

CFMS Social Medicine Certificate Program Implementation Toolkit

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Table of Contents

Part 1: Criteria for the Social Medicine Certificate Program	4
Introduction.....	5
Background.....	6
Phase I: Formal Education	7
<i>Online Modules</i>	7
<i>Student-led, School-sponsored Presentations and Workshops</i>	10
Phase II: Advocacy Training	11
Phase III: Community Education & Experiential Learning	11
<i>Low-Resource Setting Electives</i>	11
<i>Service Learning</i>	11
<i>Specific Projects and Initiatives</i>	11
Part 2: Implementation Toolkit	12
Introduction.....	13
Individual School Capacity	13
<i>Faculty Resources</i>	13
<i>Financial Resources</i>	14
Outlining Specifics of the Program	14
<i>Formal Education</i>	14
<i>Advocacy Training</i>	17
<i>Experiential Learning</i>	18
Building Sustainable Community Partnerships.....	19
Engaging Students	20
Troubleshooting Common Problems.....	20
<i>Financial Means</i>	20

<i>Faculty Support</i>	21
<i>Remote and/or Regional Campuses</i>	21
<i>Tracking Attendance</i>	22
<i>Standardized Assessment</i>	22
<i>How to Get Certified</i>	22
References	24
Appendix 1 – Core Competencies Mapped to Formal Teaching Topics	26
Global Burden of Disease	26
Health Implications of Migration and Travel	26
Social and Economic Determinates of Health.....	27
Population, Resources, and the Environment	27
Globalization, Health, and Healthcare.....	28
Healthcare in Low-Resource Settings	28
Human Rights in Global Health.....	29
Overarching Objectives.....	29
Appendix 2 – Advocacy Training Core Competency Objectives	30

Part 1: Criteria for the Social Medicine Certificate Program

Introduction

The Canadian Federation of Medical Students (CFMS) Global Health Program has long been rooted in both local, national, and international advocacy work, through the ratification of position papers, curricular advocacy, and foreign medical exchange. Although these efforts have resulted in modest gains in the global health sphere, specifically in the exposure of medical students to both local and international global health, there has been little progress towards a standardized undergraduate global health medical education. The greatest effort to date has been the ratification of the Global Health Core Competencies (GHCCs) during the 2015 CFMS Annual General Meeting. The document provides a framework for the standardization of global health-based medical education that is informed by physician leaders in global health across Canada. The long term goal of the document is to facilitate the eventual integration of all the competencies into formal undergraduate medical curricula. Unfortunately, at this point in time, curricular advocacy and integration of novel curriculum is a slow process, likely to take multiple years of diligent work by local students and faculty champions. Until such a time where all of the competencies are integrated, most medical students in Canada will be lacking a key component of medical training: competency as a global health physician (1).

Unfortunately, the concept of global health (GH) poses a problem in itself. A common misconception is that the term is the opposite of ‘local health’ and synonymous with ‘international health’. This is not true. The most widely accepted definition for global health, employed by the Association of Faculties of Medicine in Canada (AFMC) as well as the global health core competencies, is “an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide” (2). However, the term ‘global health’ is not used ubiquitously to describe the work included in the above definition. Due this discrepancy in perception and practice of ‘global health,’ this program instead focuses on a more inclusive and less divisive term—social medicine.

As defined by the social medicine consortium (3), “Social Medicine is the practice of medicine that integrates:

- 1) Understanding and applying the social determinants of health, social epidemiology, and social science approaches to patient care;
- 2) An advocacy and equity agenda that treats health as a human right;
- 3) An approach that is both interdisciplinary and multi-sectoral across the health system;
- 4) A deep understanding of local and global contexts ensuring that the local context informs and leads the global movement, and vice versa;
- 5) Voice and vote of patient, families, and communities.”

Currently, medical curriculum surrounding global health and social medicine is highly variable. Furthermore, key gaps in practices exist between schools, affecting the delivery of this curriculum and subsequent uptake of key social medicine principles by students. The lack of standardization of global health and social medicine curriculum in Canadian undergraduate medical education has resulted in a fragmentation of skills and competence amongst Canadian medical graduates. The development of a

certificate in social medicine is a proposed solution to this problem. The certificate will equip students with the tools they need to become competent global health physicians trained in the principles of social medicine.

Background

Canadian medical students have developed the Social Medicine Certificate Program around a variety of sources including recommendations from numerous studies and guidelines outlining best practices in global health education. The program has also been developed around existing global health programs offered at Canadian medical schools, such as the 'Making the Links' program out of the University of Saskatchewan, and the recently established student led Global Health Certificate Program at Western University. The proposed certificate model integrates coursework with experiential learning and involves advocacy training. The program is divided into three key components:

- I. Formal Education (Lectures & Workshops)
 - A. Online modules in six key topics (defined below) which are aligned with the global health core competences *AND*
 - B. Presentations and workshops hosted by respective schools' global health programs
- II. Advocacy training
 - A. Canadian Medical Association (CMA) advocacy training workshop *AND*
 - B. Advocacy initiative (CMA or independent)
- III. Community Education & Experiential Learning
 - A. Low-resource setting elective *AND/OR*
 - B. Service learning *AND/OR*
 - C. Specific projects and initiatives

The program is designed to be accessible to students at all schools, regardless of year-of-study or location (i.e. main or satellite campus). Ideally, the certificate would be hosted on an online platform through which students would be able to access modules and track progress. Students will have a minimum of one year and a maximum of two years to complete the program. Students can start the program at any time throughout their four or three year medical degree, although it is anticipated that most students will opt to complete the certificate in their pre-clerkship years.

Phase I: Formal Education

The formal learning component of the certificate program hopes to address the key gaps in global health medical education in Canada. It will provide students with the global health foundation they need to anchor future experiences and healthcare challenges. It will be comprised of two components: online modules in six key topics and presentations or workshops hosted by respective schools' global health programs.

Online Modules

In 2011, Arthur *et al* published the recommendations of the core competency project undertaken by the Global Health Education Consortium and the Association of Faculties of Medicine of Canada's global health resource group (1). The group recommends six key topics in which medical students should demonstrate the global health core competencies.

- a. Global burden of disease;
- b. Health implications of travel, migration, and displacement;
- c.
 - i. Social and economic determinants of health;
 - ii. Population, resources, and the environment;
- d. Globalization of health and healthcare;
- e. Healthcare in low-resource settings;
- f. Human rights in global health

The formal learning component is divided up into these six topics and each topic is matched with a series of objectives drawn from the Global Health Core Competencies (see Appendix 1). Additionally, each topic is explained in further detail below.

Each module will utilize specific examples and populations to frame key concepts. Population-specific data and specific social issues will be addressed as they pertain to the six topics global health core competencies outlined above. As such, this will encourage students to develop an overall framework to address social medicine issues, rather than stereotyping based on a person's background.

Rather than developing our own online modules, current resources will be amalgamated and organized into one central location to increase accessibility for students. Students will be able to complete modules on their own time on their personal computers.

Global Burden of Disease

The current global health climate is informed by a complex network of stakeholders, from macro-level interventionists like the United Nations (UN) and the World Health Organization (WHO), to grassroots community groups like local Non-Governmental Organizations (NGOs) and health centres. Amongst this array of different players are policy makers, allied health professionals, physicians, lawyers, politicians, public health officials, and, most importantly, community members. It is important for medical students to understand the systems that govern health internationally, while illuminating both the role and capacity of physicians to participate in health equity globally. Beyond the systems that govern international health are the diseases that inform them and the points of intervention that physicians may access. As physicians practicing in an ever more globalized world, it is important for medical students to understand the diseases that plague populations internationally.

In this module, the global burden of disease will be illustrated with examples of health inequities both internationally and within Canadian borders. Specifically, the burden of disease in low-income countries will be compared and contrasted to that in high-income nations. The role of organizations and institutions in international health governance, such as the UN, the WHO, and Médecins Sans Frontières (MSF), will be demonstrated. Finally, the role of the physician in international health will be outlined and opportunities for advocacy and participation will be identified.

Health Implications of Migration and Travel

In 2009, there were more than 214 million people living outside of the borders of their country of origin (4). These migrants move for a multitude of reasons, ranging from political persecution, to economic opportunity, to environmental degradation. As people move across borders, their health may be significantly impacted. Studies show that migrants are more likely to encounter discrimination, violence, and exploitation with direct impact on both their physical and mental health (5). The influx of Syrian refugees into Canada over the course of the next several years is just one illustration of why it is imperative that medical trainees are adequately equipped to work with patients that have crossed borders. In this module, students will learn about the impact of migration on health while working towards becoming a culturally competent physician.

Social and Economic Determinants of Health

Wellbeing and health are informed by a multitude of factors that stretch beyond health provision and care. In Canada, it has been shown that preventative strategies, focusing on upstream interventions that facilitate healthy living have a significant impact on the wellbeing of populations (6). Specifically, poverty, race, sexual orientation, geography, and structural violence have a significant impact on the ability of populations to access adequate care and lead healthy lives. This module will strive to inform the greater narrative that governs key health outcomes, like chronic disease, and give students the ability to understand and address the context that informs the health of their patients beyond medicine.

Population, Resources and the Environment

In the era of climate change, and resource scarcity, it is important for future physicians to anticipate and address environmental health consequences. According to the fifth report on climate change from the Intergovernmental Panel on Climate Change, climate change will act as a pivotal determinant of health. Furthermore, many communities in Canada are already feeling the product of rising temperatures. In the past few years there have seen significant increases in wildfires, and a subsequent exacerbation of respiratory illnesses in affected areas (7). However, the health impact of the environment does not end there. According to reports from Northern Canada, climate change is also significantly impacting access to key determinants of health like food, safe drinking water, and mobility (8). It is key for the physicians of the future to be well versed in climate change and its impact on populations and resources.

Globalization, Health and Healthcare

Globalization has allowed growing power imbalances between wealthy countries and low middle-income countries. The risks of globalization, as it relates to health, are much more likely to be experienced by low and middle-income countries, whereas wealthy nations are much more likely to reap the benefits. Between 1990 and 2006, life expectancy at birth has declined 6 years in Sub-Saharan Africa, while Organisation for Economic Co-operation and Development (OECD) countries experienced an increase in life expectancy by 3 years. Additionally, there have been discrepancies of health equity within countries. With the emergence of the global labour market, there has been an increase in job insecurity, disproportionately affecting the unskilled poor population. Health equity within globalization has not been made a priority, but there is tremendous opportunity to create health equity with good global governance. Emphasis should be on coherent policies on the international and national level as well as adopting health equity as a measurement for development between and within countries. Physicians should be aware of the effects globalization has on healthcare and health equity and which populations have been disproportionately impacted (9).

Healthcare in Low-Resource Settings

The majority of undergraduate medical education occurs in tertiary care settings and well-equipped urban hospitals. Of course, this is not where all healthcare is received. Some students will choose to work in low-resource settings abroad and others will work in rural and remote clinics in Canada. Furthermore, in the context of Canadian healthcare, many cases from low-resource settings in Northern or rural Canada are referred to larger urban centres. Meaning that even physicians who have spent their entire careers in high-resource settings will need to have an understanding of healthcare delivery in low-resource areas.

Human Rights in Global Health

The right to health is well delineated in international agreements, including the UN's Universal Declaration of Human Rights (1948) and the WHO's Declaration of Alma-Ata (1978) (1). As students studying medicine in a public healthcare system, many students already embody this notion of healthcare as a human right and will require less focus on this aspect. The emphasis of this module will be on barriers to attain health for all people, including accessibility of services and affordability of non-

insured treatments. This module may also include parts of the Canada Health Act (1984) and stipulate barriers to achieving the goals set forth in the act.

Student-led, School-sponsored Presentations and Workshops

The online modules will be supplemented by presentations and workshops coordinated by each respective school's medical society global health program. Each of the fifteen schools represented by the CFMS has a medical society with a global health program (GHP). The program is coordinated and run by Global Health Liaison(s) (GHLs) with or without Local Officers. Each local GHP hosts a variety of events, including lunch time presentations, practical skills workshops, and journal clubs. Topics range from ones that are linearly connected to health, like the impact of poverty on health outcomes, to ones that have a more abstract connection to health, like accessibility and uptake of post-secondary education in marginalized youth. Faculties outside of medicine, student interest groups, community leaders, or physicians may facilitate these sessions.

GHP committee members often state that interest is high for extracurricular global health programming and attendance is excellent early in the term. However, when large exams, assignments, or social events are near, attendance often dwindles. Upon initiation of the student-led global health certificate at the University of Western Ontario, attendance remained high throughout the term when it counted toward a certificate credit. The idea of providing incentives to increase attendance is not unique; medical societies often offer food or networking opportunities in order to garner greater participation in extracurricular events, usually to much success.

Thus, to complete the formal learning component of the certificate, students must participate in a minimum of ten GHP-sponsored events (maximum of five sessions can count per semester). This will allow students to foster a lifelong commitment to learning through experts in various fields that pertain to healthcare. Furthermore, it will encourage students to engage in issues that are specific to their community and learn from individuals outside of the medical sphere. The sessions do not need to fall under one of the core competency areas listed above, but should fall under the sphere of social medicine or global health. Requirements are left intentionally broad so that students can seek out events that suit their interests.

In the event that a student cannot attend an event due to being located at a distributed site or clerkship responsibilities, other events can take the place of attending real-time, student-led events. Examples of these may include meetings and lectures hosted by provincial and national medical associations, IFMSA webinars, advocacy rallies, town hall meetings, political talks/debates, and more. The responsibility of finding opportunities will fall on the participant, however, avenues already exist at most schools for local GHP leads to communicate and share events with their students bodies. Additionally, local officers communicate events amongst themselves, which allows for a nation-wide communication network.

Phase II: Advocacy Training

The CMA offers a complementary advocacy skills training session to the medical societies that request it. The training includes tips for meeting elected members of government, media training, an overview of federal politics, the structure of the Canadian government specifically as it relates to healthcare, as well as effective ways to communicate an ask. The skills developed through the CMA program should be used to complete an advocacy initiative. The advocacy initiative could include one of the participant's choosing, or fall under one of the CMA's current advocacy projects. Objectives for the advocacy training component are found in Appendix 2.

Phase III: Community Education & Experiential Learning

The community education and experiential learning component is the final phase so students have had adequate training through phases one and two for electives in low-resource settings. The community education and experiential learning component consists of three subcategories: low-resource setting electives, service learning, and specific projects and initiatives. This category is intentionally broad so that students are not limited by the opportunities offered by their respective schools. Currently, service learning varies widely amongst schools.

Low-Resource Setting Electives

There are many opportunities for students to participate in electives during the pre-clerkship summer years, mandatory pre-clerkship elective time, or during clerkship elective weeks. Although not mandatory, roughly 30% of students choose to participate in low-resource setting electives where healthcare provision differs substantially from the centres in which they are primarily trained (10). Students should be required to participate in pre-departure training before embarking on a low-resource setting elective outside of their community. Pre-departure training includes education on personal health, travel safety, cultural competency, language competency, and ethical considerations.

Service Learning

Service learning is “a structured learning experience that combines community service with preparation and reflection” (11). Accreditation standards for Canadian medical schools began requiring that schools support and encourage service learning in 2015 (11), however requirements remain highly variable. Community organizations can submit requests for projects and students can also submit ideas based on their interests (12). Examples of service learning include needs assessments, public health education sessions, public school initiatives, development of educational resources, and more (12).

Specific Projects and Initiatives

Specific projects and initiatives will vary depending on the needs of the surrounding communities and initiatives of public health faculty members. These projects are meant to be in partnership with community organizations or public health faculty members and have the goal of presenting the project in a conference setting. An example of a specific project includes aiding in developing background research on advocacy efforts. As these projects can be on a variety of topics, asking the Global Public Health or Public Health Department for a list of current projects is a good starting point.

Part 2: Implementation Toolkit

Introduction

The structure and format of the CFMS Social Medicine Certificate outlined above should serve as the core guide to implementing the program at the individual medical school. The program must contain the three phases of formal course work, advocacy training, and service/experiential learning; however, the way these three phases operate at individual medical schools may vary. Medical schools across Canada are heterogeneous, each established to serve a unique population with a diversity of specific needs. Therefore, the way that these core guidelines are executed at individual universities should reflect the local needs of the communities and people in which the school is mandated to serve. These next sections will outline specific ways to implement the core guidelines of the CFMS Social Medicine Certificate. Students attempting to implement the Social Medicine Certificate should unify and approach the Undergraduate Medical Education (UGME) office together as having multiple groups approach UGME will create confusion. For examples of specific global health education programs at Canadian Medical Schools please refer to separate document 'Summary of Global Health Education at Canadian Medical Schools'.

Individual School Capacity

Historically as well as currently, a lack of capacity has been one of the greatest barriers for students to advocate for the establishment of a global health program at their respective medical school. A lack of monetary and human resources has been the limiting factor for many schools in implementing a global health focused curriculum (13). To be able to establish the CFMS Social Medicine Certificate Program at one's respective school, one first needs to determine the resources in place that will help sustain the program.

Faculty Resources

Ideally, the CFMS Social Medicine program would have the support of the faculty and a faculty champion to spearhead the program. A faculty champion would offer students guidance throughout the program, add experiential knowledge, advocate on behalf of the students to the UGME office regarding program logistics, and to aid in financial support, as they may be better suited to write project grants.

The first step is to identify a faculty champion. One of the best ways to find a faculty champion could be through the local global health interest group. Often, they will have a long list of faculty members who they have reached out to in the past to help host educational events for the students. Other places to find a faculty champion could be at the local inner city health clinic, those who work most closely with patients suffering from the social determinants of health. A general call for faculty support could also be sent through the UGME office to physicians in the community. Finally, provincial medical associations could offer support in some aspect of the Social Medicine Certificate Program. It will be important to discuss with the faculty champion the details of the proposed certificate program and outline the ways in which they can support the program.

Secondly, establishing support from a global health minded department may prove very beneficial in implementing the Social Medicine Certificate Program. This could include the Community Health and Epidemiology department, as they often know the surrounding communities needs and are

knowledgeable in the social determinates of health. Other examples may be a community engagement office or social accountability office. By getting departmental approval and support, it may allow for sustainability of the program as student governments are turned over yearly. It could allow a place for the program to become embedded and continuously supported.

Finally, the Dean or Vice Deans of UGME can be very powerful allies and may be the deciding factor on establishing a student-led Social Medicine Certificate Program. Students should create a detailed proposal about the program containing information on why it is necessary, what it contains, and how it can benefit the college as a whole, its students, and the community in which it serves.

Financial Resources

In a resource-limited institution, with many different areas requiring increased funding, the Social Medicine Certificate Program will have to prove essential to student education to receive adequate funding. Often, there will be financial resources allocated to the Student Medical Society, which can be accessed for the Social Medicine Certificate Program. Ideally, a general assembly vote should be passed to have an annual amount of funding available in the general budget for the Social Medicine Certificate Program. This budget change will require a detailed amendment to be made on the yearly budget outlining specifically how much the program will require to operate, the benefits to having this program implemented, and a breakdown of the costs. This way, the program will have sustainable funding despite annual student turnover.

Costs of the program may include: attendance tracking system, food for sessions, gifts for speakers, facility renting costs, conference costs, costs for developing online modules. These costs will vary significantly depending on the layout of the program and the extent to which other clubs and organizations at the school are involved. For more ways to access financial resources, see below in the common problems section, titled “Financial Problems”.

Outlining Specifics of the Program

Implementing the Social Medicine Certificate Program will require a detailed outline of the content of the program. The required content can be found in the background information in this document. It will also be important to outline how the program will be implemented and how the required content will be presented. As stated earlier, the three phases of the program - formal teaching, health advocacy, and service learning - can be presented in many different formats depending on the resources available at individual medical schools.

Formal Education

Each of the six formal teaching categories within the core competencies are outlined above and their specific objectives are outlined in Appendix 1. The following are examples of how one might present the formal teaching phase of the Social Medicine Certificate Program.

Lecture Based

A didactic lecture based teaching session is often the main method used for presenting medical education. Student groups often organize extra curricular lectures on topics of student interest that are not usually covered in formal medical curriculum. These extra curricular lectures have the potential to meet the objectives outlined in the global health core competencies, and therefore can be used as part of the Social Medicine Certificate Program. A potential way of organizing lectures between student groups would be to present the objectives outlined in the core competencies at a student group meeting, and for students to match learning objectives to lectures that they are planning to host. For example, the emergency medicine student group may be hosting a lecture on disaster relief in a developing country, which may fit under the topic of *Healthcare in a Low-Resource Setting*. The students would then be able to record that they attended the lecture, and what objectives the lecture covered (recording students involvement will be described in a later section). Another example could be the family medicine interest group hosting a lecture on working with vulnerable minorities in a family clinic setting, which could cover objectives under *Social and Economic Determinants of Health*. Other departments in the college may also hold lectures that could cover objectives for the certificate program. An example could be the department of Community Health and Epidemiology hosting a lecture on public health concerns of travel, which could cover objectives under the topic of *Health Implication of Travel*. Collaboration with students groups and various other departments in one's medical school will be an essential component to the formal teaching sessions of the Social Medicine Certificate Program.

Small Group Sessions

Small group sessions may offer a more intimate learning environment for students and facilitate two-way conversations about the topic at hand and meet objectives required for the formal teaching phase of the Social Medicine Certificate Program. For example, the majority of the formal learning component of the 'Making the Links' Global Health Certificate Program at the University of Saskatchewan consists of weekly small group sessions after regular school hours. The intimate setting allows for better engagement from the students, allowing them to ask questions without fear of ridicule from peers. Without the support of UGME, organizing weekly small group sessions may be a significant burden for students; thus, like the lecture-based teaching, learning objectives could be applied to small group sessions organized by student groups.

Written Assignments

Written assignments can be an important tool to assess a student's learning and should be reviewed by faculty with expertise in the area. Several challenges arise when expert faculty are not available to review the assignment and should this occur, non-graded reflective assignments may be used.

Reflective assignments are also a crucial part of the Social Medicine Certificate Program, particularly regarding the service learning experience. With service learning or experiential learning, the experience itself is not sufficient for all of the learning that is to take place. Proper reflection allows for the learner to understand their actions or reactions to the experience and identify any learning needs

that must occur before a similar experience in the future. Reflection can take place before, during, or after an experience and should be done with the guidance of a supervisor or mentor. Guided reflection helps to challenge underlying beliefs and assumptions allowing for new perspectives to be considered within a supportive relationship. There can be many different styles and formats of reflection, including written assignments, conversations, visual or auditory media projects, and more.

A literature review may also be an effective method of teaching a variety of global health topics and ensuring that students are gaining a strong understanding about populations. As part of the Social Medicine course at the University of Western Ontario, students were required to write a literature review about a vulnerable population they had done mandatory community service hours with during their first year of medical school. This literature review was also incorporated into the student-run Global Health Certificate as it ensured that students also developed skills related to research and gave students an appreciation of what information was available. A literature review also allows students to gain multiple perspectives on a population or current event and write about it in a technical format (15).

Online Modules

Online modules can be a key source of material to present to students involved in the Social Medicine Certificate Program. The CFMS has created a deal with Unite for Sight to offer their online global health educational material to Canadian medical students at 25% off. Here is a link to the discount prices: <https://maestro.technolutions.net/uniteforsight/cfms>. The CFMS global health program is also working to establish a list of free online global health educational resources that students may access to put towards completion of the Social Medicine Certificate Program. An example of one such program was created by University of British Columbia's Faculty of Medicine and can be found here: <http://elearning.globalhealth.med.ubc.ca/>

Workshops

Workshops can be another useful avenue for teaching the formal component of the certificate program. Workshops often work best with a smaller number of participants i.e. six to fifteen, as it enables good team functioning. As with other aspects of the formal education component, workshops should be facilitated by an expert in the topic. Workshops allow for a concentrated educational experience in a short time period, introducing participants to the learning topics, as well as allowing them to practice their newly acquired skills, all while in a safe learning environment.

An example of how this could work in the Social Medicine Certificate program could include an introductory workshop to key themes in global health, organized by the GHLE or other global health student leader. For example, the topic could be an introduction to community based research, in which an expert in the field would teach students about how to conduct community based research through interactive participation from the students. Another example could be teaching global health ethics, introducing and exploring ethical principles that should be upheld while on global health electives. These topics would be explored for a full day, with room for lunch and coffee breaks as well. A full day timeframe allows for optimal student participation, enables engagement in deeper conversations, and fosters a deeper connection between participants.

There are many ways to plan and organize a workshop, details which are out of the scope of this implementation toolkit. Please see the following resource for more information on how to conduct a workshop. <http://ctb.ku.edu/en/table-of-contents/structure/training-and-technical-assistance/workshops/main>

Research Projects

Research projects can also be utilized as part of the formal education portion of the Social Medicine Certificate Program. Research gives the student an opportunity to pursue areas of interest further, thereby enabling a deeper understanding of the material. For research to contribute to the Social Medicine Certificate Program, it should be in a topic related in some form to social medicine, i.e. research on any of the social determinates of health (access to care, education, poverty, etc.) either at home or abroad, research with vulnerable populations, research on various health programs, and more. These research projects should have faculty support, ethics approval, and go through the proper channels of approval with the students' respective colleges. This piece in the formal curriculum is more so individually student driven and it is not expected that all students participating in the Social Medicine Certificate Program undertake a formal research project. However, should the student be interested in pursuing such an opportunity, the student should be enabled to do so, and get credit for it in the Social Medicine Certificate Program.

Assigned Readings

Assigned readings can play an important part in the Social Medicine Certificate Program. Assigned readings may not give the student any formal credits to the program, but can enhance student discussion and participation in other parts of the formal learning criteria. For example, short readings may be assigned to students before attending a small group discussion or workshop in order to get the most out of that particular setting. Assigned readings could also be combined with assignments. For example, an assignment could be answering questions based on a certain research article, WHO report, or news article as it relates to global health. Assigned readings could also be utilized in pre-departure training for the low-resource setting elective portion of the Social Medicine Certificate Program.

Advocacy Training

Advocacy training is the second phase of the Social Medicine Certificate Program. As stated in the background, this training is provided through the CMA and is often coordinated with the governmental affairs and advocacy committee at the respective medical school. The student's major responsibility is simply to contact the CMA advocacy training provider and coordinate a date for the standardized training to occur. Although these advocacy training sessions are an excellent starting point, experiential advocacy learning may provide an excellent and more practical complement to this. As part of this advocacy component, students should seek out a practical advocacy activity. These can include but may not be limited to: federal lobby day, provincial lobby day, municipal lobby day, letter-writing campaign, or relevant march. Students should also have the opportunity to complete an advocacy initiative of their choice if the above options are not available to them or not suitable to them.

Experiential Learning

The experiential learning component in a low-resource area can be very diverse depending on the connections and partnerships one's school has with local and global communities. Because medical schools are built to serve the community in which they operate, a low-resource elective may be in a local community or a community abroad. Over the past few years, there has been a major increase in opportunities to volunteer abroad with medical missions or to take part in local low-resource clinical electives. This can be an extremely beneficial opportunity for a medical student as it fosters cultural awareness, elicits a deeper understanding of what it means to live in poverty, and may inspire the student to pursue careers that care for underserved and vulnerable populations. Although there are electives in low-resource settings that are done in a sustainable and effective manner, unfortunately there are a large number of electives with many gaps in providing ethical medical care. When not established properly, the elective can put both the student and the patients at risk. Patients may be easily harmed when medical students are being asked to practice outside of their competency level, either culturally or medically. Furthermore, there must be steps in place to ensure that patients receive appropriate follow-up care after a visiting medical team leaves.

As resource poor electives are at risk of placing the community members and patients at unintentional harm, the elective should be in a community where the university has a long term sustainable partnership already established. This sustainable partnership helps with facilitating communication from the community to the college so the community members, hospital staff, or community leaders can feel free to ask questions or provide any concerns to the College regarding student placement. Secondly, it allows community or research projects that are started in partnership with the students or faculty to be continued after the students leave their placement. Furthermore, the partnerships should allow for bilateral exchanges to be provided to medical students or local community members from the low-resource community. This bilateral exchange will aim to create mutually beneficial learning experiences for students from both resource poor and resource rich areas. Achieving sustainable partnerships is one way students can ensure that the elective they are participating in is ethical.

The following is a list of ways that experiential training opportunities at one's school are aiming to be ethical and sustainable:

1. *Students will be expected to communicate to the host community his/her level of competency and will not accept responsibilities that are beyond what he/she would do at his/her home institution.*

Currently, some schools advise first year medical students to wait before completing a clinical elective in a low-resource setting. If students are interested in completing an elective abroad or even in Canadian low-resource communities, they are encouraged to complete a public health style project. It would be very difficult to mandate that first year students not be permitted to complete clinical electives as there are many medical organizations willing to take even non-medical students on missions. As a result, rather than limit what students are able to complete

as an elective, the better approach is to ensure that there is clear communication with the community on the level of training of the visiting student. For example, a first year student would be permitted to shadow at his/her home institution, but would not be involved in patient care beyond that, so when in a low-resource setting, the responsibilities should mirror this. This protects patients by ensuring that they receive treatment from adequately trained personnel and it protects the student by preventing situations in which they may feel guilty when a procedure went poorly because he/she were given responsibilities outside of his/her practice.

2. *Students will be required to complete a pre-departure training session that encompasses cultural competency, safety, and understanding of ethics pertaining to his/her elective.*

There are a number of schools that already require the completion of pre-departure training. Often times, this is a single day event that includes: cultural competency training, medical ethics case studies, and safety training.

3. *Students will be required to complete a post-return debriefing session.*

This is less commonly practiced at medical schools in Canada despite being a crucial step in the elective experience. It allows the student time to reflect and evaluate the experience. It is also an excellent source of feedback for improving the elective in future years.

4. *Feedback should be elicited from host institutions to ensure that they are benefiting from having medical students and to ensure that no harm is being done.*

Often times, the home institution forgets to communicate with the host communities, which is the most crucial step in providing safe care to patients.

5. *Faculties should strive to create sustainable and long-term partnerships with host institutions.*

This may include providing teaching services, ensuring that spots for Canadian medical students are not detracting from local medical students, and ensuring that patients receive adequate follow-up when the visiting medical team leaves.

Building Sustainable Community Partnerships

Engaging community partners is key to implementing a successful and sustainable certificate program. Although there are some documents available that have been created in partnership with members from populations being addressed, one of the greatest weaknesses in Canadian medical education is the failure to collaborate with vulnerable populations in seeking feedback on what they feel is important for physicians to know. The IPAC-AFMC First Nations, Inuit and Metis Core Competencies document is an example of how medical education can be created with strong partnerships between community members. When designing learning objectives, try to seek feedback from members of the population being addressed or from community organizations that aid that population.

Furthermore, in order to maintain relationships with community organizations, it is important to include them in the evaluation process. Many schools have students participate in electives with vulnerable populations and then only provide evaluation forms to the preceptor and student. It is important to provide an evaluation to the community partnership as well so that they can provide feedback as to how the students are benefitting or potentially not benefitting their clients and how the relationship can be improved.

Seeking new community partners may be difficult as these organizations tend to be understaffed or staff members are currently at their limits in terms of taking on projects. Students should not be engaging in an initiative that requires the organization to provide funding. There should not be a financial burden placed on the community partner unless there is a grant readily available. The best partnerships will be formed by utilizing services that are already in practice and engaging the students in a way that will expand on these existing services.

Engaging Students

The term global health may have reached a point of burnout at Canadian medical schools. With the constant push for increased student involvement in global health, many students have in fact moved in the opposite direction. Some faculties opted to change the name to things such as community engagement, community and social medicine, etc. A key step in addressing global health burnout is reminding students of how the material is relevant not only to their upcoming learning in clerkship, but also for their future careers in Canada. Students often face difficulty relating something with the term “global” to a local practice. The definition of global health as being the need to create equal access to healthcare both locally and abroad often becomes replaced with the idea of international medical missions and tropical illnesses. There will be some global health presentations or workshops that do truly address solely the international aspect of global health, and there will be a group of eager students that are keen to learn tropical and disaster medicine. However, the majority of global health topics that a certificate in social medicine will address are in fact extremely applicable to local practices. For example, Indigenous health, LGBTQ health, and Inner City health are all populations in need of greater global health advocacy. Remind students of the local applicability and social accountability that can be achieved by attending global health sessions. Another method of engaging students is in the form of recognizing their involvement on their MSPR. Further details on certifying a Social Medicine Certificate Program are found below under ‘how to get certified’.

Troubleshooting Common Problems

Financial Means

Costs associated with providing the Social Medicine Certificate may include the following: honorariums for speakers, food for attendees, materials for workshops, etc. If there is no funding within the global health budget that may exist via faculty or student channels, many medical student societies have funding for student-led projects. Applications may be submitted for an allocation of this funding to aid in covering costs of the certificate. The CFMS also has a funding application for student-led initiatives. Furthermore, many provincial medical associations encourage students to apply for leadership bursaries

that are used to host sessions for students. In order to create a sustainable certificate program, it is beneficial to meet with the Treasurer and Global Health Liaison to discuss the budget and work to incorporate the Social Medicine Certificate into the annual budget, as discussed earlier.

Faculty Support

It is very helpful to have a faculty champion supporting the certificate in order to receive approval from the UGME office at one's school. Faculty members to approach include: any staff associated with Global Health/Community Engagement offices or staff directly part of the UGME office. If there is trouble finding a faculty champion, another avenue to gain support is to complete a curriculum mapping project. Some UGME offices may even have studentship grants for undertaking this type of project as it benefits their curriculum development. A curriculum mapping project involves going through existing curriculum and determining which lectures cover a set of specified objectives. The best approach would be to individually assess each objective of the Social Medicine Certificate Program. For example, to complete a curriculum map for Objective 1, list every single lecture and or other form of current curriculum that covers any aspect of Objective 1. In a more detailed approach, one would go on to say what aspect of that lecture specifically meets the objective requirements. Ultimately, this creates a picture of what objectives are not being covered in the curriculum thus supporting the need for a Social Medicine Certificate Program. This is a very useful tool for implementing new curricula, as the faculty is able to clearly see where material is missing.

Remote and/or Regional Campuses

Many Canadian medical schools have multiple campuses and it is important to ensure that programs are offered at multiple campuses. Depending on the school it may be feasible to run the global health certificate program separately at both campuses or it may be more appropriate to videoconference between the campuses if such technology exists. Videoconferencing between campuses has been successful at schools thus far as it provides equal opportunity to students from both campuses. It is imperative to have a certificate lead at both campuses to ensure that events are run at both campuses. Attendance can become complicated as well, but using an online platform or having students scan their sign-in sheet works effectively. Having speakers from each individual campus is also good to keep people interested and to ensure diversity in speakers and sessions.

The Northern Ontario School of Medicine (NOSM) has pioneered a unique medical program, operating not within the confines of a building, but rather extending the borders of classrooms and clinics throughout Northern Ontario. They function through a distributed learning model, spread out over the vast 100,000 square kilometres of Northern Ontario, which offers some challenges. The pilot project of their Social Medicine Certificate Program needed to be uniquely developed in order to complement NOSM's unique model of distributed and community-engaged learning. The initial rendition of the program relied heavily on the use of teleconference technology, namely WebEx, for the coordination and accessibility of events, lectures and meetings to all distributed students. This functions as both a live feed of events as well as the option of providing video and/or audio recordings for students who cannot attend real-time sessions. Online forums such as Google Forms also enable them

to create readily accessible documents for activity tracking logs and program evaluation, both serving to provide accountability and satellite access to the GH Certificate Program participants.

Tracking Attendance

Each school may have different forms of taking attendance. A method that has worked well for some schools is to have students sign an attendance sheet kept by the student leading the event. The student leaders would then pass all sign in sheets to the Global Health Liaison or Certificate in Social Medicine Representative to track hours. This may be a difficult responsibility for students depending on the number of students participating in programs. An alternative would be to have a representative in the UGME office that is able to collect the sign in sheets and track hours. An attendance tracker could also be circulated to student interest group leaders that are involved in relevant sessions and have them track student's attendance. This method allows for easier analysis of data upon the completion of the certificate. The attendance trackers have also led to some confusion among participants, thus it is recommended to explain the attendance tracking system significantly at the start of the program and to ensure that there are enough people able to work on the attendance system. Purchasing an online attendance tracker is also an option but this involves increased costs.

Standardized Assessment

There are two approaches to standardized assessments for the certificate program. Option one is to have students keep a detailed list of their participation of the various components of the program. Each item on their list would require the title, description, and a signature from the lecturer, supervisor, or GHL for confirmation of their attendance. Students would then hand in the list at the completion of the components to either the faculty or GHL (depending on how the program is being regulated at each school) for approval of having completed the necessary components. It will be up to this authorizing person to determine, based on the descriptions, whether or not the activities completed are sufficient. Option two is to have a list of approved sessions that are deemed as acceptable for Social Medicine Certificate credit and would be approved by the authorizing body at each school. If students come across an opportunity that is not already approved, they could seek approval by asking the authorizing body directly. Students would again be required to keep a list of their attendance with signatures confirming their participation. This would be the ideal scenario as it is less work for the authorizing body that would only have to read the list to ensure all components have been met, unlike the first option in which there is more room for discrepancy between what is and is not considered an acceptable activity. This will also be beneficial to the student as it requires less writing and is more straightforward. However, in the initial stages of the certificate program, option one may be easier to facilitate until the authorizing body has time to go through and create a list of approved sessions.

How to Get Certified

The CFMS cannot award approved certifications in Global Health education as the CFMS is not an institutionalized organization. As such, certifications need to be affiliated with each home institution. The process will vary with each school. In order to navigate the implementation of a certificate program it is best to contact the Medical Student Association president. An example of the process may be as follows. The certificate program should be presented to the Associate Dean of Undergraduate Medical

Education or an Associate Dean of Global Health/Community Medicine if there is such a position. The Associate Dean will then take the proposal to the Vice Dean who usually sits on a board with members from the general university administration beyond the College of Medicine. The Vice Dean will need to present the certificate program to this board in order to be approved by the university as a program that can be recognizable on one's Medical Doctorate (MD). For example, some schools have an MD with Special Training in Research. This would be an MD with a Certificate in Social Medicine. A step down from having the certificate appear on one's degree would be to have it appear on the MSPR. This does not involve having to seek approval from an external board within the university and the Associate Deans and/or Dean of Medicine generally makes these decisions.

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Appendix 1 – Core Competencies Mapped to Formal Teaching Topics

Global Burden of Disease

Medical Expert

1. Describe the global burden of disease, including the major causes of morbidity and mortality across regions.
2. Describe the pathophysiology, epidemiology, diagnosis and treatment of diseases that have major implications both in Canada and internationally, and understand how Canada is linked to other countries with respect to communicable diseases, non-communicable disease, and chronic illness.

Scholar

1. Identify the forces of change that impact global health challenges and recognize that this requires a commitment to keeping up to date with health policies and knowledge of global burden of disease
2. Critically evaluate global health research and recognize the impact of the imbalance in funding of research that addresses the burden of diseases in the poorest populations versus those of the wealthiest, and understand the strategies proposed to correct it.

Professional

1. Participate in the practice of medicine with due regard that health is a basic human right as defined by the Universal Declaration of Human Rights (1948)
2. Realistically assess the potential of the clinician’s skills and societal position to have an impact in community health, both locally and globally.

Health Implications of Migration and Travel

Medical Expert

1. Develop an approach to the management and assessment of health issues (including ability to access information and support) that can be encountered in Canada and in international clinical settings such as immigrant and refugee health, travel medicine clinics, and clinical practice abroad.

Professional

1. Participate in the practice of medicine with due regard that health is a basic human right as defined by the Universal Declaration of Human Rights (1948)

Social and Economic Determinates of Health

Medical Expert

1. Describe the shift and causal factors towards increasing non-communicable diseases (NCDs) and chronic illness and how this impacts vulnerable populations.

Communicator

1. Demonstrate cultural competency in patient care and community engagement, encompassing the concepts of cultural safety, humility, awareness, and sensitivity.
2. Provide patient-centred care that demonstrates an understanding of the cultural context of well-being, illness and disease, and use this to strengthen the doctor-patient relationship.
3. Engage patients, families, and communities in developing plans that reflect the patient's/community's healthcare needs and goals.
4. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe.
5. Know how to locate resources and tools to improve communication and dissemination of knowledge in a healthcare or community setting.

Leader

1. Identify the key political and economic stakeholders, policies and programs that shape the social determinants of health in a given community.

Health Advocate

1. Explain the major determinants of health of vulnerable populations and the mechanisms with which they affect the health of individuals and populations, including issues of poverty, access to basic needs, environment, human rights, gender, conflict, and political factors.

Scholar

1. Identify and utilize population and disease surveillance databases and valid information resources that will assist with patient and population care, scholarly inquiry, and self-directed learning.
2. Use a conceptual framework on the social determinants of health to describe how social, political and economic changes influence the global distribution of health and disease.
3. Propose culturally appropriate educational tools and resources for knowledge dissemination within populations experiencing health inequities (i.e. methods for knowledge translation).

Population, Resources, and the Environment

Health Advocate

1. Identify vulnerable or marginalized populations and demonstrate an understanding of the different tools and strategies used to advocate for improved healthcare delivery and support to these communities (rural, aboriginal, refugee, immigrant, and/or low and middle income countries.)

Globalization, Health, and Healthcare

Communicator

1. Utilize an interpreter effectively in both patient and community level interactions.

Collaborator

1. Explain how to develop appropriate multidisciplinary partnerships at the community level, including with non-health-care disciplines (governments, engineers, economists, etc.).

Leader

1. Describe the advantages and challenges of different models of healthcare delivery (e.g. primary healthcare model, community-based care models, and public health models) and their relevance in various contexts.

Health Advocate

1. Discuss the interconnectedness of health in the Canadian landscape with the health of the populations in other regions of the world.
2. Outline strategies for investment in health and health determinants as a resource for economic and human development in high and low-resource settings.
3. Recognize the role of primary healthcare, including disease prevention, health promotion, and health surveillance activities in Canada and abroad as an essential tool in maintaining and improving health, especially in underserved populations.

Professional

1. Demonstrate the ability to appropriately obtain information about professional, legal, and cultural expectations within a new setting.

Healthcare in Low-Resource Settings

Collaborator

1. Recognize that sustainable development requires partnership at the community level, especially in low-resource settings.
2. Understand the critical role of non-physician healthcare providers in building sustainable healthcare systems.

Leader

1. Discuss the allocation of resources for a low-resource setting that is in balance and cooperation with the wishes of the community itself. i.e. appropriately identifying and prioritizing key healthcare expenditures such as access to clean water, sanitation, vaccination, and maternal and child care
2. Demonstrate the ability to assume an appropriate and effective role within diverse teams, cultural contexts, and low-resource settings.

Health Advocate

1. Identify and describe evidence-based interventions which will have the most impact in a low-resource setting. e.g., immunizations, nutritional supplements, education, water and sanitation
2. Participate in activities that advocate for the improved health of marginalized or vulnerable populations or communities in a low-resource setting.

Scholar

1. Demonstrate an understanding of ethical principles of clinical and translational research in a low-resource setting.

Professional

1. Discuss the unique ethical challenges involved in practicing medicine with vulnerable patients and communities.
2. Discuss the potential for unintended consequences (both negative and positive) of working in a low-resource setting.

Human Rights in Global Health

Medical Expert

1. Describe the role of major Canadian and international health organizations such as the United Nations (UN), WHO, Department of Foreign Affairs, Trade and Development (DFATD), Centers for Disease Control and Prevention (CDC), and governments.

Health Advocate

1. Explain the major determinants of health of vulnerable populations and the mechanisms with which they affect the health of individuals and populations, including issues of poverty, access to basic needs, environment, human rights, gender, conflict, and political factors.

Professional

1. Participate in the practice of medicine with due regard that health is a basic human right as defined by the Universal Declaration of Human Rights (1948)

Overarching Objectives

Professional

1. Interact respectfully with others in relation to age, gender, ethnicity, place of origin, religious/spiritual beliefs, political beliefs, marital or family status, physical or mental disability, socioeconomic status, sexual orientation, or criminal convictions.
2. Practice the importance of self-care, self-reflection, personal awareness, and physician well-being in professional practice, particularly in unfamiliar environments.

Appendix 2 – Advocacy Training Core Competency Objectives

Collaborator

1. Explain how to develop appropriate multidisciplinary partnerships at the community level, including with non-health-care disciplines (e.g. governments, engineers, economists, etc.).

Leader

1. Identify the key political and economic stakeholders, policies and programs that shape the social determinants of health in a given community.

Health Advocate

1. Discuss how advocacy requires partnerships with patients, communities, and other professionals.
2. Identify vulnerable or marginalized populations and demonstrate an understanding of the different tools and strategies used to advocate for improved healthcare delivery and support to these communities (rural, aboriginal, refugee, immigrant, and/or low- and middle-income countries).
 - a. Discuss strategies to advocate for system-level change with respect to the social determinants of health and how this impacts the concept of patient-centered care and community-centered care.