

Indigenous Peoples and Health in Canadian Medical Education CFMS Position Paper

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Canadian Federation
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Executive Summary

Canada's Indigenous population, including the First Nations, Metis, and Inuit peoples, has fallen below the Canadian average in an alarming number of health indicators. As this decline has been linked to the sequelae of colonialism and other determinants of health, medical schools in Canada have begun to adopt policies and change curriculum to begin addressing these inequities. Currently, a focus exists within Faculties of Medicine on increasing Indigenous student enrolment and on cultural safety education; however, it is apparent throughout the literature that these efforts remain insufficient. This position paper looks to evaluate current practices related to Indigenous health, highlight areas where further action is needed, and recommend interventions to begin the process of decolonization within Canadian medical education.

Principles

The Canadian Federation of Medical Students (CFMS) acknowledges that: 1) Canada's healthcare and medical education systems both directly and indirectly contribute to the continued colonization of Indigenous people and their health, 2) Consensus, respectful partnerships, and Indigenous self-representation are imperative in decolonizing healthcare and education, 3) Indigenous health is a relevant topic throughout the entirety of undergraduate medical education - from recruitment through to the transition to residency, and that 4) Current standards and practices within medical education are inadequate in addressing topics in Indigenous medical education.

Recommendations

The CFMS recommends that changes be implemented throughout undergraduate medical education. Further, the CFMS recognizes that collaboration between a number of different parties is needed to fully address target areas within medical education. In particular, the CFMS makes the following recommendations:

1. Increase the recruitment of Indigenous medical students through a targeted, culturally safe, and comprehensive 'pipeline' approach.
2. Develop admissions policies that prioritize equity in order to promote increased admission of Indigenous students into medical school
3. Implementation of mandatory, culturally safe Indigenous health curricula during pre-clerkship training
4. Implement experiential learning modules into pre-clerkship curricula, in order to promote understanding, validation, and respect of Indigenous knowledge and cultural practices.
5. Implement robust clinical elective experiences during clerkship in Indigenous health and evaluate elective outcomes for the learner, as well as the patients and communities
6. Promote student participation and leadership in Indigenous health-focused extracurricular activities through logistical, ideological, and financial support.
7. Prioritize the employment of Indigenous physician leaders, Elders, and support staff within medical faculties.
8. Ensure Indigenous cultural safety competency in all educators and support staff.
9. Increase accountability to local Indigenous communities through an administrative structure that ensures meaningful engagement

Background

Indigenous peoples of Canada are a non-homogenous group that includes Status First Nations, Non-Status First Nations, Metis, and Inuit peoples. Diversity exists among these groups according to cultural practices, language, traditional territory, and sociodemographic makeup. As descendants of the first people of North America, Canada's Indigenous peoples stand at a unique crossroad in that traditional knowledge and culture practiced for thousands of years is often intertwined with pressures resulting from European colonization. Indeed, the perverse history of institutionalized and government-sponsored cultural genocide within Canada has left an enduring detrimental imprint.¹

One recognizable impact that colonization has had on Canada's Indigenous peoples is the impact on health. Epidemiological data has consistently shown that, on average, Indigenous groups have poorer health outcomes compared to non-Indigenous groups in nearly every measure, including chronic disease, accidental death, and overall mortality. Compared to non-Indigenous Canadians, First Nations, Metis and Inuit peoples have higher rates of smoking and related respiratory disease, obesity and household food insecurity.² Supporting literature in social medicine has linked this data to the sequelae of colonialism, including—but not limited to—persistent institutional racism and the residential school system, intergenerational trauma leading to reduced resiliency, and lack of true sovereignty over health decision-making.¹ In fact, the World Health Organization asserts that the colonization of Indigenous peoples is a fundamental social determinant of health.³ As well, geographic issues and a lack of recognition of traditional medicine have further contributed to indigenous health inequalities.

In recent years, Canadian medical school curricula has placed a greater focus on social accountability, advocacy and the social determinants of health. Medical schools recognize that health reaches beyond the bounds of the hospital and is markedly shaped by the fundamental characteristics of the diverse peoples and communities across Canada: history, culture, education, employment and income—to name but a few. One way to tackle prevalent Indigenous health inequities is through improved medical education that acts on Indigenous social determinants of health.⁴ In 2006, with the goal of improving Indigenous health by advocating for more Indigenous physicians, the Association of Faculties of Medicine of Canada partnered with Indigenous Physicians Association of Canada to help co-lead the AFMC's Aboriginal health initiatives. In 2008, these organizations published four documents on curricula, admission and support programs, a pre-admissions support toolkit and best practice guidelines to recruit mature aboriginal students. This partnership aimed to improve Indigenous health by increasing the number of Indigenous doctors and promoting cultural safety for Indigenous people in healthcare.⁵ Ultimately, these efforts intend to offer “culturally relevant and meaningful health care”^{6(p.540)} to Indigenous people, helping them to both achieve the same health outcomes as non-Indigenous Canadians and determine what health outcomes are meaningful to them.⁶

Prior to nationwide efforts to increase the number of Indigenous physicians and implement cultural safety into medical training, some Canadian medical schools had already established Indigenous physician training programs. In 1988, the Faculty of Medicine and Dentistry of the University of

Alberta was the first medical school to establish a program dedicated to recruiting Indigenous students.⁷ By 2011, 73 Indigenous students had graduated from this program.⁸ Over the past two decades, many medical schools across Canada have developed similar programs, such that most now reserve seats or have a separate admissions stream for Indigenous students.

It is clear that the number of Indigenous physicians will not increase simply by creating an Indigenous application stream. The profound effects of the upstream determinants of health necessitate efforts that are longitudinal, intersectoral, and comprehensive. One critical example is the chronic underfunding of First Nations schools, which receive 15% less per student than provincial counterparts.^{9(p.1)} This underfunding leaves many students less prepared than their non-Indigenous peers for college or university education, which is a prerequisite for medical study.^{10(pp.10,14)} A second example is the history of poor access to healthcare and education resources experienced by Northern, rural, and remote populations. While Canadian medical education has traditionally been a privilege of urban dwellers, medical schools have recently aimed to provide more exposure to rural medicine, focus on rural and Indigenous health issues, and increase the number of rural medical students. The creation of the Northern Ontario School of Medicine (NOSM) and rural medical programs such as the Southern Medical Program and Northern Medical Program in British Columbia are a testament to these efforts.

Curricula has followed suit in the effort to integrate Indigenous health topics into medical education. While medical schools recognize the need for more Indigenous doctors, they are also aiming to train non-Indigenous doctors who can better integrate cultural safety into their practices. In this vein, medical schools now actively promote cultural safety in learning modules and clinical experiences. Cultural safety moves beyond several outdated models of respecting a patient's culture such as: cultural awareness, the acknowledgement of difference, cultural sensitivity, the recognition of the importance of respecting difference, and cultural competence; all of which focuses skills, knowledge, and attitudes of practitioners.¹¹ Instead, cultural safety aims to reduce the power gap between healthcare providers and patients in order to foster a respectful therapeutic relationship.¹² Cultural safety offers a safe way to tackle health inequities in medical education and while simultaneously encouraging the understanding of Indigenous values and health frameworks.

The Royal College of Physicians and Surgeons of Canada cites both cultural safety and consensus as Indigenous health values inherent in the 'medical expert' role within the CanMeds framework for physicians and physicians-in-training. As a medical expert, the "culturally competent physician embraces Indigenous knowledge and the significance of forbearance in Indigenous culture; this shows a true understanding of how historical legacies affect Indigenous people".^{13(p.4)} Though Indigenous health topics within medical education exists, there are variable practices in how content surrounding Indigenous health is delivered across the CFMS member schools. Cultural safety, for instance, takes on different forms across Canada's 17 medical schools. This variation has been documented in the literature and supported colloquially by both students and educators alike more recently.¹⁴ It is clear that more standardized practices across Canada are needed in Indigenous medical education.

Principles

The Canadian Federation of Medical Students is the voice of medical students in Canada and is poised to take leadership on developing appropriate Indigenous health approaches and curricula within undergraduate medical education.

The CFMS maintains the following principles:

- 1) Canada's healthcare and medical education systems both directly and indirectly contribute to the continued colonization of Indigenous people and their health
- 2) Consensus, respectful partnerships, and Indigenous self-representation are imperative in decolonizing healthcare and education
- 3) Indigenous health is a relevant topic throughout the entirety of undergraduate medical education - from recruitment through to the transition to residency
- 4) Current standards and practices within medical education are inadequate in addressing topics in Indigenous medical education

Additional principles specific to this topic from the CFMS' Guiding Principles and 2014-2017 Strategic Plan can be found in the Appendix.

Recommendations

Recommendation 1: Increase the recruitment of Indigenous medical students through a targeted, culturally safe, and comprehensive pipeline approach.

While there have been few studies demonstrating the efficacy of Indigenous recruitment strategies, making best practices difficult to discern, Curtis et al.¹⁵, as well as the Indigenous Physicians Association of Canada (IPAC)¹⁶, lay out principles to inform recruitment strategies of Indigenous students. Both recommend creating targeted recruitment initiatives that “take into account Indigenous rights, realities, values, priorities and process”^{15(p.13)} which have also been successful in Indigenous nursing recruitment.¹⁷ *The CFMS recommends medical faculties collaborate with local Indigenous organizations to create culturally safe, targeted recruitment materials and programs to increase interest and knowledge of the medical profession among Indigenous students.*

Institutions should foster positive relations with Indigenous students and communities by formulating a public mission statement expressing their commitment to workforce equity while enacting policies and administrative processes that proactively support this aim. Additionally, medical schools should support research to identify local barriers to achieving Indigenous health workforce equity and tailor recruitment and procedures to mitigate these barriers.¹⁵ This institutional commitment is one aspect of creating “an environment where Aboriginal students feel respected and valued”^{16(p.26)} by structurally supporting Indigenous students. IPAC stresses creating a positive and supportive environment for Indigenous students. While curriculum content, community involvement, and Indigenous faculty are discussed later in this paper, they are key aspects in creating a welcoming and

supportive environment for Indigenous students. The provision of culturally relevant support such as safe spaces, social opportunities, mentoring, or time with Elders, is also widely supported.^{15,17,18} *The CFMS recommends that medical faculties work to create a supportive environment for Indigenous medical students by committing to workforce equity, removing institutional barriers to medical education and creating appropriate Indigenous student support services.*

Most programs and researchers concerned with Indigenous recruitment recommend a multifaceted approach to student recruitment with numerous points of contact for prospective students, otherwise known as a pipeline model. Curtis *et al.* expand this approach to focus on retention and program completion as well, advocating for “a comprehensive and integrated pipeline model that operates across secondary and tertiary education sectors via the provision of early exposure, transitioning, retention/completion and post-graduation activities”.^{15(p.13)} Preparatory programs for Indigenous students entering higher education or health programs are widely supported^{15,16,18,19} as they “have the potential to provide comprehensive transitioning support to address gaps in educational achievement whilst also ensuring that students are set up for success.”^{15(p.11)} *The CFMS recommends medical faculties take a pipeline approach to Indigenous student recruitment including but not limited to outreach, preparatory programs and transition support.*

Lastly, IPAC recognizes the need for appropriate financial support for Indigenous students who must often relocate in order to pursue medical studies. This has been shown to be a key factor for the recruitment and retention of Indigenous students in health¹⁵ and nursing programs¹⁸. Mature Indigenous students may have additional financial and familial responsibilities which make “assistance in securing housing, day care programs and student-parent support groups”^{16(p.27)} critical in order to allow their entry into medical school. *The CFMS recommends adequate financial and relocation support be made available to Indigenous medical students.*

Recommendation 2: Develop admissions policies that prioritize equity in order to promote increased admission of Indigenous students into medical school

There is a wealth of support in the literature for the development of an Indigenous applicant stream.^{10,14,15,19,20} As Curtis *et al.*¹⁵ found; “Tertiary institutions should demonstrate a tangible commitment to equity initiatives via the provision of well defined, accessible and targeted admission policies or quotas for Indigenous students. Support to navigate the often complex university application processes should also be provided”.^{15(p.11)} With this in mind, *the CFMS recommends all Canadian faculties of Medicine develop admissions policies and dedicated seats for Indigenous applicants.*

An important topic within an Indigenous acceptance stream is eligibility; including both academic and demographic requirements. One common academic requirement is the MCAT. Problems with cultural appropriateness and language barriers have been addressed differently across Canada. In several Canadian schools, MCAT scores are adjusted for Indigenous applicants.^{14,20} While the IPAC pre-admissions support toolkit suggests faculties of medicine thoughtfully review their use of the MCAT,²⁰ others have gone further by insisting on discontinuing the use of MCAT scores.²¹ Given the

recent overhaul of the MCAT, there is a lack of evidence to discount its use altogether, however it still remains as a barrier for Indigenous applicants. *The CFMS recommends all medical faculties investigate their use of the MCAT and its requirements for Indigenous applicants in line with IPAC recommendations.*

Demographic eligibility for the Indigenous stream is a potentially contentious issue. While many medical faculties have specified 'Proof of Ancestry' requirements,²⁰ there must also be consideration for applicants who self-identify as Indigenous but do not meet the faculty's definitions. Allowing alternative documentation, personal essays and/or letters of community support should be included in these cases. Assembling a small panel of Indigenous staff, faculty, students and community members to review applications and determine an applicant's eligibility is recommended by the IPAC pre-admissions toolkit.²⁰ *The CFMS supports this recommendation.*

Specific guidance for faculties of medicine related to Indigenous admissions processes is available in the form of IPAC's pre-admissions support toolkit.²⁰ This toolkit highlights the importance of easily accessible information such as admissions requirements, contact information, and information on how Indigenous health is integrated into the curriculum. Support for Indigenous applicants can also be in the form of interview preparation workshops with mock-interviews, such as those offered by McMaster and NOSM. *The CFMS recommends adherence to the IPAC's pre-admissions support toolkit.*

There are two dominant interview types for Canadian Medical schools; the panel interview and the Multiple Mini Interview (MMI). The IPAC pre-admissions toolkit suggests a panel interview with at least one Indigenous student and one Elder, more questions regarding Indigenous health, and cultural training for all interviewers.²⁰ This approach is supported by the Canadian Multiple Mini-Interview Research Alliance²², which found that the MMI was not diversity neutral, and that scores correlated negatively with Indigenous status.^{21,22} Conversely, use of the MMI is supported by others^{10,23} who state that "neither aboriginal-specific rater training nor aboriginal rater assignment is required to ensure a level playing field for the assessment of applicants' personal qualities."^{23(p.58)} *There is a lack of evidence to recommend one interview method over the other. However, the CFMS suggests adherence to the widely supported^{10,20,23} notion that the interview be culturally safe.*

Finally, given that the vast majority of applicants are non-Indigenous, there is a need to evaluate cultural competency and knowledge of Canada's Indigenous peoples in all applicants. The IPAC pre-admissions toolkit recommends that a question regarding Indigenous health be asked of all applicants during the interview, both as an evaluation and to demonstrate that Indigenous health is a priority for the faculty.²⁰ *The CFMS supports this recommendation.*

Recommendation 3: Implementation of mandatory, culturally safe Indigenous health curricula during pre-clerkship training

Mandatory learning on Indigenous health in core curriculum is not currently a standard of accreditation for Canadian medical institutions.²⁴ Jacklin⁴ has noted that curriculum committees are still primarily concerned with accreditation standards and licensing examinations, consisting largely of

those from Western/medical knowledge backgrounds. The existence of this gap is reinforced by Spencer,¹⁴ finding that, while Canadian medical schools have offered lectures and training opportunities on Aboriginal health, few of these have offered Aboriginal health activities as core curriculum. The IPAC-AFMC Aboriginal Health Task Group identified curricular content and faculty development on Aboriginal health care issues to be important areas of focus for improving Indigenous health care education.¹¹

Despite the identification of these focus areas, there is still variability in both uptake of cultural safety training by medical students and emphasis on Indigenous health within this training. A 2008 IPAC-AFMC survey on existing Indigenous health curricula in UME showed that 77% of identified curricular components contained specific Indigenous health content.²⁵ 93% of learners had the opportunity to engage with Indigenous individuals; however, only 52% received any kind of cultural competency or safety training.²⁵ Although cultural safety curricula may teach content that can be generalized to diverse cultural groups, Indigenous people are particularly important in Canada due to their constitutional recognition and treaty rights. Students require stand-alone Indigenous cultural competency training to sufficiently learn the knowledge, skills, and attitudes required for development of Indigenous cultural safety.²⁶

Cultural safety is crucial to establishing trust between healthcare providers and patients, and has become increasingly recognized as a tool for clinician development. By focusing on the patient's feelings in healthcare encounter, cultural safety can empower people because it reinforces each person's knowledge and reality as valid and valuable.²⁷ The now-defunct National Aboriginal Health Organization recognized key responsibilities of both students and educators for fostering culturally safe health care education. While learning to become competent healthcare providers, NAHO argued that students must be responsible for self evaluation, identification of preexisting attitudes, and transformation of attitudes. At the same time, educators or facilitators are responsible for presenting honest curricula, dismantling barriers, and respectfully recognizing Indigenous knowledge systems.²⁸

IPAC-AFMC also emphasizes the importance of student self-reflection on attitudes towards Indigenous peoples.²⁹ It calls for curricula covering the impact of colonization and government policy—including the residential school system—as well as the diversity of Indigenous peoples of Canada, and traditional knowledge and healing practices.²⁹ Additionally, IPAC-AFMC calls on medical faculties to develop student skills in communicating with Indigenous patients and communities contributing to positive therapeutic relationships and collaborative community relations.²⁹ IPAC-AFMC recognizes barriers to implementing the core competencies framework and therefore offers a 'Curriculum Implementation Toolkit'²⁹ to provide a framework for community engagement and formation of collaborative relationships between medical faculties and the Indigenous communities they serve.

The CFMS recommends all medical faculties implement IPAC-AFMC's First Nations, Inuit, Métis: Core Competencies Framework for Undergraduate Medical Education into pre-clerkship undergraduate medical education. Additionally, the CFMS recommends the aforementioned framework for Aboriginal health curriculum be adopted as a requirement for accreditation by all Canadian medical schools.

Recommendation 4: Implement experiential learning modules into pre-clerkship curricula, in order to promote understanding, validation, and respect of Indigenous knowledge and cultural practices.

The CFMS supports the introduction of experiential teaching methods for educating medical students on Indigenous perspectives of health and wellness during pre-clerkship of undergraduate medical education. Teaching is a cultural system; inherent within each educational system is a complex grouping of power dynamics.³⁰ Experiential learning therefore helps students recognize the biases and power dynamics built into education. This type of learning “reflects questioning about the nature of knowledge and the extent to which knowledge can represent the interests of the powerful and serve to reinforce their positions in society”.^{31(p.854)} Experiential learning can be used to teach medicine in a way that is culturally inclusive and contextualizes Indigenous history, values and worldviews. From the Indigenous perspective, experiential learning includes: learning from the land, Elders, traditions and ceremonies, community, parental and family supports, as well as within the workplace.

Culturally inclusive learning about Indigenous health must foster student understanding of issues from Indigenous perspectives, which are defined within Indigenous knowledge systems. In order to foster a culturally inclusive learning environment, medical education must challenge students with exposure to multiple perspectives and connect them with knowledge of alternative views of the world.³² The Canadian Council on Learning notes that experiential learning is a “widespread, vital”^{33(p.12)} but often unrecognized—form of Indigenous learning. By developing a culturally inclusive learning environment, medical schools can encourage students to acknowledge different ways of knowing as a valuable resource rather than a roadblock to learning.

Indigenous health modules should move beyond solely didactic teaching methods and instead use experiential methods that enable students to take part in culturally safe approaches to medicine and indigenous healing by engaging more directly with indigenous peoples. Kaminski³⁴ notes that “it is not enough to read about these experiences or even to hear about them second hand. Direct personal experience is critical for true understanding.”³⁴ The primary barrier identified by NOSM in the development of the Indigenous curriculum for medical education was the conflict between Indigenous and non-Indigenous knowledge systems, which heavily favours Western knowledge, medicine, and teaching methodologies.⁴ However, immersive experiences are one manner in which NOSM has been able to overcome these Western biases and place value on Indigenous knowledge. Implementing experiential learning methods acknowledges that “[p]urposes for teaching and for learning vary. Teaching practices and learning behaviours are most effective when they are fit for their purpose”^{32(p.3)}. Experiential acquisition of knowledge is essential for medical students to develop genuine awareness and understanding of Indigenous philosophies, worldviews, traditional ways of knowing and doing, and to appreciate the wisdom and reasons behind cultural practices.³⁴ Learning through experiences may serve to legitimize Indigenous knowledge in modern medical culture, thereby promoting a more welcoming environment for Indigenous medical students and allowing non-Indigenous medical students to better understand and provide care that addresses the needs of Indigenous patient populations.³⁶

The CFMS recommends students have opportunities throughout preclerkship training to engage with Indigenous educators in small group and experiential sessions that ensure resiliency in order to foster understanding of Indigenous values promoting development of cultural competence.

Recommendation 5: Implement robust clinical elective experiences in Indigenous health and evaluate elective outcomes for the learner, as well as the patients and communities

In 2005, the AFMC Aboriginal Health Task Group presented the AFMC Council of Deans with a range of recommendations regarding Indigenous health education and human resources in medical schools. The Council of Deans approved recommendations that all medical schools should “strive for Aboriginal health curricula that respect principles of cultural competence and particularly emphasize skill-based and attitudinal themes”^{11(p.4)} and “utilize appropriate teaching methods such as experiential and interactive methods to facilitate cultural competence”^{11(p.4)}. Much of these experiential and interactive methods stem from elective experiences that expose students to Indigenous healthcare. Elective experiences empower students to translate knowledge about Indigenous health learned in the classroom setting to real life.

Medical schools can undertake several key steps to improve ongoing or future opportunities for students to gain exposure to Indigenous healthcare. Examples include diversifying learning environments and building into medical curricula specific goals and objectives around Indigenous experiences and healthcare. Indigenous health is not static. It is experienced differently across Canada—from rural to urban areas, and across distinctive Indigenous populations. By diversifying the learning context, medical schools expose students to a wide spectrum of the rewards and challenges of Indigenous healthcare and the diversity of cultures within the broad category of Indigenous peoples. Diversifying learning environments involves challenges: community-based Indigenous health electives must have appropriate faculty supports and medical schools must identify preceptors who are willing to involve students in the care of Indigenous individuals, while teaching them in a culturally safe context.

Students must also be reminded of the importance and value of their learning experiences in Indigenous contexts, as these play a part in the larger health status of the Canadian population. Medical schools have started to develop more diversified clinical contexts by creating integrated and longitudinal clerkships that better expose students to the context of providing healthcare in Indigenous communities.³⁷ Such experiences would enable students to meet key competencies set out by IPAC and AFMC, such as being able to “demonstrate how to appropriately enquire whether a First Nations, Inuit, Metis patient is taking traditional herbs or medicines to treat their ailment and how to integrate that knowledge into their care”.^{11(p.13)} However, many of these programs are still in stages of infancy and are not offered to all students across Canada.

Rather than offering students Indigenous health experiences on an ad hoc basis, medical schools should build robust clinical elective experiences in Indigenous health into their curricula. These goals and objectives can be evaluated and modified by specialists in Indigenous health such as faculty, community members and regional and national Indigenous health advocates. IPAC-AFMC has

recommended that these groups of individuals be involved in “[developing] and [teaching] culturally appropriate Aboriginal curriculum content and context”^{11(p.4)}. In order to facilitate the evaluation of programs both preclerkship and clerkship exposure to Indigenous health, the IPAC-AFMC published the critical reflection tool ³⁸, which assesses Indigenous health programs in five different domains, including, community engagement, collaborative vision, pedagogy, implementation and evaluation.

The CFMS recommends that medical schools implement the use of the IPAC-AFMC Critical Reflection Tool to evaluate preclerkship and clerkship programs designed to increase exposure to Indigenous health, in order to optimize programs to maximize student learning and community health outcomes.

While the importance of developing medical trainees’ knowledge, attitudes, skills and cultural safety around Indigenous health is well defined by organizations such as the IPAC and the AFMC, the impact of Indigenous health electives on the broader communities in which they take place is not well characterized. It is widely accepted that Indigenous health exposure increases trainee skills, knowledge and cultural safety practice; however, whether measurable learner outcomes translates into decreased disparities in the health care outcomes of Indigenous populations remains to be characterized. As illustrated by Ewen et al.³⁹, it is assumed that increasing trainee skills, knowledge and attitudes will inherently lead to improvements in the health outcomes of Indigenous populations, however, curricula are largely designed in a learner-centered way and often patient outcome evaluation is not a primary focus, nor is it measured. Further impacts of Indigenous health electives on communities, including equity and social accountability outcomes, and meeting community-specific needs are other potential areas of outcome measurement in addition to health-specific outcomes.³⁹ Ewen et al.³⁹, identifies the need to, “...design methods that focus on evaluating the impacts of the [Indigenous health] curricula on patient outcomes, while continuing to measure the impact on the learner.” ^{39(p.52)}

Evaluation of trainee impact on Indigenous community health outcomes must be done in a culturally safe and participatory manner in order to protect traditional knowledge, cultural practice and the information gleaned from such research. The Indigenous research principles of Ownership, Control, Access and Possession (OCAP)—established in 1998 by the First Nations and Inuit Regional Longitudinal Health Survey (RHS) and endorsed by the National Aboriginal Health Organization (NAHO)⁴⁰—aim to guide research on Indigenous health and are applicable in this context. OCAP calls for research that, “...must respect the privacy, protocols, dignity and individual and collective rights of First Nations. It must also derive from First Nations values, culture and traditional knowledge”⁴⁰.

As stated by Varcoe et al.⁴¹, and endorsed by the IPAC-AFMC, one of the core tenets of cultural safety is that the patient defines what constitutes safe service. In that regard, efforts to qualify and quantify the impact of clinical exposure to Indigenous health on Indigenous peoples will serve to inform the effectiveness of experiential learning and to identify areas to be improved. The community engagement domain of the IPAC-AFMC Critical Reflection Tool facilitates the assessment of the impact medical trainee exposure on Indigenous communities.³⁸ It is useful in the evaluation of both long and short-term impacts of students’ exposure to Indigenous health, thereby informing the continual innovation of available programs to meet the dynamic needs of both students and communities.

The CFMS recommends that clinical exposures in Indigenous communities, whether through core rotations or electives, should be designed to optimize both learner and patient/community outcomes. The CFMS recommends that, in addition to the measurement of learner outcomes, patient/community outcomes and the long-term impact of trainees' involvement in Indigenous communities be formally evaluated in a way that conforms to the Indigenous research principles of Ownership, Control, Access and Possession (OCAP).

Recommendation 6: Promote student participation and leadership in Indigenous health-focused extracurricular activities through logistical, ideological, and financial support.

During undergraduate medical training, it is common for students to take part in extracurricular activities to gain competencies in a number of different areas, including leadership, advocacy, and scholarly pursuits. Extracurricular activities in Indigenous health are likely to positively impact student experience, cultural competency, and community relations. Similarly, it has been shown that previous positive experiences are one of the most important factors in determining student specialty and career choices.⁴² As such, student participation in extracurricular activities focusing on Indigenous health may aid students in gaining specific competencies in Indigenous health topics that can be utilized in a variety of different future practices, including those focusing on Indigenous primary care.

Though there is no published data on this topic, participation in Indigenous health-focused extracurricular activities has been described informally as low among Canadian medical students. A number of factors may contribute to this: low enrollment of Indigenous students and/or Indigenous health leaders, perceived inability to address Indigenous health issues, worry of offending Indigenous people due to knowledge gaps, lack of perceived qualification for leadership, and lack of perceived applicability to future careers. Aside from achieving sufficient interest and participation, the success of student-lead extracurricular activities further depends on meeting two other preconditions: ideological and logistical support as well as sufficient financial means. As such, it is important that Faculties of Medicine and individual medical societies support student-lead initiatives in achieving these preconditions.

Indigenous health-focused extracurricular activities rely on a supportive environment in order to plan and execute meaningful programming within and beyond the medical community. Faculty-level ideological support is possible by recognizing the importance of student participation and leadership in these extracurricular activities as well as by promoting cultural safety in a Faculty's own institutional processes. Equally important to creating a supportive environment is logistical support. Faculties can lend this support by sharing best practices, assisting with evaluating programming, and providing resources including faculty members, meeting space, and community contacts. Elder Betty Carr-Braint of Tyendinaga Mohawk Territory emphasizes that faculties should connect student leaders with local Indigenous organizations and encourage student participation in existing open Indigenous cultural activities run within the wider community (Oral Communication, August 11 2015). Ideally, this integration would contribute to the preservation of institutional memory and encourage collaboration with community organizations and like-minded faculty members. When conflicts with curriculum

occur, logistical support in the form of attendance flexibility can be made available to permit students to participate in various Indigenous health-related activities deemed beneficial to student development. *The CFMS recommends that Faculties of Medicine adopt practices that promote ideological and logistical support for Indigenous Health-related extracurricular activities in consultation with student participants and leaders.*

In addition to logistical and ideological support, adequate financial means is imperative for medical students engaged in Indigenous health-focused extracurricular activities. Although sources of funding for student activities varies across Canada, Faculty of Medicine-mandated revenue streams and medical societies are often primary sources. Faculties, individual medical societies, and other relevant parties often must work together to determine these funding responsibilities. Once funding responsibilities have been allocated, budgetary requirements for student-lead leadership positions, interest groups, or individual initiatives require fair evaluation to ensure that adequate financial support is provided to ensure success. Further, students in Indigenous health leadership roles may benefit from capacity building, collaboration, and networking beyond the local level. Therefore, funding should be made available for these students to attend opportunities to gain relevant skills and competencies, such as conferences, meetings, or leadership forums. *The CFMS recommends that Faculties of Medicine and Medical Societies work together to determine funding responsibilities and to allocate funds for Indigenous health-related extracurricular activities. The CFMS also recommends that specific funding for students in Indigenous health leadership roles be made available for these students to attend conferences, meetings, or leadership forums.*

Recommendation 7: Prioritize the employment of Indigenous physicians, Elders, and support staff within medical faculties.

In addition to the recruitment of Indigenous students, representation of Indigenous educators, elders, and support staff within medical faculties is vital for many purposes: from teaching Indigenous curriculum to fostering resiliency and a culturally safe environment.

Indigenous physicians are needed within medical faculties for a number of different roles, yet they are often underrepresented both within these faculties and the broader healthcare system.²⁶ In 1996, the Royal Commission on Aboriginal Peoples recommended that 10,000 Aboriginal health professionals were needed over a 10-year period to address social, education, health and housing needs of Canada's Indigenous groups.⁴³ By 2005, however, Indigenous physicians made up an estimated 100-150 of the 61,622 total physicians in Canada. In other words, Indigenous people made up 4% of Canada's population, but only 0.25% of its physicians.⁶ In an effort to eliminate this disparity, the 2005 Kelowna Accords pledged \$1.315 billion dollars to improve Indigenous health indicators and double the number of Canada's Indigenous health professionals.⁴⁴

Indigenous medical educators (often referred to as Aboriginal/Indigenous Health faculty champions) have a number of roles and responsibilities within medical education. Indigenous curriculum should be directly taught by these educators when possible; as this content more effectively presented when the individuals teaching them are knowledgeable about the history, culture, and worldview of

Indigenous Peoples of Canada.¹¹ When this is not possible, these educators should oversee the presentation of Indigenous health topics to medical students and trainees to ensure that topics are presented adequately and without negative bias. On a curriculum development level, Shah²⁶ suggests that the lack of Indigenous staff in Canadian medical faculties to be a contributing factor in the insufficiency of Indigenous health content in medical curricula. Therefore, these educators should be able to advocate for the inclusion of Indigenous curriculum, in addition to reviewing existing curriculum and coordinating community-driven curriculum as needed. Apart from curriculum and formal teaching, Indigenous medical educators play a vital role in mentoring Indigenous students. Mentoring is commonplace within medical education and predictable patterns exist among students from underrepresented populations: they frequently seek mentoring from faculty with a similar background.⁴⁵ Therefore, efforts should be made so that Indigenous medical educators are given enough time to effectively mentor these students. Further, a qualitative study of the perceptions of Indigenous Australian medical students showed that simply the presence of graduated Indigenous physicians boosts confidence in the students' ability to complete the program and act as a role model.⁴⁶ *The CFMS recommends that Faculties of Medicine hire at least one (1) Indigenous physician to their faculty as an Indigenous Health Faculty Champion.*

Non-physician Indigenous staff, including Elders and support staff, are also needed within Faculties of Medicine. Traditionally, the role of knowledge carrying and teaching within many Indigenous communities comes from Elders. To respect this system of knowledge and teaching, Elder-In-Residence or have a Visiting Elder program specifically for the Faculty of Medicine have been developed in some schools. Similarly to Indigenous medical educators, Elders are able to participate in the oversight and development of Indigenous Health curriculum. Ferreira *et al.*⁴⁹ have successfully modelled collaborative teaching of science that blends Indigenous worldviews with traditional science pedagogy that uses both Elders and Scientists. Although curricular collaboration has not been documented in the medical education literature, faculties should commit to developing and evaluating curriculum that directly involves Elders in teaching. In addition to formal teaching and curriculum, Elders are able to facilitate relevant cultural teaching, ceremonies, and community support to both Indigenous and non-Indigenous students. In addition, the hiring of support staff who are dedicated to assisting prospective and current Indigenous students have been previously recommended.²⁹ They should be associated specifically with the Faculty of Medicine and be knowledgeable about Indigenous admissions policies, opportunities for financial aid, academic support, and be able to connect students to the cultural and social community. *The CFMS recommends that Faculties of Medicine develop an Elder-in-Residence or Visiting Elder program as well as the hiring of Indigenous support staff specifically for students and faculty (primarily the Faculty Champion) the Faculty of Medicine.*

Recommendation 8: Ensure Indigenous cultural safety competency in all educators and support staff.

In many instances, particularly in small group sessions or during clinical rotations, Indigenous health teaching may be lead by non-Indigenous educators. Despite this, little data exists that describes the uptake and efficacy of Indigenous health and cultural safety training in these educators in Canadian

medical schools. From the limited literature that does exist, Jacklin⁴ reported that faculty facilitating Indigenous health sessions at NOSM are not required to have expertise or formal training in the subject, and indicated that attendance at faculty development workshops on Indigenous health are poorly attended.

Limited facilitator training of Indigenous health and poor faculty uptake of cultural safety training can give rise to problems for medical trainees. Medical students may receive contradictory messages about Indigenous peoples and health, as content is solely dependant on facilitator knowledge, which may contain biases surrounding Indigenous culture and/or knowledge systems. This is particularly troubling given recent findings from Ly & Crowshoe,⁴⁷ who suggest that preceptors' perceptions of Indigenous people directly impact the perceptions of their students. To this end, requiring the completion of cultural safety training for all non-Indigenous faculty members is needed. While cultural safety curriculum typically includes topics applicable to a variety of cultural groups, topics specific to Canada's Indigenous people should be highlighted to allow faculty to facilitate appropriate representation of Indigenous topics in healthcare and to help faculty recognize their areas of bias or stereotyping. Ultimately, as Kripalani et al.⁴⁸ state, "cultural competence education should not take place only in workshops, and the teaching should not be done by 1 or 2 physician champions alone"^{48(p.1118)}; all educators have the responsibility to teach unbiased Indigenous health content when a learning opportunity presents itself. With that being said, the uptake of mandatory cultural safety training sessions is designed to build a knowledge base to inform this responsibility.

Aside from educators, staff cultural competency training is beneficial in other areas. Support staff often interact with Indigenous students, faculty, and community members on a number of levels. Therefore, similar to medical educators, they play a role in either fostering or hindering a culture of Indigenous inclusivity and should also complete mandatory cultural safety training. In terms of community partnerships and engagement, establishing Indigenous cultural safety curriculum provides an opportunity for medical faculties to collaborate with Indigenous community groups. This can lead to the development of positive working relationships with local community groups for future programming.

The CFMS recommends that Indigenous cultural safety training be made mandatory for all educators and support staff, and be facilitated by competent Indigenous Health Faculty Champions with the input from elders and local Indigenous communities.

Recommendation 9: Increase accountability to local Indigenous communities through an administrative structure that ensures meaningful engagement

In a seminal article for the WHO, Boelen & Heck define social accountability within medical schools 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"^{50(p.3)}, which is built on the core values of relevance, quality, cost-effectiveness, and equity within the domains of education, research, and services. The AFMC's 2010 report on the Future of Medical

Education in Canada includes social accountability as a cornerstone of Canadian physicians and medical schools.³⁷

Therefore, medical schools in Canada have a social responsibility to improve Indigenous health through efforts in recruitment and admissions, curricular content, creating supportive environments, increasing Indigenous faculty (all described above) and administrative structure. Medical schools must be structured in such a way as to empower and remain accountable to the Aboriginal communities they serve. Some best practices identified in the literature and a scan of Canadian medical school activities are discussed here.

The IPAC (2007 - mature students) recognizes the importance of establishing Aboriginal community advisory groups who have substantial input with senior leadership.^{16(pp.14-15)} This is well demonstrated at several schools across Canada such as the Community Advisory Council at UBC's Centre for Excellence in Indigenous Health or University of Ottawa's Aboriginal program advisory group. Secondly, an administrative department of Indigenous affairs helps to ensure evidence-based and culturally safe supports are available to both prospective and current students. To increase the capacity of the medical school to deliver culturally safe education and services, a further recommendation is the provision of professional development for staff and faculty in topics such as racism, cultural safety, and Indigenous health.^{15,20(p.6)}

Lastly, the integration of social accountability into medical school administration also requires the development of a process for all Indigenous stakeholders to be heard. While community advisory groups contribute on an ongoing basis, regular consultations with *all* stakeholders allow them to express desired outcomes, recognize improvements, and keep the medical school accountable. One example is the consultation process practiced by NOSM, who holds periodical broad consultations with Indigenous stakeholders and publishes reports online (<http://www.nosm.ca/aboriginalreports/>) in multiple languages.

To ensure meaningful engagement and accountability to Indigenous communities, *the CFMS recommends that Faculties of Medicine establish administrative structures and processes to receive community guidance in matters of Indigenous medical education including, but not limited to, recruitment, admissions, curriculum, electives, staff & faculty development, and all major undertakings of the medical schools.*

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Appendix

Acknowledgements

We would like to acknowledge and thank our external reviewers: Tavis Apramian (Ontario Medical Student Association's Director of Education, Western University), Justin Neves (CFMS National Officer of Health Policy, McMaster University), and Dr. Jason Pennington (Curricular Co-Lead for Indigenous Health Education, University of Toronto). We would also like to thank Chris Charles (CFMS Vice President Global Health) for his logistical support in making this paper possible.

Additional Principles of the CFMS

The principles and recommendations made within this paper are directly in line with the following Guiding Principles of the CFMS:

- 1) "The CFMS is ... relevant to all medical students from admission through to transition to residency."
- 2) "The CFMS celebrates diversity of all forms including race, national or ethnic origin, mental or physical disability, age, religion, sexual orientation and gender identity, and in turn, promotes the establishment of safe spaces for all."
- 3) "The CFMS recognizes the varied cultural, social and economic context within which medical students live."

As well, our focus on medical education is in line with the 2014-2017 CFMS Strategic Direction: "Promote excellence in medical education," in that it helps to achieve the following objectives:

- 1) Advance student values in medical education decision-making
- 2) Empower Canadian medical students to lead local change in medical education, supported by best practices
- 3) Promote measured reform of admissions to medical school and transition to residency
- 4) Advocate for a Canadian medical education system which best supports the health needs of Canadians
- 5) Enhance global health education [NB: While there is variability in opinion of whether or not global health should encompass Indigenous health, the CFMS has chosen to include Indigenous health under the Global Health program.]

Additional Resources

- The Royal College of Physicians and Surgeons of Canada: Advisory Committee First Nations, Inuit and Métis Health Education in PGME & CME. Cultural Competency and Safety: A First Nations, Inuit, and Métis Context & Guidelines for Health Professionals; 2007. [cited 2015 Jul 16] Available from: <http://www.naho.ca/documents/naho/publications/Rcpsc2007.pdf>

The Royal College of Physicians and Surgeons of Canada: Advisory Committee on First Nations, Inuit and Métis Health Education in PGME & CME in collaboration with the National Aboriginal Health Organization (NAHO, April 2007) identified five themes that contribute to culturally unsafe practice in Indigenous medical education:

- 1) Values, ethics and epistemologies for FN/I/M may be different than mainstream;
 - 2) Indigenous knowledge is not acknowledged, or is treated as inferior to western knowledge
 - 3) Negative portrayal of FN/I/M peoples in curricula;
 - 4) Historical experience and effects of colonization on FN/I/M peoples is not acknowledged;
 - 5) Basic access (geographic, linguistic, cultural) barriers exist
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