT OF COVID-19 ON NURSING EDUCATION**

In the wake of the COVID-19 pandemic, what was a critical issue has now become a catastrophic situation. Health care systems are either putting tight restrictions on clinical placements or completely eliminating these experiences for both undergraduate and graduate



nursing students. These restrictions threaten the progression and graduation of nursing students,



and, therefore, public health, as the nursing shortage is further exacerbated. Without high quality clinical learning experiences students may graduate with inadequate skills and clinical reasoning. Simulation is a standard facet of clinical educational experiences in half of the states across the country (Fauteux, 2020) and a few select programs in New York. Some studies herald simulated clinical environments as the gold standard in nursing education (Monaghan, 2015; Sawyer et al, 2015). Simulation must be equitably included for all qualified nursing education programs (see proposed qualification criteria below) as an option for some, but not all, clinical learning experiences in New York.

### **SIMULATION-BASED LEARNING EXPERIENCES (SBLE)**

Simulation-based learning experiences (SBLE) include unfolding realistic cases in which learners must notice patient conditions, interpret multiple data points and interactions, respond for improving patient status, and reflect to learn from the immersive experience (Lasater, 2007; Tanner, 2006). Simulation provides realistic, context-rich experiential learning in a safe environment and can be delivered in a variety of modalities (manikin-based; simulated participants; XR simulation spanning virtual, remote, screen-based and evolving modalities). Students can be involved in critical situations that they would be removed from in actual clinical settings for patient safety, such as a postpartum hemorrhage, prolapsed cord, cardiac arrest, chest tube or central line insertion, family care in a hospice/pending death situation, or diabetic emergency. Students can also directly experience the results of their decisions when in a simulation setting; whereas, in direct care clinical settings, students are not allowed to make bad/harmful decisions.

In simulation, educators can deliberately select clinical situations that all students can experience within the curriculum without hoping for, or leaving it to chance based on the current hospital census, or even neglecting population-based care beyond the hospital. An important part of any educational program is training the student on what happens when bad/harmful decisions are made, and this cannot be done on actual patients, but it can be effectively done in simulation (Donovan et al, 2018; Foronda & Bauman, 2014; Foronda et al, 2016; Gu et al, 2017; Johnson-Glenberg, 2018; Meakim et al, 2013; Rouke, 2020).

### **CURRENT ENVIRONMENT**

NYSED permits simulation as a supplement to nursing education only to replace practice laboratory experiences. To our knowledge, a few schools in New York have received approval for simulation substitution. In 2017, Pace University received approval to offer 25% simulation substitution in their accelerated bachelor's degree in nursing program. During the first two years of the pilot program, the school provided outcome data including licensure pass rates, retention and completion rates, and student and faculty satisfaction data. All outcomes were very positive, with retention rates increasing with the 25% simulation program.

Low fidelity simulators, task trainers, simulated participants, and role-play have been successfully used to enhance laboratory experiences as students familiarize themselves with professional roles and technical skills. However, there is a lack of uniformity and regulatory



guidance to allow programs to distribute clinical credit hours differently, by assigning a



percentage of required hours of evidence-based simulated clinical experiences in place of agency-based direct care experiences. Current NYSED regulations are silent on the use of simulation as a substitution for direct care experiences, and as such, simulation-based learning experiences are not permitted, in most instances, to count towards program clinical hours. Simulation-based learning experiences are currently permitted as program learning enhancements to direct patient care experiences. Further, there have been multiple verbal reports from NYSED that stated programs “can’t replace clinical hours with simulation, only lab hours” (report by Renee Gescedi, Associate in Nursing Education, NYSED, January 15, 2020). Despite this statement, a building body of research tells a different story.

### **ARGUMENTS FOR REGULATORY CHANGES**

As external pressures are limiting student clinical experiences, we must look to how a well-developed simulation program can help fill this clinical void. It is mutually agreed that simulation is not a replacement for all direct patient care; however, clinical simulation provides opportunities for students to develop their professional skills and critical thinking abilities (Aebersold, 2018; Davis et al, 2014; D’Souza et al, 2017; Hayden et al, 2014; Park et al, 2016; Weller et al, 2012; Zarifsanaiey et al, 2016). Simulation exercises allow students to “develop effective non-technical skills, practice rare emergency situations, and [provide] a variety of authentic life-threatening situations” (Kim et al, 2016) without compromising the patient’s well-being (Sanford, 2010).

While some may argue that simulation clinical learning is not the same as direct care clinical experiences, the research demonstrates clinical learning outcomes can effectively be achieved by simulation. There is no interest in eliminating experiences in clinical environments and that is not what is being proposed. Rather, there is value in combining both traditional clinical with quality simulation-based learning experiences that mimic clinical realities. It is important to note that it has always been the quality of an experience that dictates what the student learns. We know that the quality of the simulation experience from student preparation and scenario through debrief is critical to the value of the experience (Alinier et al, n.d.); however, this same statement also applies to direct care clinical settings. “Experts agree that it is not the number of hours, but the quality of the experience. If students are going to be placed in clinical settings where there is inadequate opportunity for hands-on experience, employment of simulation by capable faculty with meaningful debriefing may offer a better alternative” (NCSBN, 2020). If a student is only allowed to observe in a clinical setting, or their ability to provide care is limited to assistance in activities of daily living (nurse aide work), the clinical hours are merely “time served” and a higher quality educational experience would be provided in a simulation environment (Cummings & Connelly, 2015).

Following the 2014 landmark study conducted by the National Council of State Boards of Nursing (NCSBN), that demonstrated that up to 50% of clinical in simulation results in the same outcomes as in the clinical environment, more than half of Boards of Nursing (BON) reported having regulations to address the use of simulation (Bradley, et al, 2019). As of December 2019, 30 BONs have documented regulations for the use of simulation in a nursing program.



*Twenty-five BONs defined the percentage of clinical hours that could be replaced with simulation. Thirteen BONs allow up to 50% (FL, IA, KY, LA, MN, NH, NM, SC, SD, TN, TX, WA, and WI). Other states allow smaller percentages – 30% replacement (DC and OK), and 25% replacement (CA, IL, IN, MS, NV, VT, and VA). Four BONs with regulations did not specify (AL, GA, MO, and RI). Interestingly, some states vary the replacement depending on whether the simulation program is accredited. For example, Colorado allows up to 50% replacement of traditional clinical hours with simulation if the program is accredited but only 25% if the program is not. Some states have variations depending on the area of practice. For example, Ohio allows up to 50% replacement with mid- or high-fidelity simulation in pediatrics and obstetrics only and Michigan allows no more than 50% replacement for RN programs but allows up to 100% replacement with simulation in practical nursing programs for pediatrics and obstetrics courses only. This might be due to a lack of available placements (Baily, 2019).*

This blend of clinical practice strategies provides the opportunity for students to develop their interprofessional skills and critical thinking abilities. Use of simulation provides safe, high quality clinical practice experience thus preparing students to function at a higher level and meet program learning outcomes. This level of preparation results in the students providing better care and having a richer experience in the limited time that they are able to provide direct patient care in a traditional clinical setting.

## **RECOMMENDATION**

It is very important to keep in mind that nursing programs vary in their preparation of nursing professionals. A one-size-fits-all approach is neither safe nor appropriate. We are requesting that the NYSED regulatory guidelines, based on the best evidence, allow up to 50% of traditional clinical experiences to be replaced by simulation.

The NCSBN provides guidance to states to develop regulatory language concerning simulation (<https://www.ncsbn.org/9535.htm>). In addition, the document, “NCSBN Simulation Guidelines for Pre-licensure Nursing Programs” (NCSBN, 2016) provides “Model Rules” on the use of simulation in pre-licensure nursing education programs to be considered when drafting regulatory language. We encourage use of these guidelines as a starting point with additional input provided by representatives from the collaborating organizations listed above.

An extensive panel of experts from the International Nursing Association for Clinical Simulation and Learning (INACSL), American Association for Colleges of Nursing (AACN), National League for Nursing (NLN), Society for Simulation in Healthcare (SSH), Boards of Nursing, and NCSBN created guidelines for simulation programs and simulation faculty. These guidelines are based on the data from the NCSBN National Simulation Study (Hayden et al, 2014) and include the following: (1) There is a commitment on the part of the school for the simulation program; (2) The program has appropriate facilities for conducting simulation; (3) The program has the educational and technological resources and equipment to meet the intended objectives; (4) The program has lead faculty and sim lab personnel who are qualified to conduct simulation; (5) Faculty are prepared to lead simulations; (6) The program has an understanding of policies and



processes that are a part of the simulation-based learning experiences; and (7) The program



incorporates INASCL (2016, 2019) and The Association of Standardized Patient Educators (ASPE, 2017) best practice standards as appropriate. With more than half of all BONs adopting regulations to address simulation, and with the resources now available to guide this process, we believe it is time for NYSED to move in this direction.

We wish to collaborate with our colleagues at NYSED in the development of regulation to permit up to 50% simulation substitution in order to improve student learning outcomes while simultaneously solving many critical issues facing nursing education programs across the state. We believe this percentage, combined with objective criteria, will allow programs to develop their simulation labs in relation to the amount of simulation they believe is appropriate for their programs; and this will lead to better quality education for nursing students in New York State and will better prepare them for practice when they graduate and begin working in direct care.

## **PROPOSAL**

**Percentage of Clinical Replacement Hours:** Up to 50%

**Ratio of Simulation to Clinical Hours:** Not defined

**Definitions:** (Lioce L. et al, 2020)

Simulation: An educational technique that replaces or amplifies real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner (Gaba 2004).

Simulation based learning experience (SBLE): An array of learning activities that represent actual or potential situations in education and practice. These activities allow participants to develop or enhance their knowledge, skills and attitudes, or to analyze and respond to realistic situations in a simulated environment. (Pilcher, Goodall, Jensen, et al., 2012). SBLE can include XR simulation such as screen-based and virtual reality simulation, distance simulation, remote simulation, telesimulation, and other methods that apply quality simulation pedagogy to achieve clinical learning outcomes.

Simulated Participant: A person who portrays a patient (simulated patient), family member or other interpersonal role, or healthcare team member (such as provider) in a simulation to achieve the objectives of the simulation. A simulated participant may be referred to as a participant if they have been formally trained to act in the role in order to simulate a set of symptoms or problems used for health care education, evaluation, and research (Palaganas, et al, 2012).

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## **Simulation Program Requirements:**

1. The nursing education program shall have an organizing framework (for example the NLN/Jeffries simulation development framework) and provide adequate fiscal, human, technological, environmental, and material resources to support the simulation activities.





2. It is recommended programs refer to the NCSBN Simulation Program Guidelines for Prelicensure Nursing Education Programs regularly (for example annually) to document current status and plan for continued or improved alignment with the NCSBN Simulation Program Preparation Checklist - [https://www.ncsbn.org/16\\_Simulation\\_Guidelines.pdf](https://www.ncsbn.org/16_Simulation_Guidelines.pdf).
3. The quality of the simulation curriculum, delivery and debriefing should be evaluated at regular intervals.

### **Simulation Educator Requirements:**

1. Simulation activities must be managed by an individual who is academically and experientially qualified and who demonstrates currency and competency in the use of simulation while managing the simulation program. Certification as a Certified Healthcare Simulation Educator (CHSE) is recommended, not required.
2. All faculty involved in simulations, both didactic and clinical, shall have training in the use of simulation and shall engage in ongoing professional development in the use of simulation. Proof of ongoing faculty development in simulation should be documented and reviewed regularly (for example annually).
3. It is recommended programs refer to the NCSBN Simulation Program Guidelines for Prelicensure Nursing Education Programs regularly (for example annually) to document current status and plan for continued or improved alignment with the NCSBN Simulation Faculty Preparation Checklist - [https://www.ncsbn.org/16\\_Simulation\\_Guidelines.pdf](https://www.ncsbn.org/16_Simulation_Guidelines.pdf).

### **Simulations:**

To qualify as clinical replacement, simulations should meet the same pedagogical criteria as the studies that substantiate efficacy of simulation for clinical replacement.

For example:

1. Simulation activities should be developed utilizing a validated framework (for example, NLN/Jeffries simulation development framework, CMS framework, etcetera)
2. Pre-briefing and debriefing should be conducted via a validated, theory-grounded method (for example PEARLS or Debriefing for Meaningful Learning)
3. Student evaluation, when employed, should be evaluated with tools that are validated for use in simulation (for example Creighton Simulation Evaluation Instrument, Lasater Clinical Judgment Rubric).

Novel implementation methods that test beyond the existing body of research should gather substantive evaluation data to validate whether the methods are achieving clinical learning outcomes. Faculty should analyze and summarize results, including recommendations and rationales in a written, stored document.

**Faculty to student ratios** are not to exceed clinical ratios

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