An Innovative Model for Interprofessional Education and Practice: A Student-Run Interprofessional Rehabilitation Medicine Clinic

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ABSTRACT

Interprofessional patient-centred care improves health outcomes and may lower cost of care. Despite this, students graduating from health care programs often do not receive adequate training to integrate into an interprofessional team. This commentary proposes that interprofessional student-run clinics should be integrated into formal health and human service curricula to serve as an innovative model to implement interprofessional education. A student-run rehabilitation medicine clinic can offer needed services to underserved communities, thereby improving their access to care for patients with multiple and complex chronic diseases. Additionally, it provides a unique and important educational experience where students can learn about cost efficiency, patient advocacy, and collaboration while developing their skills in the management, monitoring, and delivery of quality care.

KEYWORDS: *interprofessional, student-run clinic, collaboration, undergraduate healthcare education, patient care*

INTRODUCTION

According to the 2005 CanMEDS Physician Competency Framework, in the modern multiprofessional environment where the complexity and delivery of patient-centred care is rapidly increasing, it is imperative for physicians to be able to collaborate effectively in an interprofessional setting.[1,2] The inclusion of such interprofessional collaboration in the delivery of healthcare is not surprising given not only the need for a more sustainable and innovative use of human health resources but also an emergent aging population characterized by a marked prevalence of chronic illnesses that necessitates an effective team of diverse health and social care professionals to coordinate their care.[3] Research demonstrates that interprofessional teams may not only lower costs, decrease patients' length of stay, and reduce medical errors, but that they also provide higher patient satisfaction and ultimately enhance patient care outcomes.[2,4-9] Despite this, health care students typically graduate from programs which train collaboration in isolation from students of other disciplines.[10] Furthermore, a 2005 Cochrane review suggested a deficiency in collaborative work among professionals and proposed interprofessional education initiatives as a potential solution.[11]

To further signify the importance of implementing ways of increasing interprofessional preparedness upon graduation, several international agencies such as the World Health Organization (WHO), the Organization for Economic Cooperation and Development (OECD), the World Federation of Medical Education (WFME), and the Institute of Medicine (IOM) have emphasized the significance of interprofessional education (IPE) and practice.[6,12] There is an emerging number of proposed methods to implement and evaluate IPE such as interprofessional team building workshops,[8] interprofessional education days, interprofessional simulation activities,[7] as well as small and large group panel presentations and interactive exercises.[10] In this commentary, we propose the model of a student-run interprofessional rehabilitation medicine clinic as another method for teaching collaborative competencies as one of the IPE opportunities for health and human service students.

IPE Definition

The following is a definition of IPE described in 2002 by the Centre for the Advancement and Interprofessional Education and later expanded by the American Association of Colleges of Pharmacy Interprofessional Education Task Force:[13, 14]

"Interprofessional education involves educators and learners from two or more health professions and their foundational disciplines who jointly create and foster a collaborative learning environment. The goal of these efforts is to develop knowledge, skills, and attitudes that result in interprofessional team behaviours and competence. Ideally, interprofessional education is incorporated throughout the entire curriculum in a vertically and horizontally-integrated fashion."

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PROPOSED MODEL: A STUDENT-RUN INTERPROFESSIONAL REHABILITATION MEDICINE CLINIC

The model we propose involves collaborative assessment during a patient encounter, team discussion (including the patient), and an interprofessional plan of care (Figure 1). This initiative will take place in an out-patient primary care rehabilitation clinic which is located within a tertiary care hospital and is fully equipped with individual treatment stations, reception, and shared clerical spaces. The interprofessional team is composed of health care students and supervisors from the disciplines of medicine, physiotherapy, and occupational therapy. Together, they will work with individual patients over a span of three to five weeks depending on their individual treatment plans. The student-run clinic would serve patients with varied health conditions primarily from rehabilitation medicine, including those with neurological conditions (e.g. stroke and multiple sclerosis), orthopaedic (e.g. post-arthroplasty and discectomy), cardiovascular, and respiratory illnesses (e.g. chronic obstructive pulmonary disease), and those with concurrent endocrine conditions (e.g. diabetes) and physical deconditioning. Various aspects of patient care are performed under the direct supervision of the respective supervisor who,, together with students, form a team that assumes responsibility of care for the patient. This model focuses on interprofessional interaction and planning and promotes explicit collaboration across professions in the context of a student-run clinic.

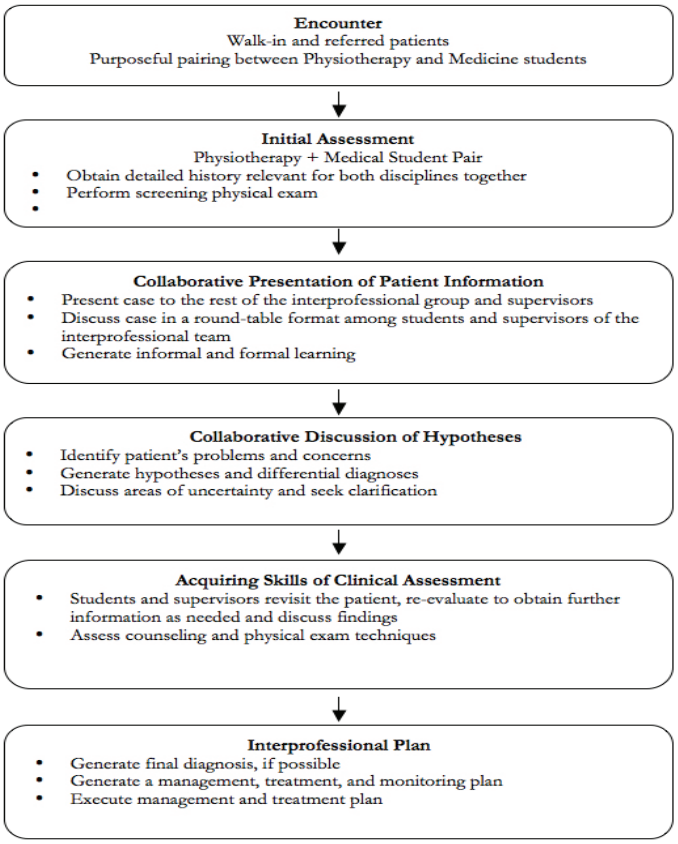

Figure 1. Proposed method for a student-run clinic IPE learning experience.

IPE IN THE CONTEXT OF A CLINIC

The focus of the student-run clinic is two-fold: service and learning, which together can satisfy the development of an interprofessional curriculum while meeting the needs of the community.

Service

A commitment to social responsibility is recognized as an important motivation among educators and universities.[15] To achieve this, the clinic should be 1) located in a community setting and 2) focused on the needs of the community.[16,17] The clinic has a strong component of rehabilitation medicine where patients with complex social and medical conditions are being cared for and whose needs are not being adequately met elsewhere.

Learning

The second focus is modeled around meaningful learning objectives that are shared by all professions. This learning focus would allow students to develop and foster program-specific skills such as taking histories, presenting cases, as well as working with others to assess, provide treatment, and monitor individual patient plans. Together, these learning experiences satisfy the students' respective curricular requirements.[18] In addition, participation in a student-run clinic allows students to fulfill collaborative competencies that are shared and reinforced among allied health educational programs.[19,20] Namely, by employing a range of teaching and learning strategies through small group learning, the clinic provides an ideal opportunity for students to engage in a clinical setting mediated by respect, mutual trust, and an enhanced understanding of each other's profession.[21] It will also allow students to better recognize their own limitations while familiarizing them with the valuable resources offered by other health care professions to complement patient care while mitigating inaccurate attitudes and perceptions based on stereotypes and assumptions.[1,22]

WHY STUDENT-RUN

There are many advantages to implement IPE in a student-run setting, both from the perspective of students and of the patient being served. A free student-run clinic can offer needed services to the community, improve access to care for underserved patient populations, and may appeal to patients in a way other providers do not.[18] Some of these appealing factors may include additional time with the patient and operating flexibility to serve patients whose needs are complex and multifactorial.[18,23] Conversely, one of the drawbacks of such a clinic would be the time consuming nature of a teaching clinic and an inexperienced collaborative learning setting. From the students' perspective, Hoffman *et al.* found that students were attracted to IPE experiences because of the possibility of enhancing patient care, advancing their careers, and learning more about diverse disease conditions.[24] In such a setting, students play an integral role in logistical planning and managing the clinic while learning the principles of cost-efficiency, resource allocation, patient advocacy, monitoring and delivery of care to the underserved.[25] Taken together, the service,

learning, and student-run components of this type of clinic can potentially provide a unique and important academic-community partnership currently not provided by didactic curricula.

CHALLENGES

Traditionally, attitudinal differences among various faculties in regards to the need for IPE have been recognized as one of the barriers to initiation of IPE.[26] However, the health and human services program objectives share similar visions with respect to the importance of collaborative patient-centred education and its incorporation into their respective curricula.[27] The success of garnering support for starting an initiative such as this is primarily driven by the support and enthusiasm of students, dedicated faculty members, policy makers, and the local health authority.[28]

One of the potential obstacles in the implementation of this initiative is the identification of a cadre of well-trained clinical supervisors competent in rehabilitation medicine and interdisciplinary team education.[29,30] Additional anticipated barriers include providing a continuum of care by the same students over multiple visits for a patient as students rotate through shifts. Furthermore, finding sustainable sources of funding to attract and reimburse supervising instructors, providing medical equipment, and addressing administrative costs present additional challenges.

To address some of these concerns, we would like to propose that the student-run interprofessional clinic should be integrated into undergraduate medical curricula. In their work at the clinical education ward at the Karolinska Institute, Ponzer *et al.* and Hylin *et al.* found that introducing IPE in undergraduate education provided lasting positive learning outcomes that may promote future collaborative care.[31,32] However, in trying to move this objective forward, juggling high curricular demands, as well as scheduling conflicts across disciplines are further anticipated challenges as the various programs may schedule clinical experiences at different stages of their respective curricula.[29]

EVALUATION

Looking forward, one of the most important aspects of the model includes the evaluative process, particularly measured outcomes with qualitative methods that appraise the effectiveness of the clinic in enabling collaboration.[33] The clinical supervisors should dedicate time for open discussion, evaluation, and adjustments of teaching methods. Jacobsen *et al.* also advocated for meetings daily, weekly, as well as on an ad hoc basis to allow for cooperation between tutors and the project manager.[34]

THE FUTURE

We hope that the pilot student-run clinic, that includes students and supervisors from various healthcare programs, will serve to integrate interprofessional learning experiences in the clinical teaching setting. A long term objective for medical curricula is to expand the interprofessional team to incorporate other health care disciplines such as dietetics, pharmacy, and nursing in order to better serve the target population while fostering the ideals of interprofessional care. It is our hope that educational institutions will embrace interprofessional education and collaborative learning through the formal incorporation of student-run interprofessional initiatives. This serves as a unique and important part of improving patient care as well as an opportunity to engage in innovative teaching and learning that meets the university's mission, goals, and strategic planning.

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Medicare in BC: Choosing an Evidence-based Future

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ABSTRACT

Health care in Canada is a contentious topic that sparks much debate. Discussions on the future of Medicare pit public and profit-driven health care delivery models against each another, often with wait times at the forefront of the dispute. By examining the current legal challenges in British Columbia, analyzing the peer-reviewed evidence, and exploring various initiatives that decrease wait times without profit motives, we strive to illustrate the importance and feasibility of maintaining all five central pillars of the Canada Health Act: accessibility, universality, comprehensiveness, public administration, and portability.

KEYWORDS: *Medicare, health care, Canada, public sector, private sector*

Canada's health care climate is often portrayed in the media as confused and fraught with critical problems, pitting public and for-profit models against each other. The debate focuses around several key issues: the role of investor-owned, for-profit delivery and private insurance; the most appropriate wait times in a publicly funded health care system; the successes and failures of private financing and profit-driven delivery in health care in other countries; and the alternative nonprofit driven solutions. As medical students we are charged with critically appraising evidence to extract the most accurate information. So what does the evidence reveal? We will look at the court case of *Canadian Independent Medical Clinics Association v. Medical Services Commission of British Columbia* (CIMCA case) and examine peer-reviewed literature to gain an evidence-based perspective on how best to deliver and finance health care in Canada.

In January 2009, the CIMCA and a group of privately owned clinics and surgical facilities, including the for-profit Cambie Surgery Clinic and False Creek Surgical Centre in Vancouver, British Columbia, launched a claim against the B.C. provincial government. They argued that four sections of the B.C. Medicare Protection Act violate the Canadian Charter of Rights and Freedoms by preventing patients from accessing the medical care of their choice and physicians from providing privately funded care for medically necessary services.[1] The Medical Services Commission launched a counterclaim, arguing that the privately owned clinics had engaged in the practice of "illegal extra billing," wherein the clinics bill the patients for medically necessary services exceeding the amount paid by the provincial medical service plan.[2] Section 20 of the Canada Health Act states that if a province allows any physician to charge a patient more than what is provided publically for a medically necessary procedure, the federal government must intervene. Therefore, extra billing may place the province at risk of serious financial penalties.[3] CIMCA maintained that it was unconstitutional to disallow patients to seek privately funded health care in the face of increasing wait times; however, the provincial government believed that CIMCA "intended to cause economic loss to the province."[3]

At issue in the CIMCA case was a model of private health care integration called a parallel public-private system. In this system, patients could pay, either out-of-pocket or through privately held insurance, for faster access to treatments that are normally publicly funded. According to the Romanow report,

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