

Equity, Diversity and Inclusivity in Canadian Medical Institutions

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Briefing Note

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Summary

Physicians are required to treat a diverse array of patients with respect to culture, race, gender, ethnicity, and sexual orientation, and thus physicians should themselves be a diverse cohort. In order to meet patient needs it is important that medical schools place an emphasis on the diversity of their student population through equitable and inclusive admissions processes as well as culturally safe and relevant educational content during training for medical students. The ongoing process of increasing equity, diversity, and inclusivity (EDI) in populations of medical learners as well as in their educational content can be addressed directly through robust EDI policies which reflect the need for equitable admission processes, accurate data collection, diverse staff, and comprehensive diversity education. Thus, there is a need for ongoing reviews and development of actionable EDI policy in Canadian medical schools.

Historical Development of EDI in Medical Education in Canada and the United States

Equity, diversity, and inclusivity (EDI) in medicine is a broad concept that encompasses both visible and invisible characteristics such as race and ethnicity, sexual orientation and gender identity, socioeconomic status and geographic location across various levels of training and workplace settings. It is an ongoing process that differs by geographic, social, and political climate and therefore necessitates collaboration both within and outside medicine. The pursuit of EDI in medicine is a social responsibility of all past, current, and future physicians to better represent and work alongside the populations whom they serve.

It wasn't until the late 1800s that the first Black, Indigenous, and female physicians graduated from Canadian medical schools. [1-3] The early 1900s saw both steps forward in the creation of the Federation of Medical Women of Canada in 1924, and steps backward in the ban of Black students from Oueen's medical school in 1918 that lasted until 1965. [4, 5] Similarly, Medicine in the United States of America started to see improvements in diversity in the field beginning in 1840's with the first Black man and the first woman graduating to earn a medical degree. [6, 7] The first significant pushes for diversity in medicine began as the creation of small, self-promoting institutions in the late 1800's and early 1900's, with the establishment of groups such as the National Medical Association (NMA) and the founding of the American Women's Medical Association. [8, 9] In 1968, the first study of Canadian medical student characteristics was published that highlighted disparities between medical students and the greater Canadian population. [10] Specifically, medical students were more likely to have come from urban communities and have parents with higher education levels and social standing occupations than the age-matched national average. Other major EDI milestones in the late 20th century included the first female president of the Canadian Medical Association in 1974, the formation of the Filipino Canadian Medical Association in 1985, the establishment of the Indigenous Health Initiatives Program at the University of Alberta in 1988 (the first of its kind in Canada), calls by the Royal Commission on Aboriginal Peoples for better and more culturally relevant healthcare in 1996, and the founding of the Society of Rural Physicians of Canada in 1992. [11-15]. In 1960's United States of America there was a sustained push for educational equity through events such as the Brown v. The Board of Education in 1954, the Civil Rights Act in 1964, and when former US President Johnson introduced affirmative action as a means to move beyond nondiscrimination in 1965. [16] In the 1990's and carrying into the 2000's there has been another rebirth toward EDI focused policies. Starting with the AAMC's "3000 by 2000 project" which aimed to enroll 3000 underrepresented individuals in medical schools by 2000 (though the initiative was unsuccessful) and continued growth of smaller associations like the Student African American Brotherhood (SAAB). there has been an increased focus on standardized admissions, creating access to underrepresented populations, and breaking down barriers of marginalization through data collection and studies. [8, 17]

Within the last 20 years, work on EDI in medicine has increased drastically. More recent studies of Canadian medical student characteristics have both reinforced previous findings, such as the greater proportion of students coming from urban communities and parental education and income levels, and discovered new findings, such as the underrepresentation of Indigenous, Black, and Filipino students in Canadian medical schools. [18-21] Despite these discrepancies however, efforts have been made across the country to increase admission and retainment of diverse students and to foster a climate that aligns with that goal. Indigenous and more recently Black admission streams are being put in place at various medical schools. [22-24]

EDI Statistics

Canada prides itself on its multicultural makeup. Based on the 2016 census, 93% of the 34 million residents in Canada are Canadian-citizen, with immigrants to Canada making up the next largest proportion of the population. Of the 7.5 million immigrants in 2016, the largest cohort came from India, followed closely by China. 1.6 million identified as Aboriginal in identity, with the majority identifying as First Nation, followed by Metis, then Inuit. Notably, 22.3% of the Canadian population identified as a visible minority: nearly 1.9 million identified as South Asian, 1.6 million as Chinese, and 1.2 million as Black [1]. Ethnically, 20 million identified European origins, 11 million indicated Canada origins, 6.1 million Asian origins, 1 million African origins, 800 000 indicated Caribbean origins, and 675 000 indicated Latin, South or Central American origins. Further, the median pre-tax income among income recipients aged fifteen or older was \$47, 487, with the median total household income of \$70, 336 [1]. In terms of education, 5.2 million people reported having no certificate, diploma or degree, 7.5 million reported a high school diploma, and 15.8 million reported a postsecondary certificate, diploma or degree (6.7 million reported a university level certificate, diploma or degree at the Bachelor level or above). Notably, 190,925 reported a degree in medicine, dentistry, veterinary medicine or optometry. Importantly, of the 28.5% of the population with a Bachelor's degree or above, more degrees are held by women [1]. However, income disparities among genders continue to exist in spite of education levels [2].

Demographic Data in Canadian Medicine

There is a paucity of comprehensive, reliable and up-to-date information on the diversity of Canadian physicians and medical trainees [1]. The majority of diversity data found was collected through voluntary surveys which are susceptible to data incompleteness, biases, and may not be reliable. Below is a summary of data found on the diversity of physicians broadly, resident physicians specifically, and medical students through a search of published and grey literature.

Physicians

According to 2018 data, 42.1% of physicians overall were women [2], however the majority of physicians under the age of 45 are female (54%) demonstrating increasing gender parity. When broken down by physician type, 46.6% of family medicine physicians and 37.5% of specialist physicians were women [2]. The ethic diversity of physicians has been improving over time - in 2000, just 18% of Canadian physicians were visible minorities, compared to about 31% in 2015 [3]. This increase has not been even or uniform across all minority groups - for example Ontario saw an increase from 24% to 39% visible minorities in 2015 although most of this increase came from just two ethnic groups, South Asian and Arabic populations [3]. Research from 2015 shows that Black physicians were just 2.5% of the total physician population [4].

Resident Physicians

Information was found on the diversity of resident physicians are limited, with the only data found being on the gender of resident trainees. These data were from 2017, and found that of the 14,000 resident doctors in Canada, 53% were women [5].

Medical Students

A 2020 survey of 1388 med students found that most respondents identified as women (63.1%), matching 2018 data showing a similar proportion [6]. In terms of race and ethnicity, there remains underrepresentation of certain minority groups in medical school. The same 2020 survey found that

respondents were less likely, compared to the Canadian Census population, to identify as Black (1.7% vs 6.4%) (P < 0.001) or Aboriginal (3.5% vs. 7.4%) (P < 0.001) [6]. Findings from the 2012 National Physician Survey (24% response rate among medical students) aligned with these data, showing that only 2.2% of medical students reported being of African or Carribean ethnicity compared to 4.2% of the national population at that time, and 2.7% of students were Indigenous identifying compared to 4.3% in Canada more broadly [1].

Medical students tend to be from higher socioeconomic status, with 2015 survey data from the Association of Faculties of Medicine of Canada (AFMC) finding that 62.6% of medical students came from families with household incomes greater than \$100,000 annually, a proportion almost eight times that of the general Canadian population [7]. A 2020 survey reinforced these findings, showing that 62.9% of respondents grew up in households with an income of >\$100,000/year, compared to 32.4% of Canadian [6]. This trend is also seen amongst medical school applicants, 54% of which were found to come from families earning greater than \$100,000 [7]. A recent study found that the median neighborhood income of all applicants to one Ontario medical school was 33.7% percent higher than the Canadian median total household income, and further that applicants offered admission had a 40.4% higher neighborhood income than the national median [8]. A 2012 paper reported on other diversity metrics amongst canadian medical students, noting that they tend to be between 21 to 25 years old, single, heterosexual, cis-gender, from urban environments, and are unlikely to have any disability [9].

Recent Events in EDI in Canada and the United States

Recent events and movements throughout the world, such as the Black Lives Matter (BLM) movement, have generated a renewed push for equity, diversity, and inclusivity within medicine. This push for more tangible action than in the past is a needed step forward in order to ensure safety and accessibility for previously marginalized groups. Within the past 5-10 years there has been increases in data collection and statistics surrounding EDI and EDI practices within the United States and Canada. These data suggest positive improvements in some areas of equity in medical education such as increases in female medical student numbers in the US to 50.5% in 2019, but stagnation in other areas such as racial minorities. [1] A 2012 study by the Association of American Medical Colleges (AAMC) found that through it's 127 member schools, only 28% of schools had at least 15 Black matriculants across all four classes, only 25% had more than 15 Hispanic matriculants, and only 20% matriculated at least one Indigenous student. [2] In addition to the stagnation of numbers surrounding certain marginalized populations in medical education, groups such as those who identify as LGBTQ2S+ have had no significant pushes for medical education equity until very recently. It was not until 2018 that the AAMC and schools including Harvard began offering students the option to specify gender identity and preferred pronouns, which are small steps for a group who in one Canadian study state that concealing their identity may be easier due to lack of supportive environments and fear of discrimination from both peers and faculty. [3, 4] There have been steps taken by medical schools in North America for nearly 50 years in regards to Indigenous students, but more recently schools such as the University of Alberta have began to increase Indigenous recruitment by eliminating quota capacity limitations and now offering positions to all students who meet the rigorous eligibility requirements, which took place in 2019, but also increasing competency surrounding Indigenous health care education [5]. The most recent pushes for medical educational EDI have come from the BLM movement taking place throughout the world. Through steps to support current students and faculty Stanford Medical School has put together resources surrounding anti-racism education, donating and activism around BLM, Black mental health resources, and other

supportive services [7]. At a number of schools throughout both Canada and the United States students and faculty members have been looking at ways to progress Black and minority representation in medicine. A specific example of this is the Jacobs School of Medicine and Biomedical Sciences- University of Buffalo staff members speaking out about the creation of programs and events centered on healing and progress in order to establish protocols and timelines to address institutional racism and increase hiring of more Black faculty members [8]. In 2017, the University of Toronto initiated the Black Student Application Program to boost chronically low numbers of Black students applying to medical school. This contributed to creating a culturally safe environment for Black students, to trying to eliminate systemic barriers students may face or have faced in the past, and to alleviating bias in the medical school application process. [9]

EDI Actions Taken by Canadian Medical Schools

Admissions

Sixteen medical schools were assessed for equity, diversity, and inclusion policies and initiatives. All surveyed medical schools have implemented admissions policies reflecting priorities for EDI. All schools have ongoing efforts to increase the diversity of their applicant pool. Many schools have developed facilitated admissions streams for underrepresented minorities in medicine. The most common streams were for Indigenous (n=16), rural (n=7), low SES (n=3), and/or Black (n=3) applicants. Additional equity streams that exist at Canadian medical schools include a Francophone stream at the Northern Ontario School of Medicine, a bilingual stream at the University of Manitoba, and a stream for refugees at the University of British Columbia.

Outreach Programs

In addition to EDI policies at the time of application, recognizing the importance of early intervention to increase the representation of URM in medicine, many schools have implemented mentorship programs for undergraduate and high school students from marginalized communities. Fourteen schools advertise undergraduate mentorship programs on their website. Typically, these programs offer mentorship for underrepresented students including Indigenous, low-income, rural and/or Black medical students, pairing them with current medical students and/or staff physicians. Many student-led groups offer workshops to aid with the application process (e.g., MCAT preparation, applications, interviews). Limited schools provide financial support to students from low SES backgrounds to take the MCAT and/or academic tutoring for underrepresented minorities.

Indigenous Health and Reconciliation

With regard to Indigenous reconciliation and priorities for Indigenous health, all medical schools have committed to improving their efforts for Indigenous reconciliation. Some faculties have developed initiatives such as Indigenous health programs, Indigenous-related curriculum content, mentorship and outreach programs (e.g. mini-med school programs at uCalgary and uOttawa), awards and funds, and community engagement projects. The majority of medical schools also demonstrated partnerships with local Indigenous organizations and community members/experts to guide their programs and pedagogy. The overarching objectives for these programs and initiatives are to raise awareness on Indigenous issues, increase representation, and develop Indigenous health knowledge and competencies amongst their student bodies.

Accommodations for Students with Disabilities

Sixteen Canadian medical schools were assessed for academic accommodations for students with disability. All the accommodations share the common goal of reducing barriers to allow otherwise fully qualified medical students with disability to succeed in their medical degree. The focus of these

accommodations is to provide an equitable environment for the students with their unique disability that is in accordance with the principles of dignity, individualization, and inclusion. Every school has a respective office for an effective, confidential, and comfortable process obtaining the necessary accommodations. Additionally, all the Ontarian Medical Schools mention their commitment to following The Ontario Human Right Code (OHRC) and the Accessibility for Ontarians with Disabilities Act (AODA). More specifically, some schools (i.e. University of Toronto), offer specialized campus maps that allow an enhanced understanding of campus accessibility by providing parking and navigation support of accessible areas and paths. Others (i.e. Queen's University) allow students to start their registration online with all the necessary information required. This may maximize the efficiency and student comfort with the process. Others (i.e. UBC, Alberta) offer their entire "Disability Accommodation Policy" for students to visit, as they wish. Having this information accessible is a vital step towards establishing transparency between the university policies and practices. Others (i.e. Ottawa, Saskatchewan) have transparent and in-depth information of some of the important but often not publicly shared information such as timeframes, accommodation renewal, categories etc. Others (i.e. Laval) provide a simplistic, easy to follow interface. Furthermore, it provides clearly accessible contacts for emergencies and non-emergencies.

During our assessment, we found discrepancies in the amount of information shared and transparency of the information-access to the accommodations process between schools. While some schools provide easy to access and follow information as well as links to their accessibility services, we have found numerous differences between schools in terms of the transparency, accessibility, and availability of the necessary information on specifics. Finally, some schools did not dedicate a specific web page for accommodations. Instead, they lumped the information under their numerous other student services. It is essential for students to access all the necessary information they need about the accommodation process with ease and have necessary additional resources and contacts in order to provide equity in the accommodation process among medical schools in Canada.

Principles

The Canadian Federation of Medical Students (CFMS) endorses the following principles in support of equity, diversity, and inclusivity within Canadian medical education.

- 1. Equity, Diversity and Inclusivity (EDI) should be important cornerstones of medical education and leadership in Canada.
- 2. Medical organizations such as the CFMS, AFMC, and CMA have a role to play in ensuring that EDI targets are met.
- 3. Medical schools, specifically, Undergraduate Medical Education and Post-Graduate Medical Education offices also have a role to play in ensuring EDI targets are met.
- 4. EDI policies and advocacy should involve the individuals they are referencing.

Concerns

- 1. There is a paucity of comprehensive, reliable and up-to-date data on the diversity of Canadian medical trainees, physicians, and institutional leadership. A lack of national consensus, collaboration and coordination has been a major contributory factor toward this.
- 2. Canadian medical trainees and physicians do not reflect the diversity of the populations they serve. There remains underrepresentation of certain racial & ethinic minority groups in medical school, with a specific and concerning underrepresentation of Black and Indigenous medical students, and low socioeconomic diversity with the vast majority of students coming from high socioeconomic backgrounds.
- 3. While initial steps have been taken at several medical schools and nationally, there remain several financial and social barriers to the medical admissions processes.
- 4. Medical student mistreatment remains a concern, moreso for students from underrepresented and visible minorities, and there remain barriers to reporting of mistreatment.
- 5. Medical school environments are not always safe and welcoming environments for diverse students, ranging from lack of ability to specify pronouns for LGBTQ2S+ populations to challenges with obtaining accommodations for students who require them.

Recommendations

Given the research and concerns outlined above, we recommend the following EDI action items for Canadian universities, medical schools, hospitals, and institutions training and supporting medical learners:

‡ denotes recommendations for medical schools

Diversity

- 1. *The CFMS will advocate for the AFMC to lead the development of national census and tangible mechanisms to collect and publish disaggregated demographic data (including race, ethnicity, socioeconomic status, educational and non-educational debts, parental occupation, gender, sexual orientation) about medical school applicants, medical students, physicians, and institutional leadership.
- 2. *The AFMC should develop clear guidelines on the collection and reporting of inclusive demographic data at Canadian medical schools.
- 3. ‡Undergraduate Medical Education (UGME) Offices and Post-Graduate Medical Education (PGME) Officers should recruit, select, and retain medical students and residents who reflect the diversity of Canada.
- 4. ‡National accreditation standards should reflect the importance of a diverse body of medical students in the set of standards and metrics used to assess medical schools' quality, and ideally mandate efforts to improve diversity as a key medical school activity required to obtain accreditation.
- 5. *Financially support social accountability, equity-seeking learner special interest groups and organizations at national and local levels.
- 6. **Develop a clear consultation policy to ensure marginalized groups are included in decisions that affect them at national and local levels.
- 7. ‡*Fairly compensate student learners and physicians engaging in EDI work for institutions, for example through establishing formal EDI related faculty roles.

^{*} denotes recommendations for national organizations

8. ‡Advocate for greater learner representation in the AFMC Equity, Diversity, and Gender (EDG) Network, with a greater focus on inclusivity.

Training

- 9. *Implement EDI competencies and cultural sensitivity training for medical school administrators, institutional leaders, medical students, and residents.
- 10. ‡Implement integrating anti-racism into clinical practice as a core objective of medical school curricula.

Admissions and Outreach

- 11. *Develop mentorship programs from underrepresented minority groups in high school and undergraduate programs to encourage their pursuit of healthcare professions.
- 12. *Develop pipeline programs to recruit and support underrepresented medical school applicants, particularly from low socioeconomic status, rural, Indigenous, Black, Filipino, Latinx, LGBTQ2SIA communities and other groups that are historically underrepresented in medicine.
- 13. ‡*Rigorously evaluate the utility of widely used medical school admissions tools (e.g. GPA, MCAT, CaSPER test) to ensure students from lower incomes or marginalized groups are not disadvantaged by these tools.
- 14. *Where the MCAT exam is required, promote the national MCAT fee assistance program to low-income medical school applicants.
- 15. *Publish statistics from successful medical school entrants (e.g. average GPA, MCAT scores) to enable low-income medical school applicants to make the most informed decisions on where they can apply with greatest chances of success.
- 16. *Develop application program or streams for underrepresented minority applicants to remove any possible unconscious and implicit biases throughout the application and interview process
- 17. *Ensure medical school interviewers are diverse (reflecting the population of the patients medical students will serve) and are equipped with implicit bias training.
- 18. *Develop needs-based bursaries to support low-income medical school applicants.

Discrimination, Harassment, and Bullying

- 19. *Develop accessible reporting process for incidents of discrimination, harassment, and bullying within university and hospital institution.
 - a. *Widely publicize reporting mechanisms for trainees and staff.
 - *Institute policies protecting students and/or staff who report incidents of discrimination, harassment, and bullying from personal and professional ramifications.
- 20. *Develop safe spaces for marginalized and minority students on campus.

Accessibility

- 21. ‡*Advocate to provincial licensing boards to ensure that students with mental health concerns or illnesses are not subject to punitive measures or unnecessary monitoring.
- 22. *Increase the transparency and inclusivity of accommodation policies for learners.

Financial Support

23. **Develop and continue offering needs-based bursaries to support low-income medical students at national and local levels.

24. ‡*Reduce major medical school expenses when possible (e.g., AFMC elective portal fees, CaRMS application costs) and provide financial support to students for major medical school expenses (e.g., flights, accommodations).

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