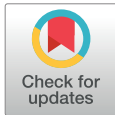




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## Methods and Measurement

# Questions Regarding Substitution of Simulation for Clinical

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Two long-standing questions regarding the use of simulation in nursing education came to the forefront during the COVID-19 pandemic: “How much supervised clinical experience can be replaced with simulation?” and “What ratio should be used to count these hours?” Within the United States, leaders and faculty at national, state, and institutional levels weighed the evidence and came to a range of decisions about how to proceed.

Many of the conversations about how much supervised clinical experience could be replaced with simulation focused on the National Council of State Boards of Nursing National Simulation Study (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014) which demonstrated high-quality simulation could be successfully substituted for up to 50% of supervised clinical experience. Although there remain inconsistencies in how policy makers apply this research (Breymer et al., 2015), it is generally accepted that some combination of supervised clinical experience, along with simulation, produces positive learning outcomes. However, there has been additional controversy around what ratio should be used to count simulation hours used to replace traditional supervised clinical hours.

Several studies demonstrate simulation offers a more concentrated learning environment than traditional supervised clinical experience (Curl et al., 2016; Sullivan et al., 2019). These studies suggest simulation is twice as potent as traditional supervised clinical and it may, therefore, be reasonable to count each hour spent in simulation as two hours spent in traditional supervised clinical. Without considering what learning objectives are best addressed

using which teaching strategy, there is a risk of reducing the complexity of experiential learning to reflect a simple equation where the endpoint is achievement of a required number of hours. A more intricate question that needs attention centers around optimizing the strengths of traditional supervised clinical and various types of simulation experiences to best meet learners’ needs. Specific questions that need to be answered include “what learning objectives can only be met in traditional supervised clinical experiences,” “what learning objectives can only be met in simulation,” and “when given the option between traditional clinical and various types of simulation, which option(s) most effectively and efficiently achieves learning objectives?”

Before simulation came on the scene, few educators questioned the value of traditional supervised clinical experience. There was an assumption that, with the guidance of faculty and preceptors, immersion in the clinical environment would necessarily meet student learning needs and prepare them to care for patients. With the expanded use of simulation, nurse educators have increasingly questioned not only the value of simulation, but the value of traditional supervised clinical experience. Time on task studies reveal that students are more engaged during simulation and also more likely to accomplish learning tasks related to QSEN competencies when compared with the same students’ activities during a supervised clinical experience (Cooper, Prion, & Pauly-O’Neill, 2015; Pauly-O’Neill, Prion, & Lambton, 2013). As researchers continue to wrestle with the question about what ratio should be used to count simulation hours used to replace traditional supervised clinical, it is important to identify which teaching strategy aligns best with which learning needs and design curricula that exploit the strengths of all available resources.

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During the COVID-19 pandemic, traditional supervised clinical experiences have been severely limited. However, if we are able to map desired learning outcomes to the most ideal teaching strategies, we will be better prepared to not only meet learners' needs during business-as-usual, but to make the case for substituting other experiential learning strategies during times of crisis.

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