

Student-Run Clinics: Opportunities for Interprofessional Education and Increasing Social Accountability

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Abstract

Background: Collaborative practice is a necessary component of providing effective, socially responsive, patient-centred care; however, effective teamwork requires training. Canadian student-run clinics are interprofessional community service-learning initiatives where students plan and deliver clinical and health promotion services, with the assistance of licensed healthcare professionals.

Methods and Findings: In this article, we use a reflective approach to examine the phenomenon of student-run clinics in Canada. First, we briefly review the history of student-run clinics and then describe one particular clinic in detail. Then, drawing on the experiences of student-run clinics across the country, we identify common themes and challenges that we believe characterize these programs.

Conclusion: Student-run clinics in Canada emphasize health equity, interprofessionalism, and student leadership. As more student-run clinics are developed, both nationally and internationally, co-ordinated research efforts are needed to determine their effects on students, institutions, communities, and healthcare systems. If educators can learn to collaborate effectively with student leaders, student-run clinics may be ideal sites for advancing learning around interprofessionalism and social accountability.

Keywords: Interprofessional education; Community service learning; Student-run clinics

Introduction

*Whenever I am with energetic young people
... I feel like a recharged battery.
— Nelson Mandela*

Collaborative practice has been identified as a key component of providing effective, socially accountable, patient-centered care [1]. Interprofessional education (IPE) aims to impart knowledge, skills, and attitudes that will enable future health-care professionals to function effectively in collaborative care environments. IPE occurs on occasions when two or more professions learn with, from, and about each other to improve collaboration or quality of care [2].

Community service learning (CSL) is an educational approach that combines community service with explicit learning objectives, preparation, and reflection [3]. As such, it is a valuable tool in the delivery of education that aims to foster socially accountable practice in health professionals [4,5] (see Table 1 for a list of potential benefits of CSL). When CSL activities are interprofessional, students have opportu-

nities to develop collegial relationships, to understand the complementary roles of the various professions, and to practice collaborative competencies like communication, conflict resolution, and shared decision-making. In turn, collaborative teams are able to provide a wider range of services, potentially deepening the impact on the communities involved.

Table 1

Benefits of community service learning

- Calling attention of current and future practitioners to the health needs of underserved areas.
- Development of connections between the different health system partners, in particular with underserved communities.
- Exposure of community members, including youth, to positive examples of health professionals.
- Development of leadership and management skills among students.
- Countering the phenomenon of “vanquishing virtue” (that is, the tendency for students to become less altruistic as a function of professional socialization). [6,7]

Canadian student-run clinics are organizations composed of students from a variety of disciplines that collaboratively plan and deliver healthcare and health promotion services with the supervision and assistance of licensed healthcare professionals. By combining work with an underserved community, practice that is relevant to future careers, interprofessional training, and the behind-the-scenes skill sets associated with clinic management, student-run clinics may be a “full basket” CSL experience. As such, they have the potential to deliver meaningful changes for students, communities, and academic institutions—in short, for the health system as a whole. Unfortunately, very little is known about the student-run clinic movement in Canada, or the degree to which these programs align with the principles of IPE and CSL.

Objectives

In this article, we use a reflective approach to examine the phenomenon of student-run clinics in Canada. First, we briefly review the history of student-run clinics and then describe one particular clinic in detail. Then, drawing on the experiences of student-run clinics across the country, we identify common themes and challenges that we believe characterize these programs. Finally, we speculate on the potential for optimizing these novel learning environments in the future.

Background

Student-run clinics have been operating in the United States since the early 1960s, where they arose in response to demands for low-cost or free community-based health and health promotion services. Currently, it is estimated that there are approximately 110 American student-run clinics operating from more than 49 medical schools [8], with numbers increasing dramatically during the past ten years.

Historically, these clinics have made a substantial contribution to the social safety net, primarily serving the poor and uninsured. By definition, students take primary responsibility for operational management of student-run clinics. Often, these projects are spearheaded by medical students and provide primarily acute biomedical care. However, it is increasingly being recognized that to optimize care in underserved communities, the involvement of several disciplines is required.

The first Canadian student-run clinic, the Community Health Initiative by University Students (CHIUS) was founded in Vancouver, British Columbia, in 1998 (with doors opening for clinical service in 2000). Since that time, several other student-run clinics have opened across the country (see Table 2 for a comprehensive list), and a number of additional clinics are currently in development.

Table 2
Student-run clinics in Canada

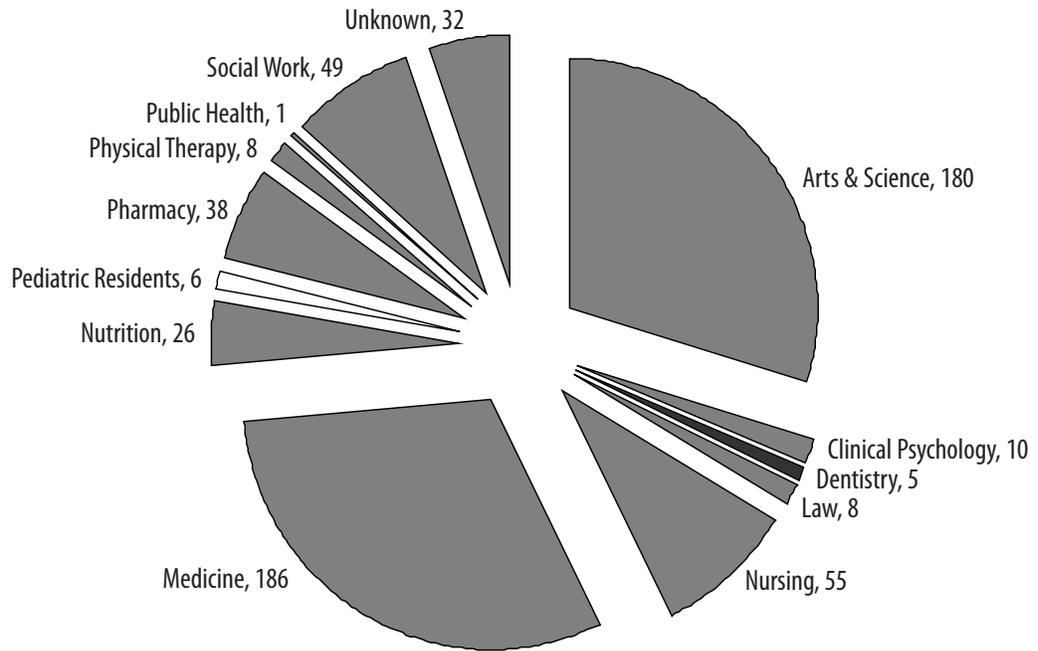
Clinic Name	Location	Website/Contact Information
Community Health Initiative by University Students (CHIUS) Clinic	Vancouver, British Columbia	http://www.chius.ca/chius.htm
Student Health Initiative for the Needs of Edmonton (SHINE) Clinic	Edmonton, Alberta	http://www.shineclinic.ca
Bridges Student-Run Clinic (BRSC)	Calgary, Alberta	http://www.ucalgary.ca/studentrunclinic/about
Student Energy in Action for Regina Community Health (SEARCH) Clinic	Regina, Saskatchewan	http://www.reginastudentclinic.com
Student Wellness Initiative Toward Community Health (SWITCH) Clinic	Saskatoon, Saskatchewan	http://www.switchclinic.ca
Winnipeg Interprofessional Student-Run Health (WISH) Clinic	Winnipeg, Manitoba	www.wishclinic.ca
Interprofessional Medical and Allied Groups for Improving Neighbourhood Environments (IMAGINE) program	Toronto, Ontario	http://www.torontomeds.com/imagine
Community Health Initiative with McMaster Education (CHIME) program (health promotion services only)	Hamilton, Ontario	http://www.chimeonline.ca

Case study: The Student Wellness Initiative Toward Community Health (SWITCH)

One example of a Canadian student-run clinic is the Student Wellness Initiative Toward Community Health (SWITCH; www.switchclinic.ca), which began operating from Saskatoon’s Westside Community Clinic in October 2005. Development of SWITCH began in 2003 when a small group of University of Saskatchewan medical students saw a video of Vancouver’s student-run clinic (CHIUS) and decided to estab-

lish a local version based on the CHIUS model. Recruitment of students from other colleges began, and a steering committee was formed with representation from all participating disciplines (see Figure 1 for numbers of students involved by discipline).

Figure 1:
**Student volunteers at the Student Wellness Initiative Toward
Community Health (SWITCH) Clinic, by discipline (2008-2009; N= 603)**



SWITCH found partners in the University of Saskatchewan, which houses most of the student volunteers, and the Saskatoon Health Region – Primary Health Care. A third partnership was formed between SWITCH and the only primary healthcare centre located in Saskatoon’s inner city, the Westside Community Clinic, a co-operative wellness centre that agreed to be SWITCH’s host clinic. SWITCH also has close working relationships with a number of community-based organizations, and with two other institutions that train healthcare professionals (The University of Regina and the Saskatchewan Institute of Applied Science and Technology). With the help of almost three hundred student volunteers and forty professional mentors annually, SWITCH has grown into an active interprofessional primary healthcare centre providing after-hours clinical, social, and health promotion services to clients. Over the years, approximately 1500 students have chosen to participate in this community service learning opportunity. Most of these students have been volunteers that received no formal academic recognition for their work.

As an incorporated not-for-profit organization and registered charity, SWITCH operates three four-hour shifts weekly (Monday and Wednesday evenings and Saturdays), providing after-hours interprofessional general and specialist clinical care, social services (food, conversation, telephone, advocacy, childcare, client trans-

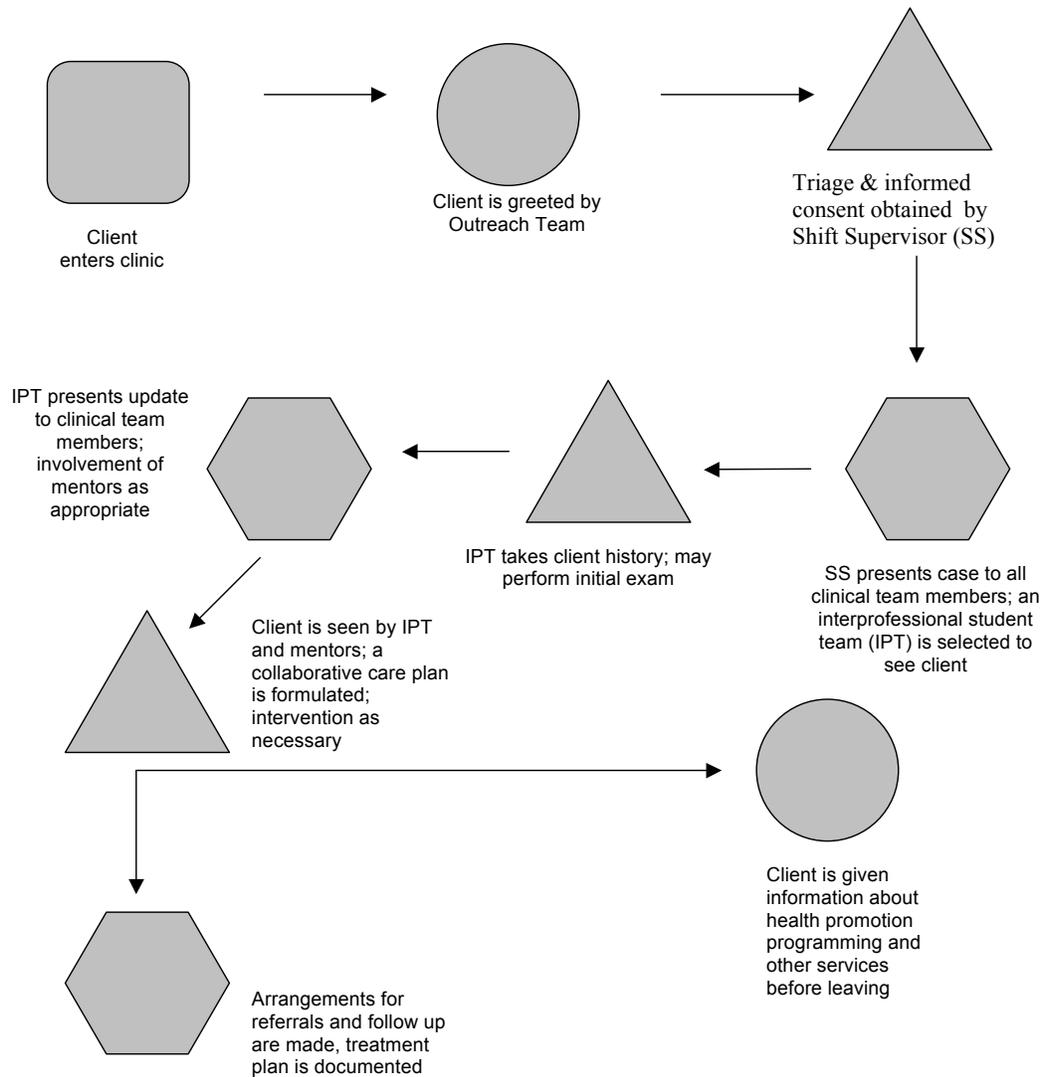
portation), and health promotion programs to inner-city residents. Governance and day-to-day operations are overseen by the SWITCH Council (board) and the Program Committee, both of which are composed of students representing all of the involved colleges. Additionally, students chair the two advisory groups: the Faculty Committee, composed of those faculty members who act as liaisons from their respective colleges to SWITCH, and the Partners in Planning Committee, which involves representatives from each of SWITCH's three partners. The council meets weekly to discuss clinic operations, budgeting, programming, human resources, fundraising, events, policy, and strategic planning. SWITCH staff consists of a full-time co-ordinator and a part-time volunteer co-ordinator, nutrition supervisor, cultural support advisor, and receptionist. In addition, each shift is staffed with a physician and three to four other licensed healthcare professionals (mentors), which encourages an interprofessional and collaborative environment.

Unlike some student-run clinics, there is minimal staff overlap between SWITCH and the host facility, Westside Community Clinic. SWITCH and Westside Community Clinic share a receptionist, a few physicians, and one nurse practitioner. Despite operating separately, there is a shared vision and philosophy that allows for excellent relations and mutual support.

At SWITCH, students fulfill four functions on each shift according to their college and level attained in their program. Prior to working a shift, however, students, staff, and mentors all complete a "pre-brief" session, which emphasizes respect for the host community and sensitivity to cultural, linguistic, and economic factors. In addition, the cultural support mentor works with the organization to ensure that the clinic environment is welcoming and that community voices are being heard. Arts and science and first-year students from professional health science colleges comprise the Social/Outreach Team, who prepare and serve food, provide childcare, help with programs, keep client statistics, and converse with clients in the waiting room.

When clients present for clinical services, they are triaged by the shift supervisor—a student of any discipline who has completed specialized training. Interprofessional clinical teams of two to three students include an upper-level medical, nursing, or physical therapy student trained to take a history and perform a basic physical exam, and a senior student from any of the other health disciplines. Counselling is provided by upper-level social work, clinical psychology, educational psychology, or psychiatry students who have participated in SWITCH's in-house mental health training sessions and work with mental health mentors (e.g., social workers, clinical psychologists). After the initial assessment, the appropriate mentors are consulted by students in the consultation room, where all clinical team members have an opportunity to provide input into the treatment plan. Because of the range of expertise available on any given shift, this model is ideally suited to the needs of individuals who face multiple barriers to health. At the end of each shift, there is a debriefing or reflection session led by the shift supervisor, where every individual who worked the shift has the opportunity to reflect on their experience, to ask questions, and to provide suggestions for future shifts, which are taken back to the SWITCH Council (see Figure 2 for an illustration of patient flow through SWITCH).

Figure 2:
Flow chart for patients seen at the SWITCH clinic



Case example

The working model at SWITCH is perhaps best illustrated with reference to a particular patient, who we'll call Gerald. Gerald is a 57-year-old man who came into SWITCH for coffee and food on a weekly basis. One day, he was encouraged by the outreach team to seek medical services, as he was complaining of a sore throat and congestion. Following triage by the shift supervisor, he was seen by a senior medical student and a junior physical therapy student. During the history, it emerged that Gerald had Type II diabetes that was not being regularly monitored. The students received permission to test his blood sugar, which was unacceptably high. The physical therapy student provided information about a free exercise program run by SWITCH and Westside Community Clinic. The dietician mentor helped him to work out a week's menu and provided information about diabetes and diet. Social work students provided him with pamphlets outlining resources for accessing

affordable, healthy food and determined that he would be eligible for additional funding for groceries through social assistance because of his condition. Nursing provided him with a free home blood glucose testing kit. A pharmacy student and the family physician evaluated his medication history and prescribed a new regimen. The family physician advised symptomatic therapy for a viral upper respiratory tract infection. The entire visit was clearly recorded on Gerald's medical chart to guide future care. Gerald then returned weekly for ongoing medical care and counselling for depression.

Evaluation

I knew that there were many struggles that people of the core neighbourhoods endure which stem from poverty, and my experiences with SWITCH have given me the opportunity to put faces and humanity to the statistics...the core neighbourhoods did not make me as uncomfortable as some others feel, but the more time I spend going to the clinic and being in the area, the more beauty I see. (SWITCH Volunteer)

It will give you a different perspective on what's possible...on how what we often talk about and dream about can actually become reality. (SWITCH Mentor)

Initial efforts evaluating SWITCH have been encouraging. A process evaluation conducted during the first year of operation revealed that SWITCH was effectively serving the target population and that satisfaction among both students and mentors with their experience was high. Program evaluation efforts since that time are ongoing. Each year SWITCH sees close to 300 student volunteers and professional mentors from almost 20 different disciplines, reflecting the remarkably broad scope of involvement.

Students, staff, and mentors work together to provide services and programs to an average of 64 (8 clinical, 56 social) clients each shift. Clients are primarily of First Nations or Métis ancestry and from disadvantaged socioeconomic conditions. Demographic data, services accessed, and information on presenting concerns are routinely collected and reviewed by the SWITCH Council to inform the development of programs and services. For example, after evaluation data revealed that a large proportion of individuals (approximately 20% of clinic patients) were accessing social work or clinical psychology services for counselling, a counselling stream that allows for ongoing mental health services to be provided was established in 2007. Some SWITCH volunteers participated in a study examining community-based educational experiences and beliefs about poverty and health [9]. This study suggested that participation in SWITCH was associated with a change in attitudes toward individuals living in poverty, and satisfaction data indicated that students valued the "real life" experiences they had at the clinic. More recently, a program of research was jointly proposed by faculty at the University of Saskatchewan and SWITCH students, with the aim of learning more about how CSL contributes to the

personal and professional development of students, including building critical awareness and skills for ongoing civic engagement related to health and social inequities. Research initiatives are also underway in other Canadian student-run clinics, including prospective studies of the impact of participation in these clinics on students' future career choices, studies looking at the nature of interprofessional collaboration and learning during clinic shifts, and chart review studies examining quality of care and clinical outcomes.

Student-run clinics: A Canadian model

The SWITCH program clearly meets the definition of IPE in that collaboration and mutual learning are built into all aspects of the organization, from the composition of the council to the shared management of clinical cases on shift. Furthermore, the emphasis on working with community members and on preparation (orientation) and reflection (debriefing) is consistent with principles of CSL. But do other Canadian student-run clinics operate similarly?

To answer this question, a core group of students and faculty from SWITCH and WISH (the Winnipeg Interprofessional Student-Run Health Clinic) worked to identify common themes and challenges, with input from CHIUS (Vancouver) and SHINE (the Student Health Initiative for the Needs of Edmonton). We then used Internet searches, social networking, and emails to host universities to locate other student-run clinics, contacted representatives from these clinics, and invited them to participate. When we were unable to speak with a representative from a clinic, we compared our model to information about the clinic that we could find online (e.g., published vision and mission statements). In April 2010, a group of students and faculty travelled to The All Together Better Health conference in Sydney, Australia, to present this information through posters, talks, and a round-table discussion.

Core values of Canadian student-run clinics

Our discussions revealed several common themes across different student-run clinics. After reflection, we grouped these into a model with three "pillars," which we called health equity, student leadership, and interprofessionalism, reflecting the focus on underserved communities, student experience, and the cross-discipline collaboration that characterized all of the different projects. We then considered the most common challenges faced by these organizations and some of the solutions presented.

Health equity

All of the Canadian student-run clinics explicitly identify the provision of service to marginalized or underserved populations as a core mandate. Although Canadians have universal healthcare coverage, it is widely recognized that there continue to be great disparities in access to health services and in health outcomes. As a result, Canadian student-run clinics have uniformly been established in underserved communities in partnership with community organizations. In addition to providing clinical services, Canadian student-run clinics provide health promotion

programming, which may include educational activities (e.g., smoking cessation workshops, vaccination clinics, needle exchanges, good food stores, collective kitchens, homework programs, community baby showers, and sharing circles). Many of these programs do not target specific health conditions, but rather the underlying social factors that are key determinants of health status. Communities often collaborate with students to develop and deliver these programs.

Student leadership

As in American student-run clinics, students in Canadian clinics assume leadership roles in all aspects of clinic operations and administration, including scheduling student volunteers and professional mentors, planning and implementing health promotion programs, triaging patients, budgeting, fundraising, and engaging with faculty and community. Within this general framework, clinics vary in their relationship to relevant stakeholders (e.g., universities, communities, healthcare regions) and the degree of autonomy that students have. Clinical operations that involve patient care are performed by interprofessional teams of students with the supervision of licensed healthcare professionals, who help ensure quality of care and accountability. Students report that this type of environment provides a safe space for learning without pressure or fear of negative evaluation from instructors.

Interprofessionalism

In direct contrast to their American counterparts, where IPE is rare, using a holistic, interprofessional, or team-based approach is another core value of Canadian student-run clinics, and one that was repeatedly emphasized and valued by the students and mentors we spoke to. In the student-run clinic, patients are seen by teams of students in various stages of training from different health science professional programs. Learning is explicitly multi-directional; students are mentored by their peers and more advanced students of their own and other disciplines, by licensed healthcare professionals, and by patients themselves. Because students work with real patients, they gain hands-on experience and practical skills in patient interaction that are difficult to simulate using “role-playing” activities with actors or problem-based learning exercises in class. In turn, each student brings a unique set of knowledge, skills, values, and life experiences that enhances the learning of other team members.

Challenges to Canadian student-run clinics

All student-run clinics face challenges and barriers. Unlike the United States (<http://www.studentrunfreeclinics.org>), Canada does not have a national organization of student-run clinics, although efforts are currently underway to develop one. Representatives from the growing number of Canadian clinics have been meeting annually since 2007 at a day-long workshop to network, hear presentations, and talk with students across Canada about where each project is in its trajectory of development. In 2007 and 2008, the workshop was held in conjunction with the annual Association of Faculties of Medicine of Canada conference. In subsequent planning

meetings, it was decided by the Student-Managed Interprofessional Health Initiative Leadership Event (SMIHILE) Steering Committee that the workshop should be held in tandem with the annual National Health Science Students Association (NaHSSA) conference, which is Canada's largest conference planned by and for health science students. NaHSSA was established in 2005 and is the first national interprofessional student association in the world (see <http://www.nahssa.ca/en/gateway>). In addition to hosting an annual conference, this organization provides networking and resource opportunities to local chapters. SMIHILE offers those university students particularly interested in learning more about how to start a student-run clinic an opportunity to network with those already engaged with a project. Through these forums, students have the opportunity to share resources and ideas, to collaborate on larger projects, and to develop innovative strategies for addressing common concerns. These include risk management, continuity and quality of care, recruitment and retention of volunteers and staff, funding, and sustainability.

Malpractice and liability insurance

One of the most daunting issues is ensuring that student volunteers, mentors, and staff are all covered by malpractice and liability insurance. Many mechanisms for coverage are possible; one of the most promising is universities developing a free, zero-credit course that allows students to be covered year-round by educational malpractice insurance. A distinct advantage of this approach is that it creates opportunities for greater integration with coursework in the future. Other possibilities include integrating clinic activities into existing courses (e.g., practica) or arranging coverage through the host clinic. Mentors are typically required to carry their own personal liability insurance and to provide evidence of this prior to working a shift.

Continuity of care and patient flow

The very structure of many student-run clinics (relying on volunteers and rotating mentors from various disciplines) means that, in many cases, repeat patients are seen by different students and professionals each time they come for services. Good communication and a good relationship with the host clinic/organization are two critical tools to ensure that hundreds of students, mentors, and staff are able to deliver consistent care. Recording relevant health information in a way that is thorough, consistent, and clear is a key element in compensating for lack of continuity.

There are concerns that the inconsistency of personnel may impede the development of trusting relationships with patients who see changing faces on their health care team. We have observed that patients who receive exemplary healthcare often return. The value of being part of the educational experience is stressed to patients, and many take pride in their role as teachers; however, there are certainly those who would prefer to see the same healthcare providers each visit. These individuals, whether new or regular clients of the host clinic, are typically provided with information about services available elsewhere or encouraged to return during regular clinic hours.

As with any healthcare clinic, supervision of clinical personnel is an area of potential concern. To ensure both the continuity of care and an effective and appro-

priate student experience, all students are continually observed by the shift supervisors, mentors, and in many cases, staff, while they are on shift. If a concern arises, all members of the clinical team are encouraged to discuss it openly, if appropriate, or to contact the shift supervisor or, in some cases, clinic manager, to effect a solution. In the case of students doing practica at a student-run clinic, an evaluation strategy is proposed by the student's university and academic supervisor and then discussed collaboratively with their field supervisor at the student-run clinic, who is either staff or a mentor who works regularly at the clinic on a pre-arranged schedule with the student. A variety of evaluation techniques may be used, including the student's written goals and objectives, reflective journals, and direct observation.

Recruitment and retention of students and mentors

Recruiting and retaining both student volunteers and mentors can be challenging. Some student-run clinics pay mentors; others do not. Student-run clinics require continuous outreach to the partner academic institutions and the practice community to maintain interest and participation. Neglecting this important activity can result in waning enthusiasm for the project, fatigue among regular volunteers and mentors, and staff shortages. Nevertheless, in our experience, interest in participation in student-run clinics is high. Indeed, in schools with well-established clinics, the demand for involvement can exceed the available opportunities to volunteer. Students may participate for a variety of reasons: to gain practical, hands-on experience, to work with trainees and mentors of other professions, to learn more about working with specific populations, or to increase their clinical exposure.

Sustainability: Human resources and funding

One of the underlying concerns among the community of student-run clinics is sustainability. The community and educational needs served by student-run clinics are long-term and thus better served by stable initiatives able to develop long-term relationships. Student-run clinics by their nature may face relationship tension with the bodies (e.g., government health services and academic institutions) that support them. To be truly student-run, they must maintain a degree of independence. However, their stability (as well as their ability to offer their core health and educational services) often is better served by greater integration with these institutions. An element of the work that needs to be done includes further investigation of for-credit streams that operate alongside extra-curricular participation, development of sustainable funding models, and further development of the relationships with partner institutions.

One interesting example of such integration is Making the Links, a program of the College of Medicine at the University of Saskatchewan [10]. This program consists of three major sections: SWITCH shifts throughout first- and second-year medical training, a 6-week rural, remote experience with Aboriginal communities in Northern Saskatchewan, and a 6-week experience in rural Mozambique. This longitudinal program not only deepens the understanding of the social determinants of health and of practice in underserved communities that students obtain at

SWITCH, it also integrates the student-run clinic experience further into the life of one of its partner institutions, making the relationship less tenuous over time.

Aside from the connections with its partners, the sustainability of a student-run clinic depends on a number of factors, chief among them being human resources and finances. The transient nature of students makes it necessary to engage in active succession planning. Most steering committees or boards try to ensure continuity of operation by having junior and senior students involved with the governance body. Senior students mentor juniors to ensure that essential roles and tasks are not abandoned as those more experienced move into practice. Some former students also return as mentors, further increasing institutional memory and continuity.

Funding is a perennial issue with most Canadian student-run clinics. In some cases, the student-run clinic operates outside the purview of both the university(s) with which it is associated and the local health region. As such, it is wise to explore as many different sources of stable funding as possible. SWITCH, as a non-profit registered charity, receives some core funding from the provincial government and otherwise fundraises through grants, fundraising events, individual donations, mentors who choose to forego their honoraria, and financial and in-kind support from its partners. Fundraising is facilitated by developing relationships within the community with individuals as well as companies and community-based organizations. Other clinics rely more heavily on their academic institutions, either through direct funding or student levies.

Given these funding challenges, student-run clinics are typically understaffed. Technology can be a valuable resource, if used effectively. For example, paying a small monthly fee for the use of an email site that can broadcast hundreds of emails easily may be more expedient from the outset than using a free public email site that restricts the number of emails sent. It is also advisable to find technology early on that has the ability to integrate and display statistics. Many Canadian student-run clinics also find scheduling software that allows students and mentors to sign up for shifts online is helpful.

Discussion

Key Findings

Canadian student-run clinics are exciting interprofessional service learning environments that strive to encourage socially accountable practice in a way that is meaningful for students, communities, and academic institutions. The examples of established projects like SWITCH, along with growing numbers of newly emerging clinics across Canada, and more recently in Australia and the United Kingdom, reflect a widespread enthusiasm for the model on the part of students, educators, and professionals. Although the challenges are significant, innovative solutions are being developed to overcome these.

We have observed first-hand the impact that these projects can have not only on the students who volunteer, but also on academic institutions, political bodies, and, most importantly, on the community as a whole. However, the development of

scholarship to further evaluate and examine the effectiveness of these clinics in reaching their key objectives is sorely needed. This research agenda has begun to be addressed in American clinics, where recent papers have been published looking at clinical outcomes and quality of care [11], the nature of interprofessional training [12], and patient satisfaction [13]. However, as noted in the review by Meah, Smith, and Thomas [14], there is a need for more rigorous and extensive research to be conducted if the true potential of student-run clinics is to be fulfilled and their effects truly understood.

Recommendations

Following upon these promising first steps, a burgeoning scholarship of CSL and social accountability would be greatly served by comprehensive evaluation of student-run clinics with a particular focus on the interprofessional Canadian model. Given the far-reaching objectives of student-run clinics, such comprehensive evaluation would be no small feat, and the studies will necessarily come from many different angles. Key elements of such an evaluation would include impacts, short and long-term, on students who participate, host communities, and the academic and service institutions involved. Comparison studies should be undertaken that compare these same constituencies with controls who have not participated in student-run clinics. This sort of evaluation, if positive, could serve to justify continued (and even augmented) resource allocation to student-run clinics and help to establish these innovative projects as permanent features of the educational landscape and key elements in the development of a healthcare workforce characterized by effective teamwork and socially accountable practice.

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