

EDITORIAL

Clinical Simulation in Health care – contemporary learning for safety and practice

There has been enormous growth over the last decade in the use of ‘simulation’ in nursing and other health professional education for both students and practicing clinicians. The volume of literature published each week is testament to how educators are embracing this learning strategy. Although some may consider we have been using simulation within nursing education for decades, advances in equipment technology (i.e. manikins, task trainers and virtual platforms) has propelled simulation, in its contemporary forms, into the higher education and hospital arenas.

Worldwide interest and research output have led to government awareness of the potential for health care simulation to improve workforce capacity and prepare students for the clinical practice setting. The Health Workforce Australia (HWA) projects around Clinical Training Reform include \$94m of funding within the Simulated Learning Environments area (<https://www.hwa.gov.au/work-programs/clinical-training-reform/simulated-learning-environments-sles>). A diverse range of funded projects and programs are underway including a national training program for simulation educators and technicians (<http://www.aussett.edu.au/>). Governments in the UK, Canada and USA have also invested heavily in simulation program funding to prepare the health care workforce specifically in the areas of patient safety, competency and to reduce medical errors by creating safe, quality health care environments.

This special issue of Collegian provides a collection of views and reports of bodies of work related to simulation across five countries and several domains.

Simulation enables new ways of learning. GenY students in particular expect to use more technology, be more interactive and participate in learning (Black, 2010). Within Australia however, providing simulation learning experiences for large numbers of students can be challenging on a number of levels. One group of Australian authors (Rochester et al) draw from student perceptions and report on strategies for ensuring students gain the most from either participating or observing others in simulations.

A key experience that many health care educators provide for more senior students and practicing clinicians is managing a deteriorating patient. Exposure to such situations provides participants with an awareness of the importance of timely patient assessment, initial management and escalation of the situation for best patient outcomes. One group of Australian researchers (Buykx et al) provide an overview of their body of work in this important and emerging area of simulation learning.

There is strong interest and activity in simulation within specialty clinical practice areas reflected in two papers within this issue. A group of UK authors (Davies et al) outline their experiences and evaluation of a paediatric-focussed simulation learning initiative. In addition, a Canadian author (Goldsworthy) describe a flexible learning program, incorporating simulation, currently available across one province, to prepare graduates for critical care nursing practice.

Interdisciplinary learning, education and practice are what many aim for – and is the current ‘hot topic’ not only in clinical simulations but an important focus in healthcare education. Demonstrating the importance of interdisciplinary learning, the Society in Simulation and Healthcare (SSIH) convened leaders from twenty-two different interdisciplinary, professional, healthcare organisations in January 2012 during a preconference to discuss simulation-enhanced interprofessional education. Two papers in this issue discuss experiences in initiating interdisciplinary simulation through collaborative upfront processes (Engum & Jeffries), with one paper providing a comprehensive literature review of this area (Gough et al).

As the use of clinical simulations increase, the scope is boundary spanning across different disciplines and levels of learners. Increasingly in the literature, authors are reporting about simulation for post graduate students. In this issue an example of how clinical simulation is being used in an advanced practice nursing program in the US is described (Walton-Moss & O`Neil).

As health care simulation continues to grow and research provides insight into best practices, educational programs to support the development and delivery of simulation are maturing. Representative of emerging local and international collaborations, the development of educational resources and programs to support delivery of simulation learning activities in Australia and New Zealand, Brown et al report on activities and future plans of the Simulation Learning Environments (SLE) reference group of the Council of Deans for Nursing and Midwifery (Australia and New Zealand).

As reflected in the papers of this special issue, there is an enormous breadth and scope of simulation learning experiences. There have been major advances in the applicability of simulation in health care beyond practicing basic or advanced life support. Common learning objectives within contemporary simulation scenarios most often relate to: communication, patient assessment and team work. Aligning simulation learning experiences with key health priority areas and data relating to medical errors from patient safety groups aim to prepare students for the chaotic, complex, and unpredictable nature of practice in today’s health care facilities.

As we mature in the practice of simulation learning and delivery, questions are repeatedly raised about the possibility of replacing a portion of clinical experience with simulation. One driver for this is the immense pressure on hospitals and facilities to provide clinical experiences for increasing numbers of students. A multisite study currently underway in the USA will provide insight into the impact on nursing student outcomes of replacing <10%, 25%, or 50% of clinical hours with simulation (<https://www.ncsbn.org/2094.htm>). Results from this large, national, multi-site study may be an influencing factor to others’ opinions about how best to prepare health care students for professional practice, and to consider the frequency of simulation experiences for continuing professional development.

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