

## Reducing barriers in Canadian medical school admissions for students with disabilities

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### KEY POINTS

- Medical education is inherently ableist and unwelcoming to students with disabilities
- Inclusion of medical students with disabilities fosters many benefits to their fellow students, patients, physicians, and society
- Technical standards unnecessarily exclude students who would be capable of safe and effective practice as a physician
- Rigid admissions criteria imposed without exception can disqualify students for disability-related reasons and devalues the strengths that living with a disability can impart
- The OMSAS Disability-based Consideration Request system does not meet the needs of applicants with disabilities and may, in fact, cause harm to this population
- Effective accommodations policies must go beyond the legal minimum, consider intersectionality, and be informed by people with lived experience
- There is no publicly available data on the number of medical students or applicants with disabilities, although several large studies on this population have been done in the US

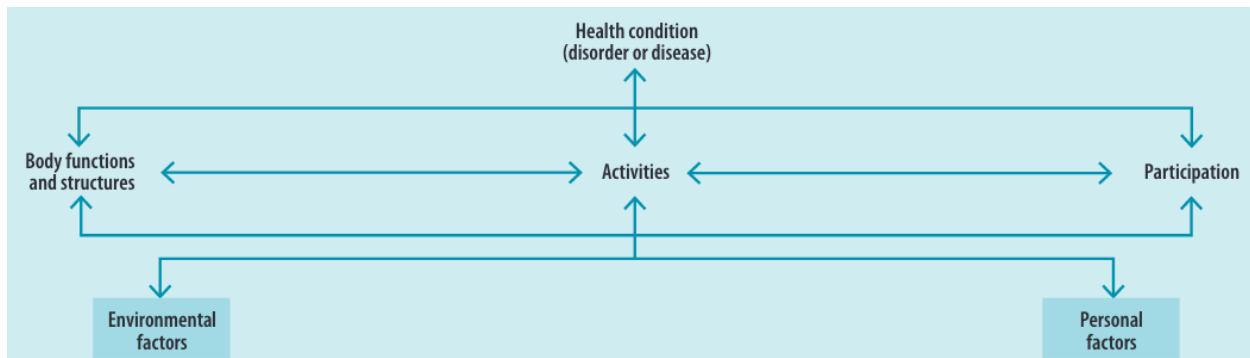
### INTRODUCTION

#### Defining disability

Currently, it is estimated that 22% of Canadians aged 15 and over identify as persons with disabilities.<sup>1</sup> Although there is no current reliable data regarding the percentage of Canadian medical students who live with disabilities, there has been a historical lack of representation of persons with disabilities within medical training.<sup>2-3</sup> In the Canadian Medical Association (CMA) 2021 National Physician Health Survey, 22% of respondent physicians self-identified as having a disability,<sup>4</sup> which is increased from only 11.2% in 2012.<sup>2</sup> It is unclear what degree of this change is related to medical school admissions versus higher incidence of disability during training/practice. In 2019, only 4.9% of students at United States (US) medical schools identified as having a disability.<sup>5</sup>

Disability is defined by the Accessible Canada Act as “any impairment, including a physical, mental, intellectual, cognitive, learning, communication or sensory impairment — or a functional limitation — whether permanent, temporary or episodic in nature, or evident or not, that, in interaction with a barrier, hinders a person’s full and equal participation in society.”<sup>6</sup> A “barrier” is “anything — including anything physical, architectural, technological or attitudinal, anything that is based on information or communications or anything that is the result of a policy or a practice — that hinders the full and equal participation in society of persons with an impairment.”<sup>6</sup> By this definition, a disability is not an inherent state but rather the outcome of an interaction between a state of function and the context.<sup>7</sup> The International Classification of Functioning, Disability and Health (ICF) model (Figure 1)<sup>7-8</sup> emphasizes that

performed activities are a result of interaction between a health condition, environmental factors, and personal factors (e.g. resilience, problem-solving), and demonstrates that disability and function lie on a continuum rather than a can-vs-cannot binary.<sup>7</sup> Environmental factors impact the function of all students and physicians, and persons with disabilities often simply need alterations to the conventional environment that has been designed within an ableist society.



**Figure 1. International Classification of Functioning, Disability and Health.** As depicted in the WHO World Report on Disability<sup>8</sup>

## Why do we need physicians with disabilities?

Although learning environments in medicine are often unwelcoming to students with disabilities, inclusion of these students has countless benefits to their fellow students, patients, physicians, and society. Doctors who live with disabilities often have increased insight into patients' experiences and may be better able to understand and empathize with patients,<sup>9</sup> which engenders better patient physical and mental health outcomes.<sup>10-15</sup> The historic exclusion of people with chronic illness and disability from medical education has perpetuated the 'us versus them' or 'sick versus well' mentality which limits physician-patient empathy.<sup>7,16</sup> On the contrary, able-bodied medical students and physicians witnessing the capabilities and strengths of their peers with disabilities is an important step toward breaking down that bias. A representative physician population would also allow for increased concordance in patient-physician disability status, which may promote similar benefits to those shown for racial concordance, such as improved use of healthcare and greater patient satisfaction.<sup>17-18</sup> In addition to enhancing care for individual patients with disabilities,<sup>19</sup> physicians also have important influence on policies that impact healthcare resource application and applicable laws, and increased representation in positions with decision-making capabilities may improve justice for persons with disabilities in the general population.<sup>20</sup>

Lack of accommodations and supports within medical school is often used as a justification for exclusion of persons with disabilities, which, in turn, reduces the impetus to implement such supports. This creating a vicious cycle of exclusion and ableism. Acceptance of medical students with disabilities necessitates the creation of additional supports and accommodative policies – changes which, in fact, support the health and well-being of *all* medical trainees through increased compassion, adaptability, and focus on trainee health.

## Barriers to admission of medical students with disabilities

### *Culture, ableism, & bias (Recommendation 3)*

Ableism has always been entrenched in the culture of medicine,<sup>20</sup> creating an illusion of a binary between sick and well (i.e. patient versus physician), perpetuated by societal, social, and psychological influences.<sup>16</sup> The expectations for trainees to work long hours, take no leaves of absence, and perform physically demanding activities for long stretches without food or sleep – all whilst remaining productive outside of the classroom with research and extracurricular activities<sup>9</sup> – are damaging to the health of students without preexisting disabilities and disproportionately impact those with them.

Students with disabilities are often discouraged from pursuing careers in medicine by the lack of relevant role models, direct deterrence from mentors, and the language used in medical school

application policies. Trainees with disabilities frequently take steps to hide their disabilities to avoid being the subjects of prejudice, which further perpetuates the illusion that they do not exist. Although disclosure is a key step in overcoming ableism in medicine,<sup>21</sup> we should not expect individual students to put themselves at risk without first fostering a culture that supports and protects them. Agaronnik et al. (2021) demonstrated that disability bias is likely a factor in interview evaluations,<sup>20</sup> as there is evidence that physicians with disabilities are perceived as less capable by others who work in the medical field.<sup>4</sup>

### **Technical standards (Recommendation 2)**

When referring to applicants with disabilities, all Ontario medical schools encourage students to refer to the Council of Ontario Faculties of Medicine's *Essential Skills and Abilities Required for Entry to a Medical Degree Program*, and decide based on these whether they are capable of attending medical school.<sup>22</sup> Although this document includes a statement that students with disabilities are "entitled to reasonable accommodation that will assist her/him to meet the standards", the enactment of this is up to individual schools and details are generally not available prior to admission. These accommodations are to be assessed against "undue hardship, including any cost", which inappropriately signals to students with disabilities that their inclusion is less important than the institution's bottom line. The administrative/financial impact of a student's accommodations should not be incorporated into an admissions decision.

Furthermore, certain standards may not be met by applicants even with accommodation depending on the disability, although it may be possible to find *alternatives* that ensures the competence of the future practitioner. For example, under the skill of "Observation", students must be able to "acquire all relevant sensory information", and yet Deaf physicians have been successfully trained with access to interpreters.<sup>23</sup> "Motor movement reasonably required to provide general and emergency medical care to patients" is also open to interpretation – is it enough to be able to direct CPR or must one physically be capable of performing it independently?<sup>20</sup> Physicians without disabilities often practice within modified environments - a prime example are the diagnoses that have occurred without tactile information in the era of pandemic telemedicine. Medical school has long been structured around the notion that to be *any* type of physician, you must be capable of being *every* type of physician.<sup>7</sup> In reality, practicing physicians are licensed only to perform tasks within their domain, and thus students are denied entry into fields where they may excel due to inability to perform tasks they would not be permitted – let alone *required* – to perform as a licensed physician.

### **Rigid admissions criteria (Recommendation 1)**

Components used to evaluate applicants for admission to medical school typically include GPA, extracurricular activities, standardized testing (MCAT, CASPer), and requirements for full-time course loads for all or part of the student's undergraduate degree.<sup>24</sup> While some schools offer opportunities for students to explain circumstances that may have impacted their GPA and courses,<sup>25</sup> others state explicitly that "The Admissions Office will not make any exceptions to declared policies".<sup>26</sup> While this may be seen as ensuring equal evaluation of applicants, it is certainly not equitable; rather, it perpetuates an institution within which students must have the privilege of an education unhindered by the very life circumstances that promote personal growth, empathy, and resilience – all qualities that are touted as essential for effective physicians. For example, the strengths of a student who persevered through their undergraduate degree on a part-time basis due to illness and hospitalizations are devalued and dismissed.

### **Misguided OMSAS accommodation policy (Recommendations 1 & 7)**

The Ontario Medical School Application Service (OMSAS) has recently introduced a space for Disability-based Consideration Requests in the application to Ontario medical schools,<sup>27</sup> however, this policy presents multiple challenges: Firstly, it is only available for students who were *unaccommodated* during their undergraduate degree, incorrectly insinuating that University accommodations consistently and completely eliminate the disadvantages associated with illness and disability. Secondly, the request only applies to the "initial assessment" of the OMSAS application, and it is unclear how individual schools apply this; for example, if the policy permits a student to bypass a GPA requirement pre-interview but then their full application is compared post-interview without additional consideration, they are unlikely to

be ranked favorably. Thirdly, it requires applicants to compose a personal statement describing their “plan to ensure success in the study and practice of medicine,” putting the onus on the student to determine their accommodation plan without knowledge of the structure of medical school and possible accommodations. Finally, it also requires providing direct proof of accommodations and medical documentation to the admission office, which elicits concerns for students regarding confidentiality of their health information and risks of bias/discrimination due to disclosure. The performative accessibility of this policy is harmful as it reduces the drive for schools to provide true accommodations, evidenced by a reference to this policy being the sole accommodation referenced on most application websites.

### ***Loss of opportunities (Recommendation 1)***

The Autobiographical Sketch (ABS) is a structured non-academic portion of applications used by many Ontario medical schools. It includes spaces for employment, volunteerism, extracurricular activities, awards and accomplishments, and research, each with a 150-character limit description.<sup>28</sup> Many students with disabilities have faced circumstances that limit extracurricular involvement in these domains, especially if large amounts of time and money are required to manage their disability.<sup>29</sup> These students often attain substantial growth that will directly benefit them in caring for patients through the process of coping with their illness and disability; unfortunately, these restrictive forms are designed from an ableist lens and exclude what may be the strongest attributes of these candidates.

### ***Lack of information on accommodations for interviews and medical school (Recommendations 4 & 5)***

Although all schools offer a statement that students may contact the school if they require accommodations during interviews, there is no information on application websites about what types of accommodations may be possible during the interview or during medical training for students to view without personal disclosure. Many students avoid disclosure due to the fear of discrimination,<sup>20-21</sup> and even potential exclusion from medical school if the required accommodations are rejected.<sup>30</sup> Given the immense time and cost involved applying to medical school, this absence of information may discourage students from applying to medical school as they lack assurance that they will be supported in the application process and/or program.

### ***Lack of data (Recommendation 6)***

It stands to reason that the barriers outlined above have a real exclusionary effect on medical school applicants with disabilities. We can reasonably expect that people with disabilities are underrepresented in medical school classes compared to their communities. We are unfortunately not able to quantify this effect because there is no publicly-available data on Canadian medical students with disabilities.<sup>2</sup> In the absence of Canadian data, we can look to the United States. One large 2019 study of 87 US medical schools found that students with disabilities made up 4.6% of total enrollment.<sup>31</sup> Previous US studies have reported 0.3%, 0.6%, and 2.7% prevalence.<sup>32</sup> We can also look to data about Canadian physicians: the CMA 2021 National Physician Health Survey reported that 22% of respondent physicians identify as having a disability.<sup>4</sup> Older data from Statistics Canada showed 11.2% of Canadian physicians self-identified as disabled in 2011, compared to 13.7% of the general population in 2012.<sup>33</sup> Of course, we can only make very limited inferences about medical students and medical school applicants based on these related populations.

Accurate, comprehensive and up-to-date data on the prevalence and experiences of Canadian medical students with disabilities would enable us to study the effects of exclusionary policies and take steps towards increasing inclusion and equity. The WHO/ESCAP Training Manual on Disability Statistics states that “population disability data is essential for monitoring the quality and outcomes of policies for persons with disabilities. In particular, these data help to identify policy outcomes that maximize the participation of persons with disabilities in all areas of social life.”<sup>34</sup> We need accurate data to compare the prevalence of disability in applicants versus matriculated students, and assess the gaps between medical students with and without disabilities, in order to identify barriers in the admissions process and design and evaluate effective accommodation policies.

Currently, applicants to OMSAS are prompted to complete the OMSAS Demographic Survey, which asks them to provide “information on demographic markers such as gender, sexual orientation,

race and socioeconomic status.”<sup>35</sup> According to the OMSAS website this is in order to “select students who are representative of the Canadian population and address barriers to medical education.”<sup>35</sup> According to McMaster administration [email correspondence, August 29th 2022], its most recent version includes one question regarding disability which asks applicants to respond with one of five options: (1) “No - I do not have a disability;” (2) “Yes - I have an intellectual, cognitive and/or learning disability;” (3) “Yes - I have a mental health and/or addiction-related disability;” (4) “Yes - I have a physical disability (e.g., mobility, hearing, vision); or (5) “Prefer not to answer.” This question apparently aims to assess the prevalence of disabilities among medical school applicants, as well as categorizing applicants with disabilities into three broad and arguably reductive categories. It is unclear if applicants are permitted to select more than one option if they wish to report having more than one “type” of disability.

It is crucial that applicants asked to provide data on disability status do so freely and with consent. For privacy, it is also important that any data is deidentified, and that any data that could be used to identify applicants or medical students is viewable to individuals who have no bearing on student acceptance. Further, we argue that this data should be made publicly available. It is important for use in scholarly analysis, to promote accountability, and may be useful for informing medical students and applicants in their choices about where and whether to pursue medical education. Currently, data from the Demographic Survey is only made available to medical school administration [McMaster administration, email correspondence, August 25th 2022]. Transparency in these matters would help protect students with disabilities’ autonomy and improve policies meant to benefit them. Ideally, comprehensive, anonymous data about the population of medical students and applicants with disabilities and their data would be collected each year and reported publicly.

It is important to note that the paucity of data extends to research on medical students with disabilities in general, including evaluation of performance within medical school and qualitative needs-based research and recommendations. Canada lags significantly behind the US in this regard - out of several dozen papers retrieved in the literature review for this article, only one focused on Canadian medical students.<sup>3</sup>

## **Additional Considerations**

### ***Rising beyond the legal minimum***

Tackling ableism and empowering students with disabilities requires moving beyond the legal minimum with regards to accessibility.<sup>31</sup> Laws might entail building public spaces that are accessible or providing accommodations such as alternative text; however, the education and healthcare contexts in which medical students exist are not well-overseen legally.<sup>36</sup> Although Ontario is in the process of developing new Accessibility for Ontarians with Disabilities Act (AODA) standards in these two spaces, currently, and for the foreseeable future, medical students have no legal standards for accessibility.<sup>36</sup> Thus, the legal minimum should not be the goalpost as often legal standards do not exist or else lag behind best practices. Furthermore, a spirit of accessibility and diversity dictates that each individual’s unique needs should be accommodated - by following vague, generalized standards, institutions do a disservice to their students.<sup>31</sup> Institutions should continuously develop infrastructure, policies and practices that rise above the legal minimum standards, matching both best practices and their student’s unique needs.

### ***Intersectionality***

A true holistic approach to medical school admissions must view applicants as whole people and celebrate their differences. Under-representation of medical students with disabilities has been the product of considerable barriers by way of admissions policies, curriculum, and discrimination that persist today.<sup>37</sup> These barriers are compounded when we recognize intersecting identities such as race, class, sexuality and more.<sup>38</sup> A key part of anti-ableism is recognizing that experience with a disability is a value-add for the institution and not a deficit.<sup>31</sup> Differences in lived experience allow for the exchange of new ideas and perspectives, which can help address issues of equity and improve therapeutic relationships and patient outcomes through correlation to experiences of diverse patients.<sup>39</sup> A holistic approach recognizes that a person’s intersectional identity introduces unique challenges that require unique methods of support support.<sup>40</sup> Institutions cannot reap the benefits of a diverse class without providing the

supports necessary to help those student's thrive, whether financial, functional, academic, emotional, or otherwise.<sup>40</sup>

### ***The inconsistent definition of “reasonable” accommodations***

Many medical schools state that they can provide “reasonable” accommodations, but what constitutes reasonable/possible modifications is not consistent between or even within schools. The COVID-19 pandemic has illustrated this well: adaptations that occurred rapidly on a large-scale during the pandemic, such as working and attending school/events virtually, have included modifications that people with disabilities have been fighting for (and denied) for years.<sup>41-42</sup> While medical school undeniably requires the vast majority of training to occur in-person, allowing for lectures, tutorials, and interviews to be attended virtually may significantly open opportunities for individuals with disability to be successful in medical education. For example, before the pandemic, if a person had a disability that caused medical issues resulting from air travel, their capacity to interview at many Canadian schools would have been hindered despite having no impact on the ability to study medicine at those schools. One Ontario medical school states that they now accept part-time course loads due to the strains students have experienced during the pandemic, acknowledging that students should prioritize their health and well-being and that growth may occur outside the classroom<sup>43</sup>— something that students with disabilities have been advocating for years. While these changes are certainly beneficial, the sudden implementation of adaptations that were previously denied to students with disabilities begs the question as to what accommodations could be made if accessibility was truly a priority. Progress is most often made when the impairment is something that impacts people with decision-making authority, which is why it is essential for individuals with disabilities to be included in the medical field and supported in positions that influence decision-making.

## **PRINCIPLES**

The Ontario Medical Students Association makes its recommendations using the following guiding principles:

1. Many disabilities do not impact the ability to practice medicine, and many trainees and doctors successfully remain in the profession after acquiring a disability during training or practice.
2. It is essential that people with disabilities are proportionately represented in medical education, both in the interest of disability rights and for the provision of better patient care.
3. Remediation of medical school admission policies to be inclusive of applicants with disabilities necessitates the improvement of accessibility within medical school.
4. Creating an environment within medical training that is amenable to students with disabilities will promote self-care and well-being among trainees of all abilities.
5. Transparency around policies regarding disability and accommodation during medical admissions and matriculation is essential in order to detect and confront discriminatory processes.
6. Lack of transparency regarding accommodations during interviews and medical school discourages students from proactively seeking out the accommodations that they need to protect their health and well-being.
7. Automatic disqualification of students due to failure to meet an arbitrary admissions requirement as a result of their disability is discriminatory and promotes an ableist culture within medicine.
8. Effective, sustainable barrier reduction requires formal data collection regarding the number of students who apply and are admitted to Ontario medical schools.
9. Data on the number of students with disabilities applying to and being offered acceptance at each Ontario medical school should be confidentially collected to determine discrepancies and evaluate success of barrier reduction.

10. The privacy of students with disabilities must be protected as personal health information.

## RECOMMENDATIONS

The Ontario Medical Students Association recommends the following:

- 1. That Ontario's medical schools create policies to ensure their admissions requirements do not disqualify or disfavor students based on characteristics that are the result of a disability.**

Rigid admissions criteria applied to applicants without regard to individual circumstances discourage and exclude people with disabilities from equitable access to medical admissions. Examples include mandated course load requirements, GPA minimums, and standardized testing such as the MCAT and CASPer. Several schools apply discriminatory "no exceptions" policies. The OMSAS Disability-based Consideration Request system falls severely short by categorically excluding students with disabilities who received some form of accommodation during their undergraduate studies. Applicants with disabilities are entitled to have their applications considered without prejudice. Policies should be created or amended to ensure applicants with disabilities are fairly considered with their particular circumstances taken into account.

- 2. That the wording of technical standards required for the study of medicine be revised to clarify where alternatives may be considered if they cannot be performed with accommodations.**

The Council of Ontario Faculties of Medicine have created a technical standards document with the aim of protecting "patient safety".<sup>22</sup> The language of the technical standards document currently provides a list of physical and mental capabilities a medical degree candidate should possess including but not limited to "visual, auditory, and tactile information from patients". It should be noted that the document recognizes students with disabilities and states that students are entitled to "reasonable accommodations" under Ontario's Human Rights Code. However, this document needs major revisions, as language used could discourage prospective applicants from applying due to its lack of emphasis on the availability of accommodations and the legal requirement to do so. In stark contrast to the undertones of the document, there are physicians who practice medicine whilst living without some of the capacities that the document states as required (e.g: vision and hearing).<sup>23</sup> Hence, this document should be rewritten to include the use of person-first language, an accurate and flexible representation of the required skills of physicians, and greater emphasis on the availability of accommodations.

- 3. That all admission committee members and interviewers undergo anti-ableist training.**

Ableism is deeply intertwined into all facets of society, including on an individual level as internalized ableism.<sup>44</sup> Internalized ableism informs an individual's perspectives and behaviours often without the person's knowledge.<sup>44</sup> Although there have been great strides in implicit bias training with respect to visible factors such as race, disability is often left out of the conversation. Anti-ableism training will help minimize bias in the admissions process by helping committee members understand their legal obligations, learn about the ways that ableism manifests, and dispel myths.<sup>44</sup> Committee members are better equipped to evaluate their own biases and practices when they recognize that ableism is a structural issue that persists within institutions, interpersonally, and within oneself.<sup>44</sup> Actively pursuing opportunities for staff training and consultations with the community may help institutions keep their policies up-to-date. Most importantly, anti-ableism training will teach committee members the value that ability diversity brings and the need for physicians with disabilities - it challenges them to move beyond mere accommodation and towards inclusion.<sup>44</sup>

- 4. That medical schools in Ontario have publicly available resources for prospective applicants that detail the ways in which their programs are accessible to students with disabilities, including possible accommodations for interviews, preclerkship, and clerkship.**

Planning for accommodations in medical school is important for many applicants with disabilities given the enormous time and financial investment involved in the application process, and this is made more difficult as the publicly available information about policies and practices for accommodation is often scarce and vague. Improving transparency will empower students with disabilities to apply to medical schools with confidence that they will receive the accommodations they need, promote standardization of accommodations between schools, and hold institutions accountable to their duty to accommodate. Resources should be made available to all applicants, and successful applicants should be provided relevant policies and contact information for matters of accommodation ahead of the deadline for offer responses. There should also be a confidential resource for students to ask questions confidentially to people uninvolved in the admissions process.

**5. That medical schools provide accommodations during interviews that match those available within medical school.**

Inaccessibility of the interview should not be the limiting factor for a student with a disability to become a physician. Medical schools should adequately accommodate interviewees to an extent that the student has access to the accommodations they typically require or new accommodations that would be needed for them to perform in the interview environment. These accommodations should also be available to matriculating students to utilize during their degree.

Furthermore, medical schools must be clear regarding what documentation is required to apply for interview accommodations. Vague descriptions can inappropriately encourage students to over-disclose personal information. Whereas overly strict guidelines such as those that include specific diagnostic test names should be avoided to prevent undue financial burdens on students. Additionally, the onus is on medical institutions to take all reasonable measures to ensure applicants' accommodation status and disability are kept confidential, such that interviewers not be made aware of the accommodation where avoidable. While accommodations are legally mandated, there is still much work to be done around how accommodations are granted, which accommodations are offered, and how intersecting barriers can be addressed.

**6. That Ontario's medical schools collect and report data on the population and experiences of applicants and medical students with disabilities applying to and studying at their institutions.**

Currently, there is no data publicly available about medical school applicants and students with disabilities in Canada. The methodology and results of the OMSAS Demographic Survey should be made public. Further, there is a clear need for independent data collection on the population of medical students with disabilities and their experiences in medical school. Comprehensive data on the population of medical school applicants and students should be collected and made publicly available for scholarly and personal use. These data should be collected anonymously and stored confidentially. Analysis based on these bodies of data are important for improving our understanding of the barriers to medical education experienced by people with disabilities and the evaluation of policy measures intended to improve inclusion and equity.

**7. That medical schools and adjacent organizations consult students with disabilities when constructing relevant policies.**

Community consultation is a key tenet of ethical research and policy development.<sup>45</sup> Medical students with disabilities should be consulted throughout the process from development of policies and practices, to their implementation and evaluation. Such students can identify pitfalls and appropriate remedies as they are experts in their own lived experiences, and help minimize the influence of ableism in policy design.<sup>44</sup> Moreover, medical students with disabilities can prioritize the benefit to the community above the financial interests of the institution. To not include these students has and will continue to result in makeshift solutions that only partially address the problems and may even exacerbate harm, such as the OMSAS Disability-based Consideration Request system. Thus, inclusion of medical students with lived experience may mitigate unintentional harms and empower them to have agency over their own lives.



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