

SIMULATION EDUCATION ADVISORY COMMITTEE (SEAC) SYMPOSIUM FUTURE COLLABORATIONS IN SIMULATION IN TORONTO

November 14, 2019

SEAC Mandate

- Establish a coordinated network of education simulation activity and associated scholarly work within the Faculty of Medicine, university, and hospital network.
- Create a repository of information about education simulation expertise/ resources within the Faculty of Medicine, university, and hospital network.
- Remove barriers, streamline processes and increase access to simulation equipment and resources.
- Leverage opportunity and innovation within the network to advance education simulation.
- Position the Faculty of Medicine for the future with respect to curriculum change and renewal.

SEAC Deliverables

- Regular meetings since 2016
- External review in 2018
- Simulation inventory in January 2018 and November 2019
- Recommended fee structure for simulation activity (draft 2019)
- Common simulation fellowship (draft 2019)
- Gaining national recognition

Symposium Overview

The SEAC Symposium brought together 93 individuals from the University of Toronto (U of T) simulation community, including representatives of undergraduate and postgraduate medical education, continuing professional development, hospital simulation centres and programs, medical students, residents, fellows, and health disciplines. The Symposium provided an opportunity for participants to discuss collaborations in simulation and prioritize future plans.

Symposium Keynote Address

Dr. Richard Cherry, Associate Dean, Learning with Technology & Simulation, Western University addressed the topic of *How Organizations Can Move Forward*. Dr. Cherry was a member of the External Review team (along with Dr. Elizabeth Sinz, Associate Dean, Clinical Simulation, Penn State University) that visited the University of Toronto and its network of hospitals in 2018. He noted the following about the Faculty of Medicine simulation community:

- Committed, capable leaders;
- Multiple, high functioning simulation programs;
- A distinctive desire to collaborate; and
- Participants are seeking i) role clarification between the university and hospital, and ii) opportunities to rationalize use of resources.

With the vision, leadership, and resources available in Toronto, Dr. Cherry identified four key domains to be addressed as our simulation community moves forward:

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| <p>People – We simulate with people to prepare for real health care experiences. Simulation is a social learning experience; it is done for people, by people and with people. We can work on improving the experience for the people involved through faculty development, building capacity, and formally recognizing contributions.</p> | <p>Technology – Technology does not create simulation, it’s the biproduct. We need to consider how new technologies like AI and VR are creating a new paradigm, and position ourselves to assess and direct these new technologies in simulation.</p> |
| <p>Culture – We should recognize the value of simulation in changing people and organizations, and therefore in changing our culture. Simulation culture (i.e. excellence in care delivery) should be the exemplar that becomes the culture of the organization</p> | <p>Organization – Simulation allows us to poke holes in traditional organizational silos. Simulation educators, curriculum developers, technicians and instructional digital media developers can help us think about what we’re trying to do and help us achieve it across disciplines and departments.</p> |

Sharing Simulation Learnings

Dr. Samir Grover presented a theoretical approach to endoscopy simulation that matches task complexity to skill level and can be applied to other disciplines. He identified progressive models of simulation as: basic knowledge, basic technical skills, complex technical skills, and non-technical skills, i.e. integrated scenario simulation, critical thinking, and communication skills. His study found that improving one’s non-technical skills like communication, leadership, etc., helps to improve technical skills.

Priorities and Opportunities for Future Collaboration

Opportunities for future collaboration were identified as: involving nursing and other health professions in implementation of competency by design; using simulation to close the gap between clinical quality and education quality in hospitals; and leveraging simulation to think about safety and quality, e.g. collaborate around space design, debriefing exercises, etc. It was suggested that the Faculty of Medicine should establish a Division of Simulation in order to prioritize simulation and really support forward movement. Other priorities included:

- Competence by Design
- Health disciplines collaboration
- Innovation and scholarship in simulation:
 - Education
 - Patient safety
 - Health systems design
 - Product development

Round Table Discussions – Key Take Away Messages

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| <p>Simulation and Continuing Professional Development – Barriers and Opportunities with Dr. Richard Cherry</p> | <p>Continuing professional development and faculty development were recognized by the participants as important spheres for increased simulation activity. There are several existing, well developed simulation programs that use a variety of simulation modalities (role play through to mannequin based simulations) and are delivered in situ - in clinical environments. The reward of MOC credits - even higher level credits such as Royal College Section 3, does not seem to be a significant driver for CPD participants. Other barriers to increasing simulation for CPD include timing of the events for busy professionals, optimizing location and costs for delivery. Programs have been more successful when continuing education and simulation are explicitly integrated and form a vital part of overall mission and vision of the organization.</p> |
| <p>Issues and Opportunities in CBME with Dr. Glen Bandiera</p> | <p>We need to create a more seamless and efficient process by which users can review and access sim resources across the city. A forum for regular exchange of ideas and resources across sites is helpful and should be maintained.</p> <p>The use of in-Situ sim for team-based training linked to quality and safety initiatives within sites has a great deal of potential to change culture and advance safety. It is starting to happen but must be more systematic and widespread.</p> |
| <p>Opportunities for Collaboration – How can Simulation Centres support or learn from one another? with Emily Louca</p> | <p>Overall, the programs/participants were very eager to collaborate and the discussion was very informative.</p> <p>In summary, the “Opportunities for Collaboration” table discussed leveraging the strengths of different programs to either learn from each other or collaborate on projects, reach out to other programs to support business case development, leveraging opportunities to connect through local events/social media/listserv and share information about our programs through newsletters or other publications (ex. SEAC survey).</p> |
| <p>Ethical Considerations in Simulation with Dr. Latika Nirula</p> | <ul style="list-style-type: none"> - No consistent ethics framework for guiding simulation design, delivery that we know of - CAMH beginning this work locally and seeking opportunities for collaboration with SEAC members - Opportunity to co-develop from the ground up with patients, families, SPs and other key stakeholder groups as a UofT simulation community - Acknowledgement that local contextual adaptations may be necessary but value in doing this important and necessary work together |

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| | <ul style="list-style-type: none"> - Need to apply a critical lens to our work from an equity and social justice perspective so we are not further amplifying the care disparities and lack of representation through our simulations (recognizing our position of privilege in our work as sim designers) - Consider what it means to co-create authentically with underserved populations |
| How do we align needs of health disciplines with those of medical learners? with Dr. Douglas Campbell | Faculty of medicine needs to work with other Faculties (e.g. Nursing) to encourage shared curriculum opportunities across simulation programs |
| Faculty Development in Debriefing with Dr. Alison Freeland | |

Posters Presented at the Symposium

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| <p>Title: Initiating A Sustainable Interprofessional Paediatric Mock Code Program Using High-Fidelity Simulation In A Community Hospital</p> <p>Authors: Karen Fleming, Darlene Baldaro, Dianne Rice, Sheri Ferkl, Dr. Ronik Kanani, Dr. Melanie Ostreicher</p> |
| <p>Title: Shifting the Safety Culture: Using simulation to build capacity in team-based incident review at a mental health hospital</p> <p>Authors: Latika Nirula, Anika Saiva, Stephanie Sliemers, Faisal Islam, Nicole Thomson</p> |
| <p>Title: “First 5” – Improving Quality and Safety through the Introduction of In-situ Code Blue Simulations</p> <p>Authors: Lory Lee, Christine Leger, Kristen Daly, Vasuki Parmalingam</p> |
| <p>Title: ICE3: A Simulation Debriefing Tool Based on Transformative Learning Theory</p> <p>Authors: Filipe Nadir Caparica Santos, Deven Chandra</p> |
| <p>Title: The future of simulation is not created; it is collaboratively co-created</p> <p>Authors: Delon Pereira</p> |
| <p>Title: Resuscitative Hysterotomy Model</p> <p>Authors: Sue Zelko</p> |
| <p>Title: Impact of augmented reality on procedural skills acquisition in a simulation-based training curriculum for polypectomy: A randomized controlled trial</p> <p>Authors: Michael A. Scaffidi, Nikko Gimpaya, Joshua Satchwell, Colleen Parker, Catharine M. Walsh, Samir C. Grover</p> |
| <p>Title: Modifying a Fishbowl Simulation Technique to Teach Conflict Management to Point-of-Care Staff</p> <p>Authors: Beverly Kramer, Ben Hartung, Diana Goliss, Jerry Anim-Ansah, Cathy Smith</p> |
| <p>Title: The Development of Focused Cardiac Ultrasound (FOCUS) Image Interpretation Module</p> <p>Authors: Azad Mashari, Joshua Hiansen, Moshira Mahran</p> |
| <p>Title: Workflow associated with new electronic health record in the operating room – a simulation-based study</p> <p>Authors: Elaine Ng, Clyde Matava, Karim Jessa</p> |
| <p>Title: Improving Self-Efficacy through Simulation for IMGs Transitioning To Fellowship Programs in Anesthesia</p> <p>Authors: Filipe Nadir Caparica Santos, Susan Glover Takahashi</p> |
| <p>Title: Integration of Endovascular Simulation at Peter Munk Cardiac Centre</p> <p>Authors: Sean Crawford, Sean Balmain, Sebastian Mafeld, Massimo Tarulli, Arash Jaber, George Oreopoulos</p> |
| <p>Title: 3D Virtual Reality Surgical Simulator for Spinal Decompression</p> <p>Authors: Christina Ding, Amanda Hope, Hikmat Sahak, Michael Hardisty, Joel Finkelstein, Cari Whyne</p> |