Improving Service Learning Curricula in Canadian Medical Education

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Policy Area: Competencies for UGME

Problem History

Although the exact definition of service learning varies, it is often defined as intentional community work through which students simultaneously provide a service and gain meaningful learning experiences (Rhodes & Davis, 2001; Waterman, 2014; Billig & Waterman, 2014). While the aims of 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 and often exposes them to various communities such as disenfranchised populations (Lawson et al., 2017). 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, such as climate change and wealthy disparity (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 into their curricula in a heterogeneous manner. 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 overarching statements requiring that Canadian medical schools incorporate service learning and community service activities into their curricula (Appendix 1). However, 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. Some schools provide formal education and support for service learning opportunities, 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. Appendix 2 provides a summary of the various practices of medical schools in Canada.

Problem Definition

Existing national medical education policies do not explicitly outline conditions and frameworks for incorporation of service learning into Canadian medical schools' curricula, likely contributing to the large amount of heterogeneity between programs, as can be seen in Appendix 2. While minor differences between individual school approaches are inevitable, the lack of common guiding principles may lead to varying levels of skills, knowledge and experience in Canadian physicians, where some physicians may not be equipped to make effective civic contributions as they begin their careers. Furthermore, the absence of an evidence-based guiding framework means curricula employed at various schools may not utilize the most effective, sustainable and up-to-date tools in the service learning toolbox. As service learning research advances, national curricular guidelines in

Canadian medical schools should similarly shift. For example, more recent literature suggests a stronger emphasis on developing long-term and sustainable partnerships with community groups should be made (Waterman, 2014; Rinaldo et al. 2015).

The main actors involved in this issue are the medical schools across Canada, and the various organizations of which they are part, such as the Liaison Committee on Medical Education (LCME, 2016) and the Committee on the Accreditation of Canadian Medical Schools. As the goal of Canadian medical schools and the bodies which mandate their curricula are to guide the education of expertly trained physicians, it is of the utmost importance that an evidence-based framework for service learning curricula is available.

Position Statement
The CFMS supports the implementation of service learning curricula in Canadian medical schools which includes aspects of mentorship, formal learning objectives, structured reflection, evaluations, interprofessional collaboration, sustainability, and pre-placement training.

Recommendations
The following are recommendations for a framework to guide Canadian service learning curricula. As the LCME and CACMS already require schools to have a service learning or community service element, our paper suggests a framework is necessary to help guide what is already being instituted in medical schools across Canada. Although some of the 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. Acknowledging that each institution may have existing service learning programs, relationships with community stakeholders, and/or mentorship programs in place, they may choose to implement these recommendations within the context of their own environment. For example, programs may choose to customize existing service learning opportunities offered to students or allow students to organize their own learning opportunities, in accordance with the recommendations.

A key issue in current service learning dialogue is that initiatives may often benefit student learning more than the community. Although many of the following recommendations may not directly focus on the community, they seek to prepare the student to ultimately better impact the community. Detailed rationale for each of the recommendations can be found in Appendix 3.

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

Mentorship during service learning helps students develop robust learning objectives, and undergo guided reflection. Guidance and support from mentors allows students to develop their organisational, leadership and advocacy skills (Long et al., 2011). 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.

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). In an analysis of past service learning projects, students felt they benefited from actively setting such 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, or lessons which they wish to apply in future service learning work (Bringle & Hatcher, 1999). An important component of reflection should be a critical appraisal of the work that was done. For example, students should explore the extent to which their service learning work did and/or will benefit the community, and what barriers exist to this being a reality. Reflection can take on many forms, including writing, discussion groups, artwork, role-play, and meditation. It can also be incorporated into existing reflection activities in which medical students currently partake.

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

Evaluation 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). 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 mandatory hours completed, and student attendance, which can all be measures of students' learning. Evaluation can also be an opportunity for medical school programs to improve on the service learning experience offered to students from year to year.

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

Community consultation facilitates more commitment and sensitivity on the part of the students during their service learning experiences. Active community consultation before, throughout, and after service learning projects engenders trust and strong partnerships between communities and institutions of academic study (Eyler, 2002). 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 frequently 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 facilitate a realistic experience of effective community work. 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 engage with more effective and patient-centred care (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. These practices engender community distrust in the healthcare system, due to the unreliable nature of the healthcare received (Asgary & Junck, 2013). 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 from someone with intimate knowledge of the community

Robust evidence demonstrates that students (medical or otherwise) engaging in international service learning benefit from pre-departure training (PDT) (Astin et al., 2000; Asgary &

Junck, 2013). However, most medical students do not currently receive any such training from their schools or community agencies when engaging in local service learning. Given that the local communities with which students engage have many similarities with international marginalized communities, students engaging in local service learning should receive pre-placement training (PPT) and post-project debrief. The CFMS has released national guidelines on this topic in 2008, which include a list of currently implemented PDT programs, as well as resources for implementation (Anderson & Bocking, 2008). Both the guidelines and frameworks currently used to prepare students for international service learning in Canada are transferable to local service learning.

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. Of note, these guidelines intentionally do not prescribe a rigid template, checklist, or number of hours of service learning to students as there is limited evidence supporting such an approach. Furthermore, we do not expect every service learning curriculum to apply each of these values to an equal degree, as the effectiveness and feasibility of these recommendations may vary by school. Ultimately, these recommendations outline a framework that intends to make service learning experiences more evidence-based across institutions and provinces, while at the same time, allowing enough flexibility for students to design their own experiences in a manner that is personally meaningful to them.

Accountability Statement
The executive board of the CFMS should use this position paper as a framework for advocacy efforts when discussing medical curricular changes. Members of the CFMS Education Portfolio-- including the VP Education, the Education Committee, and the VP Academics--are directly responsible for advocacy activities regarding this area and ensuring the stakeholders are aware of the recommendations in this paper.

Advocacy Plan
The CFMS will make its position on service learning curricula public by posting this position paper on its website and defending the position when the opportunity arises. This should be completed within a few months of the position paper being passed by the CFMS.

Appendix 1: Policies Governing Current Service Learning Curricula

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.

Furthermore, the Royal College of Physicians and Surgeons of Canada has defined the role of a physician as a health advocate in the CanMEDS framework which touches on many aspects of service learning curricula:

- 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

Appendix 2: The Current State of Service Learning Curricula in Canadian Medical Schools

The service learning curricula in Canadian medical schools are reviewed below. It is important to note that service learning curricula at Canadian medical schools are varied and may not meet the current definition of service learning. This underscores the confusion around the definition of service learning across the country and the need for a guiding framework to clarify what qualifies as service learning:

McMaster University

The three-year undergraduate MD program at Michael G. DeGroote School of Medicine at McMaster University 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 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 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 whether or not 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, community development opportunities, and 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 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. Students are encouraged to engage in long-term projects beyond the scope of program requirements (McDowell, 2014).

Northern Ontario School of Medicine (NOSM)

The four-year undergraduate MD program at the Northern Ontario School of Medicine (NOSM) 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. The students are supervised by the service learning faculty coordinator who provides guidance throughout the process (Northern Ontario School of Medicine, 2016).

University of Toronto

The four-year undergraduate MD program at the University of Toronto 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, make a work plan, and present a proposal related to their service learning experience (CPPH-1 Course Manual, 2016). In Year 2, during which the bulk of the project is completed at the community site, they are also required to attend tutorials/discussions to supplement their work, and give a final presentation (CPPH-2 Course Manual, 2016). The CPPH curriculum provides guidelines regarding the principles and purpose of service learning. (University of Toronto, 2016).

Queen's University

The four-year undergraduate MD program at Queen's University 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).

University of British Columbia (UBC)

The four-year undergraduate MD program at the University of British Columbia (UBC) currently does not have a formal service learning component in its curriculum. Students do have the option of completing a service learning project through UBC's mandatory Flexible Enhanced Learning (FLEX) course, which spans all four years of the program. This course provides students with protected half-days and block time to pursue learning activities (e.g. research projects, community service learning) in any topic they are interested in, including health advocacy, biomedical sciences and indigenous health among many other options. Students may choose to continue exploring the same topic or project for all four years, or to develop several different projects over the course of the program (University of British Columbia, 2015).

University of Saskatchewan

The four-year undergraduate MD program at the University of Saskatchewan incorporates a mandatory service learning component into its pre-clerkship curriculum. First-year students may choose between several options, including a 50-hour interprofessional learning placement with a pharmacy student at a community agency in Saskatoon, a 40-hour clinical placement in a rural or underserved community, or a 2 year certificate program in global health (Medicine and Society I, 2016). Second-year students must do a 7-hour placement in either a community agency or a workplace Occupational Health and Safety office to learn about the social determinants of health (Medicine and Society III, 2016). At the end of the course, students must submit a reflective essay on their experience (University of Saskatchewan, 2016).

University of Calgary

The three-year undergraduate MD program at the University of Calgary currently does not have a formal service learning component. In year 1 of the program, students complete a mandatory Population Health course, which involves a combination of lectures and a community component,

entitled Community Correlations. Lecture topics include health promotion, the Canadian healthcare system and epidemiology. In the Community Correlations component, each student group designs a research question within one of six themes (e.g. indigenous health, elderly health). Students then visit a community agency serving the population in question, and conduct interviews with the people being served by the agency. Groups are given protected time to conduct this fieldwork and must produce a 10-minute presentation on their findings at the end of the course (University of Calgary, 2016).

University of Alberta

The four-year undergraduate MD program at the University of Alberta involves several pre-clerkship service learning opportunities. In first year, students must complete a mandatory 15-hour service learning activity in areas such as refugee health, seniors' programs and homework help programs. Upon completing these hours, students must prepare a reflective presentation on their findings. The University of Alberta also offers optional service learning electives for pre-clerkship students. In their first two years, students must complete a total of 12 hours of electives per year. Elective categories include subspecialties of medicine (e.g. emergency medicine), arts and humanities in medicine, and community engagement. Students who pursue the community service learning elective must work with a community agency to plan and implement a health advocacy project that will target a current need faced by that community. Students who choose other community engagement electives such as indigenous health and inner city health receive a combination of formal instruction on the topic, and subsequently shadow or participate in a community event with the population in question (University of Alberta, 2015).

University of Manitoba

The four-year undergraduate MD program at the University of Manitoba, in Winnipeg, Manitoba does not have a formal service learning component in their curriculum. The university does, however, offer opportunities for students to get involved in the community. Firstly, in year 1 of the program, students are to complete a clinical rural placement in a for one week. In addition, the Faculty of Medicine also runs an after-school program for neighbourhood youth at Jacob Penner Park. A course is also offered on Indigenous health that spans all four years of the program. (University of Manitoba, 2016).

McGill University

The four-year undergraduate MD program at McGill University incorporates a mandatory service-learning course into the second-year medical curriculum, entitled the Community Health Alliance Project (CHAP) – Partnering for Healthier Communities. As part of the service learning course students are to complete a minimum of 7 sessions for a total of 21 hours at an assigned community placement. A list of possible placements is provided by the school, but students also have the option

of finding their own community placements. In addition, students are to submit a written reflection based on their experiences at their community placement, and complete a small group project in which groups devise recommendations to address a community-identified health concern (McGill University, 2016).

Dalhousie University

The four-year undergraduate MD program at Dalhousie University offers an optional service learning program for second-year students. Students must apply for the program and are matched to a community organization by the Service Learning Leadership Committee. The service learning program requires students to complete a minimum of 20 hours at their assigned community placement. In addition, students are to submit written reflections based on their experiences at their community placement, and complete a project identified in partnership with their community organization (i.e. assisting with media material) (Dalhousie University, 2016).

Memorial University

The four-year undergraduate MD program at Memorial University does not have a formal service learning component. The university does, however, provide medical students several opportunities to work with the community including the MUN MED Gateway project, the Global Health Initiative, and Aboriginal Health Initiative. The MUN MED Gateway project is a student-led initiative that matches first and second year medical students with a newly arriving refugee family in the St. John's area. Students assist the families in accessing healthcare (i.e. collect medical histories for their doctors). The Global Health Office helps connect students who are interested in working in the community with community service placements. The Aboriginal Health Initiative involves medical students volunteering as mentors to help recruit First Nations, Inuit and Metis populations into medical school (Memorial University, 2014).

Appendix 3: Detailed Recommendations

The research and rationale behind each of the recommendations delineated in the position statement is as below:

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

Mentorship during service learning helps students develop robust learning objectives, and undergo guided reflection. These mentors could be physicians, other healthcare professionals, or community leaders, for example. 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.

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. Of note, Seifer et al. (1998) describes the balance between student- and community-centered objectives through the example of an initiative where medical students engage in mentorship of high school students. Whereas the objectives of the medical students may be to hone their communication skills with this population and learn about common health problems affecting adolescents, the goals of the high school may be to expose its adolescents to positive role modeling and career guidance. 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). In an analysis of past service learning projects, students felt they benefitted from actively setting such 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, or lessons which they wish to 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. This reflection process will also serve as a tool for students to explicitly consider how learnings can be actionable, especially as they begin building a framework for their future clinical practice. Reflection can take on many forms, including writing, discussion groups, artwork, role-play, and meditation. It can also be incorporated into existing reflection activities in which medical students currently partake.

In addition to helping students develop their skills in health advocacy and critical thinking, reflection is also beneficial for service learning endeavours. An important component of reflection should be a critical appraisal of the work that was done. For example, students should explore the extent to which their service learning work did and/or will benefit the community, and 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

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 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 exploring 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 having the opportunity to provide feedback to their mentors is important to them. In addition to informal feedback in discussions with mentors, anonymous feedback opportunities for students to evaluate mentors may also be valuable, as there is an apparent power disparity between mentors and students. This has been found by many studies, including one study performed at University of Wisconsin-Madison, Vanderbilt University, University of Colorado-Denver, and University of North Carolina-Chapel Hill where a mentorship program was being evaluated. Although students had opportunities to discuss informally with their

mentors, the mentees requested a forum for anonymous feedback to their mentors as they did not feel comfortable providing some feedback directly. As such, the program suggested that mentees provide feedback biannually or annually, which is collated and fed back to mentors at annual mentor training sessions (Anderson et al., 2012).

Quantitative (e.g. likert scales) and qualitative evaluations (e.g. comments/reflections) 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. 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). Studies have shown that community partners usually value student consultation in ongoing work (Driscoll et al., 1996; Nigro & Wortham, 1998). 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 project-oriented community work to tackling small components of ongoing complex community issues (Eyler, 2002). As well, consultation with the community will allow students to understand how best to serve within the particular community context. An example of such a service learning project is MacHealth DNA, a student-run clinic for the inner city communities in Hamilton, ON. The clinic was established, and continues to run, in consultation with the executive director of the Urban Core Community Health Centre, an inner city healthcare provider, to ensure that the initiative matches the needs of the community (Wilson, 2016).

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. Notably, medical schools should work to develop and foster these relationships. One problem commonly highlighted by students regarding service learning is that they are set up with (or even more challenging, expected to create a relationship with) a community partner who has very little knowledge about the program or no pre-existing relationship. This can lead to a potentially unproductive and unfulfilling experience.

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

As do all healthcare activities, effective service work frequently 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 facilitate 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 engage with more effective and patient-centred care (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). The volunteers and organizations who work on short-term projects are not in a position to take responsibility for poor health outcomes that follow the completion of these projects. As a result, these practices engender community distrust in the healthcare system, due to the unreliable nature of the healthcare received. This can be an issue in any low resource setting, whether it is local, national, or international.

As mentioned above, the importance of program sustainability has been demonstrated by the MacHealth DNA clinic. This program recruits new volunteers and student program directors annually to ensure that the clinic continues to run every year (Wilson, 2016). As such, 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 from someone with intimate knowledge of the community

Robust evidence demonstrates that students (medical or otherwise) engaging in international service learning benefit from pre-departure training (PDT) (Astin et al., 2000; Asgary & Junck, 2013). While this is the norm for international service learning, most medical students do not currently receive any such training from their schools or community agencies when engaging in local service learning. Moreover, schools and organizations that do provide pre-placement training usually focus

on clinical skills, with limited discussion on health inequity frameworks (Wallace & Webb, 2014).

Given that the local communities with which students engage have many similarities with international marginalized communities, students engaging in local service learning should receive 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. In Canada, 11 out of 17 Canadian medical schools do provide PDT for international service learning (Anderson et al., 2012). Additionally, the CFMS has also released national guidelines on this topic in 2008, which include a list of currently implemented PDT programs, as well as resources for implementation (Anderson & Bocking, 2008). Both the guidelines and frameworks currently used to prepare students for international service learning in Canada are transferable to local service learning.

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 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 may 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 disrespect of the dignity 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 in these settings, 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.

Moreover, 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.

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