

A Virtual Competency-Based Academic Half-Day On Concussion For Primary Care Residents: Exploring Peer-Learner-Residents' Feedback and Impact on Self Efficacy

Julia Taylor¹, Denyse Richardson^{2,3,4}, Alice Kam^{2,5,6,7}

¹Faculty of Medicine, University of Toronto; ²Division of Physical Medicine and Rehabilitation, Department of Medicine, University of Toronto; ³Department of Physical Medicine and Rehabilitation, Queen's University; ⁴Providence Care Hospital; ⁵Toronto Western Hospital, University Health Network; ⁶North York General Hospital; ⁷Toronto Rehabilitation Institute, University Health Network

Introduction

- Concussions are the most common traumatic brain injury, affecting an estimated 200,000 Canadians annually¹
- Family Physicians are often the first point of contact for patients with suspected concussion and must therefore be competent in their management²
- A 2017 survey of University of Toronto family medicine residents found 12% reported having no concussion training and 33% believed seeing a family physician was unnecessary for concussion care³
- There is a need for a dedicated Spiral Integrated concussion curriculum within the UofT Family Medicine Residency program

Aims

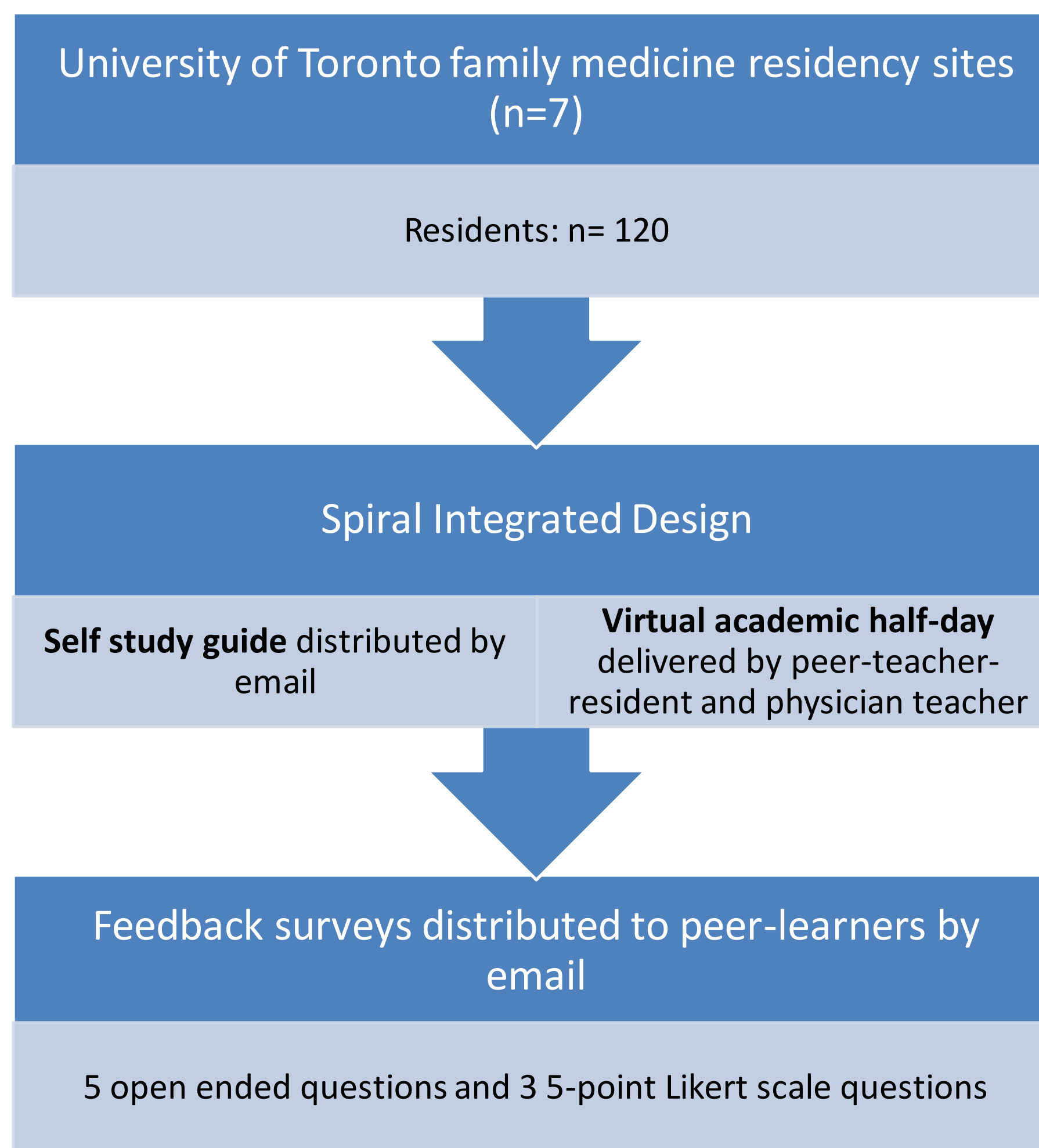
1. To elicit University of Toronto family medicine Peer-Learner Residents' feedback on a virtual competency-based concussion curriculum composed of a self-study guide and academic half-day
2. Evaluate effects of the curriculum on Peer-Learner-Residents' confidence in managing concussion symptoms

Methods

- The Spiral Integrated Design was conducted at 7 University of Toronto family medicine residency sites from July 2022 to June 2023.
- REB approval was obtained through the University of Toronto (#40656). There is no funding to disclose
- A self-study guide was first distributed to all peer-learners

Methods (Continued)

- A 2-hour virtual academic half-day was delivered for each site by a peer-teacher-resident and a physician-teacher
- Feedback surveys were distributed to peer-learner participants by email immediately following the academic half-day
- Feedback surveys collected resident-peer-learner feedback on the curriculum through open-ended response
- Self-reported confidence in managing six common concussion symptoms was assessed using a 5-point Likert scale



Findings

- Feedback survey participation rate was 20% (n= 24 of 120)
- Mean self-rated confidence on concussion symptom management improved significantly on all survey items after delivery of the curriculum (mean 0.67-0.83-point increase, p<0.001 for all survey items)

Findings (Continued)

- Based on peer-learner feedback, the following curriculum enablers and challenges were identified:

Curriculum Enablers	Curriculum Challenges
<ul style="list-style-type: none">• Interaction: direct peer-teacher and peer-learner interaction through breakout rooms• Contextual learning: content was contextualized for peer-learners through case-based teaching	<ul style="list-style-type: none">• Content: peer-learners wanted more focus on Return to Activity guidelines and medication use for symptom management

Conclusions

- A virtual competency-based concussion curriculum composed of a self-study guide and academic half-day, delivered by resident peer-teachers is an effective tool to increase resident confidence in their self-efficacy to manage common concussion symptoms
- This virtual curriculum is a flexible and valuable tool which could enrich concussion education delivery both locally and in distant communities

References

1. Statistics [Internet]. Brain Injury Canada. 2022. [cited 21 Aug 2023]. Available from: <https://braininjurycanada.ca/en/statistics/#Concussion>
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3. Mann A, Tator CH, Carson JD. Concussion diagnosis and management. Can Fam Phys. (2017) Jun;63(6):460-6.

Contact: juliac.taylor@mail.utoronto.ca

