Improving Service Learning Curricula in Medical Education

Ontario Medical Students Association Position Paper
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Background

Service learning is defined as intentional community work through which students simultaneously provide a service and gain meaningful learning experiences (Rhodes & Davis, 2001). While the aims of higher education and the university may sometimes seem at odds with the needs of the community (Fish, 2008), service learning rebuts this idea by allowing students to apply the theory and skills they gain through higher education to real-world issues. This type of learning prepares students for participation in public life by giving them the tools to make impactful civic contributions. Moreover, service learning allows students to dismantle the perceived separation of work and civic contributions, a perception that lies at the root of many of the challenges we face as a global community today (Speck, 2001). Research demonstrates that service learning can improve students' higher order thinking, empathy, cultural awareness, interpersonal development, and motivation to engage in social issues (Warren, 2012).

Medical schools across North America have incorporated service learning in a heterogeneous manner. Some schools include formal education and support for service learning opportunities as part of the curriculum, whereas other schools allow students to explore service learning independently through their extracurricular activities. Even when formally part of the curriculum, the way in which service learning is incorporated varies widely. This paper explores the various practices of medical schools in Ontario as well as research on effective service learning. The description of current state at schools that we provide here does not represent an extensive review of each medical school's service learning curriculum.

The goal of this paper is to make recommendations around the principles that should guide medical school service learning curricula. Although some of our recommendations may also apply to global service learning, this paper is intended to focus on local service learning within the communities in which medical schools are embedded.

Problem Description

The Royal College of Physicians and Surgeons of Canada has defined the role of a physician as a health advocate in the CanMEDS framework. Under this framework, the role of a physician is to approach healthcare from a wider social context and advocate for their patients based on social determinants that affect their health. Physicians should place an equal focus on preventive medicine and curative medicine. Physicians should also advocate for health systems reform based on community and population needs (Frank et al., 2015).

Policies regarding service learning from the Liaison Committee on Medical Education (LCME, 2016) and the Committee on the Accreditation of Canadian Medical Schools (CACMS, 2015) provide an overarching statement that requires Canadian medical schools' curricula to incorporate service learning and community service activities. However, the guidelines on specific logistical details are not outlined. Therefore, there is no framework that guides the way service learning should be incorporated into medical education.

Current Status

The service learning curricula in Ontario medical schools are reviewed below.

McMaster University

The three-year undergraduate MD program at Michael G. DeGroote School of Medicine at McMaster University in Hamilton, Ontario currently does not have a formal service learning component integrated into its curriculum. During the pre-clerkship period, students attend weekly Professional Competency sessions which include one hour of large-group lecture and two hours of small-group discussion. The weekly sessions have various learning objectives, such as community service, social determinants of health and working with diverse populations. In the summer of second year as a part of the Professional Competencies curriculum, students at McMaster are expected to propose a hypothetical health advocacy project that could have a significant positive impact on local communities. Students are given the option of carrying out their proposed projects in their local communities (McMaster University, 2016).

Western University

The four-year undergraduate MD program at the Schulich School of Medicine & Dentistry at Western University in London, Ontario saw the inauguration of a formal service learning component into its curriculum in August 2015. Students complete 14 hours of mandatory

service learning at their organization of choice in any capacity, including administrative work and interaction with community members. Students may complete these hours during a one-week period allotted for service learning in January, or during the school year. Regardless of if they complete their hours during the allotted week in January, they do not have class, clinical, or other mandatory activities during this week. Activities range from teaching, health care placements, and community development opportunities, to environmental projects. Students independently set up placements at facilities of their choice and are not required to develop formal learning objectives or consult a mentor (VanDeven, 2016).

University of Ottawa

The four-year undergraduate MD program at the University of Ottawa in Ottawa, Ontario incorporated a mandatory community service learning component into the first-year medical curriculum in August 2012. Students are required to complete a minimum of 30 hours of community service at a community health agency placement through the University's Centre for Global and Community Engagement. Students choose from a list of possible placements and sign up on a first come first serve basis. Students alternatively can explore an issue in health care delivery through primary or secondary research and develop a report documenting their findings. The program thus far has received relatively positive feedback. Students identified continuity in the program as they are encouraged to engage in long-term projects beyond the scope of program requirements and are not under pressure to arrange their own placements (McDowell, 2014).

University of Northern Ontario

The four-year undergraduate MD program at the University of Northern Ontario (NOSM) in Sudbury, Ontario is currently under review, with changes being made in 2016-2017. Currently, students may engage with a service learning project in Year 2 on a voluntary basis. By default, students engage in a mandatory component of the curriculum entitled Community and Interprofessional Learning, where students work with other professionals in settings such as nursing homes and pharmacies. However students may replace this component with a service learning project, and a substantial number of students opt for this choice. For the project, students are required to meet with a community organization, make a work plan, participate in orientation and training provided by the organization, and submit an application for a service learning project to NOSM. If accepted, students must keep a record of what they did and make a year-end presentation regarding their project. The students are supervised by the service learning faculty coordinator who provides guidance throughout the process. NOSM also provides a guide regarding the principles and purpose of service learning (Northern Ontario School of Medicine, 2016).

University of Toronto

The four-year undergraduate MD program at the University of Toronto in Mississauga and Toronto, Ontario is currently transitioning into a new program for the first two years, called the Foundations curriculum. However, the Foundations curriculum contains the same service learning components as the previous curriculum. This includes a Community, Population and Public Health (CPPH) component in which students complete a Community-Based Service-Learning (CBSL) placement with a community organization with which they are placed. To facilitate the placement, student rank choices from a catalogue of eligible organizations/projects, however students may opt to apply to work with a separate organization. Through participation in organization activities and the completion of a specific activity or deliverable, students learn about community health needs and disparities. Guidelines are flexible around exact number of hours or visits needed. In year 1, students attend various tutorials/discussions to prepare for the completion of the project. They are required to make a work plan and various proposal presentations related to their service learning experience (CPPH-1 Course Manual, 2016). In Year 2, during which the bulk of the project is completed, they are also required to attend tutorials/discussions to supplement their work with a community agency and give a final presentation (CPPH-2 Course Manual, 2016). The CPPH curriculum provides guidelines regarding the principles and purpose of service learning. In addition to the CPPH course, the new medical Foundations curriculum also integrates service learning through seminars on the theme of priority population groups, such as indigenous and LGBTQ groups (University of Toronto, 2016).

Queen's University

The four-year undergraduate MD program at Queen's University in Kingston, Ontario does not have a mandatory service learning curriculum. The curriculum integrates public and global health topics into its lecture and case-based learning formats. Students are required to complete a rural family practice placement in the summer of first year. Additionally, students are required to complete community-based projects in Year 1 and 2 through which they learn about community agencies and share these learnings with their peers. Queen's has created a Service Learning Panel to support students who wish to engage in service learning projects on a voluntary basis. This panel provides funding and communication support, liaises between students and community agencies, and holds events and forums for students to share their learning experiences with peers (Queen's University, 2016).

Recommendations

Existing national medical education policies do not explicitly outline conditions and frameworks for service learning in Canadian medical schools' curricula, likely contributing to the lack of standardization between programs. While minor differences between individual school approaches is inevitable, the lack of common guiding principles may lead to varying levels of skills, knowledge and experience in Canadian- and Ontario-trained physicians, where some physicians may not be equipped to and/or understand the importance of civic contributions to communities as they begin their careers. As such, the following are recommendations for a framework to guide service learning curricula:

1. Service learning curricula should include mentorship to guide student learning

Mentorship during service learning helps students develop robust learning objectives, and undergo thorough, thoughtful reflection. A study evaluating the service learning program developed at the University of Colorado School of Medicine, called the "Leadership Education Advocacy Development Scholarship" (LEADS) program, indicates that students benefited from having a mentor, as this guidance and support allowed them to develop their organisational, leadership and advocacy skills (Long et al., 2011). Mentors also aid students in developing reasonable learning goals and ensure that the students' experiences are in line with their original objectives as well as the needs of the community. Furthermore, mentors facilitate the students' reflection process and ensure that students consider their emotions, prejudices, stereotypes and overall thoughts on their experience when reflecting (Stewart & Wubbena, 2014).

Understanding that the availability of mentors can be limited, mentorship structures can be flexible. If resources permit, students may access one-on-one mentorship, or, one mentor could be matched with several students. There are several schools that already have a student mentorship program in place such as McMaster and University of Toronto. These mentorship programs can be integrated with service learning by simply providing basic training in service learning to current mentors. The recommendations for incorporating mentorship are flexible and seek to build upon existing infrastructure to address the potential limitations in resource and personnel availability.

2. Students should develop formal learning objectives with their mentor prior to completing their placement to direct their learning experience

Developing learning objectives prior to the start of a placement allows students to structure their learning experiences. As service learning aims to benefit both the community and the student, learning objectives should be specific, relevant to the student's placement, and include both personal and community-based components (Gelmon et al., 1998). Past service learning programs indicate that students felt they benefited most from actively

setting learning objectives, and engaging in structured reflection on the degree of success in achieving their objectives after the placement was completed (Seifer, 1998).

3. Opportunities for structured, continuous reflection should be incorporated into the placement

Reflection allows students to think critically about their service learning experiences and consolidate what they have learned. Through intentional reflection that addresses the students' thoughts, feelings, reactions and revelations, students can confront their own sentiments regarding difficult situations they have faced, memorable situations they could continue reflecting upon, or lessons learned that they could apply in the future (Bringle & Hatcher, 1999). Formalizing the reflection process allows for constant, structured feedback and discussion between the student, their mentor, and their peers. As students are encouraged to explicitly consider how learnings could be actionable, it allows them to begin building a framework for their future clinical practice. Reflection can take on many forms, including writing, discussion groups, artwork, role-play, and meditation.

On top of helping students develop, reflection can also bode well for the project and the organization. An important component of the reflection should be a critical appraisal of the value of the work that was done. For example, students should explore whether the project they are undertaking will actually improve health outcomes, and if not, what barriers exist to this being a reality.

4. Evaluation of both students and mentors should be carried out at the end of the placement

Often formative in nature, both qualitative and quantitative measures can be used to evaluate students' service learning endeavours. Qualitative measures include the evaluation of students' reflective journals, essays, reflective portfolios, and one-on-one interviews with students. Quantitative measures include tests, mandatory hours completed, and student attendance, which can all be measures of students' learning. Using these measures, mentors are able to gain insight into and assess the student's learning process, which allows them to provide targeted feedback. Evaluation also gives students the opportunity to assess if they have addressed all of their learning objectives and how to supplement any knowledge gaps (Buckner et al., 2010).

Research specifically in the area of evaluation of mentors in service learning placements is sparse. However, the role of evaluation of mentors in other fields, such as nursing and academia, has been studied. Students in academia indicated that maintaining a relationship with mentors with open communication and having the opportunity to provide feedback to their mentors is important to them. In one particular study at University of

Wisconsin-Madison, Vanderbilt University, University of Colorado-Denver, and University of North Carolina-Chapel Hill, an evaluation of the mentorship program indicated that the program would benefit from giving mentees the opportunity to provide anonymous feedback to their mentors as they did not feel comfortable doing so directly. As such, mentees provided feedback biannually or annually, which was collated and fed back to mentors at annual mentor training sessions (Anderson et al., 2012).

Quantitative and qualitative formal evaluations by students can be helpful for mentors to determine ways in which they can best support students. Evaluations may also help mentors recognize their own biases, emotions and prejudices. Additionally, such feedback may be valuable in providing training for future mentors. Feedback can also be anonymized in the case where mentees feel uncomfortable with providing feedback directly to their mentors. The focus of evaluation is for both the student and mentor to receive constructive feedback regarding their work, and does not necessitate a quantitative mark on a transcript.

5. Service learning projects should be developed and executed through consultation with community stakeholders

Active community consultation before, throughout, and after service learning projects engenders trust and strong partnerships between communities and institutions of academic study (Eyler, 2002). For example, there should be check in points where students and organizations can discuss and continuously assess the best way to move forward. Studies have shown that community partners usually value student consultation in ongoing work (Driscoll et al., 1996; Nigro & Wortham, 1998), and without this, projects can become problematic. Community consultation facilitates more commitment and sensitivity on the part of the students during their service learning experiences. Research demonstrates that consultation can help students transition from less goal-oriented community work to tackling more complex changes needed by the community (Eyler, 2002). As well, consultation with the community will allow students to understand how best to serve within the particular community context. In summary, developing bilateral relationships with community stakeholders allows students to respect community members as primary stakeholders in all aspects of service learning, including training, planning, intervention, implementation and program evaluation (Wallace & Webb, 2014), driving positive outcomes for the community, and not just the student.

6. Where possible, service learning projects should include components of interprofessional collaboration

As do all healthcare activities, effective service work requires students to work in teams with other professions. As such, it is important that service learning projects include

components of interprofessional collaboration, in order to broaden student appreciation of wider social and community supports for their patients, as well as to give them a realistic experience of effective community work. Research has demonstrated several interprofessional service learning programs that have met with success and that students have found valuable (Buff et al., 2011, Matthews et al., 2012). Interprofessional service learning not only yields the typical benefits of interprofessional education, such as greater respect for teamwork and other professions, it also allows students to be more patient-centred (Dacey et al., 2010).

7. Service learning projects should be sustainable for the community in which they are developed

Community service within the medical community is frequently in the form of short-term projects with no prior relationship with, and no follow-up plan for, the communities involved. For example, many medical teams who worked in Haiti after the 2010 earthquake did not provide long-term follow-up care or infrastructure support (Asgary & Junck, 2013). This can be an issue in any low resource setting, whether it is a local, national, or international. The volunteers and organizations who work on short-term projects in communities are not in a position to take responsibility for poor health outcomes, due to the transient nature of these projects. Moreover, these practices engender distrust in the healthcare system by the community, due to the unreliable nature of the healthcare received by the community. Effective service learning is most ideal in collaboration with community groups where long-standing relationships have been established and plans for long-term work have been made (Asgary & Junck, 2013).

8. Students should receive pre-placement training prior to completing their service learning project

Robust evidence demonstrates that students engaging in international service learning benefit from pre-departure training (PDT). Given that the local communities with which students engage have many similarities with international marginalized communities, students engaging in local service learning require pre-placement training (PPT) and post-project debrief. Although research on local PPT is sparse, much of the research on international PDT can be applied to forming local PPTs. Most medical students do not currently receive any such training from their schools or community agencies. Moreover, schools and organizations that do provide pre-placement training usually focus on clinical experiences, with limited discussion on health inequity frameworks (Wallace & Webb, 2014).

General PPT should include information about local disease epidemiology, medical conditions, healthcare systems and cultural/sociopolitical considerations. This will help

students tailor their work to the communities in which they work. For example, knowledge regarding health care systems and local resource availability can help inform students who might attempt to provide health care according to conventions in settings with more resources. In resource-poor settings, such as rural areas, inner cities and low-income neighbourhoods, these students risk overusing resources in a setting where a health care system is already stretched to its limits. On-site training in addition to PPT is helpful for students to understand the extent of a healthcare setting's resource availability (Asgary & Junck, 2013).

PPT will also serve as a basis for learning about health inequity frameworks. Students seeking to work with marginalized communities often have an inflated idea of their skills and abilities due to their conceptualization of their relationship with these marginalized communities (Wallace & Webb, 2014). Often, students think of the care they are providing as charity, without which marginalized communities would be "worse off". This mindset leads to provision of lower standards of care and reflects a disrespect of the dignity and equality of citizens in communities with lesser resources (Asgary & Junck, 2013). Because of this mindset, students have often become involved in situations beyond their scope of knowledge, leading to adverse health outcomes for patients and community members (Wallace & Webb, 2014). As such, social accountability training, including training on understanding varying community contexts, health inequity and anti-oppressive frameworks is essential to avoiding such adverse health outcomes. "Social accountability" for medical schools was defined by the World Health Organization (WHO) in 1995 as: "The obligation to direct their education, research and service activities towards addressing the priority health concerns of the community region and/or nation they have a mandate to serve. The priority health concerns are to be defined jointly by governments, healthcare organizations, health professionals and the public." Exploring these concepts requires opportunity for student reflection on the reasons they are engaging and have engaged with service learning, and ways in which these motives may continue to perpetuate power imbalances which, in many ways, lead to the marginalization of these communities in the first place. Reflection and discussion should surround the idea that effective service learners engage with resource-poor communities because of their duty as global citizens and not as an act of charity (Asgary & Junck, 2013). A more detailed look at the benefits and processes of reflection are included above.

Third, many students engaging in service learning have experienced burnout and depression due to the stress of working in a resource-poor setting. Stressed and/or burnt-out healthcare personnel can cause adverse health outcomes and emotionally driven decision-making. Providing PPT to students regarding managing mental health issues, accessing supports, and cognitive dissonance between their own ideas and societal values is essential (Asgary & Junck, 2013).

Lastly, topics covered in PPT should evolve based on feedback from community stakeholders, students and mentors as well as knowledge gaps identified.

In conclusion, these recommendations outline how service learning programs can be made effective learning experiences. The components of these recommendations - including mentorship, objective-setting, reflection, evaluations, community consultation and program sustainability, interprofessional collaboration, and pre-placement training - are what distinguish service learning from simple community service. The intentionality and the structure around service learning programs aim to make them into more meaningful learning experiences for both communities and students.

Ontario Medical Student Association (OMSA) Position Statement

1. The Ontario Medical Student Association hereby takes a position in favour of integrating a structured service learning curriculum into the educational framework of all medical schools in Ontario.
2. The Ontario Medical Student Association endorses the integration of the components and principles of service learning curricula that are described in this document.

Advocacy Plan

1. To engage in consultation with key stakeholders (including faculty members, curriculum planners, medical students, and administration) at all Ontario medical schools in order to improve service learning curricula using the guidelines proposed in this paper
2. To offer schools support with relevant literature and previous curricula in order to implement service learning curricula within their individual curriculum frameworks
3. To support program evaluation, and research on both educational and community outcomes resulting from curricula implementation

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Appendix

CanMEDS:

- Health advocate:
    - Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment
        - 1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources
        - 1.2 Work with patients and their families to increase opportunities to adopt healthy behaviours
        - 1.3 Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
    - Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner
        - 2.1 Work with a community or population to identify the determinants of health that affect them
        - 2.2 Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities
        - 2.3 Contribute to a process to improve health in the community or population they serve

The Liaison Committee on Medical Education (LCME) policies' on service learning are as follows:

- Current clause in the LCME 2016-2017 functions and structures:
    - 6.6 Service-Learning: - The faculty of a medical school ensure that the medical education program provides sufficient opportunities for, encourages, and supports medical student participation in service-learning and community service activities.

The Committee on the Accreditation of Canadian Medical Schools (CACMS) policies on service learning are as follows:

- Current clause in the CACMS policies on "Functions and Structure of a Medical School - (contains the LCME Standards)" - June 2015
    - 6.6 Service-Learning - The faculty of a medical school ensure that the medical education program provides sufficient opportunities for, encourages, and supports medical student participation in a service-learning activity.