

# Re-envisioning Technical Standards in Undergraduate Medical Education in Canada

Promoting Accessibility and  
Inclusion for Learners  
with Disabilities

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## Proposal

People with disabilities provide critical perspective and experiential expertise to medical education and patient care but have been deterred and excluded from the medical profession by ableist assumptions within medical education. We propose to re-envision the current Canadian technical standards and redefine functional abilities required for entry to medical school. This may allow both medical education and patient care to benefit from the contributions of people with disabilities. While these standards pertain to undergraduate education, they will influence learners at all levels of medical education.

Functional technical standards identify core competencies on entering medical school that form the basis of the knowledge, skills, and behaviours required to achieve the medical education program objectives. In contrast to organic technical standards which emphasize how objectives are achieved (such as motor and sensory skills), functional technical standards focus on what abilities are needed, with or without the use of accommodations or assistive technologies<sup>1</sup>. This reframing of technical standards is one way that Canadian medical education can be more inclusive of learners with disabilities and promote epistemic justice in medicine. We welcome collaboration with other health professional education programs in adopting parallel approaches.

## I. Background

Leaders in Canadian medical education have called for greater equity, diversity and inclusion across the admissions process<sup>2</sup>. However, outdated technical standards, which define specific ways in which functional abilities must be demonstrated to enter medical training, exclude learners with disabilities<sup>3,4</sup>. One in five Canadians experience disability in their lifetime<sup>5</sup>; therefore, medical learners with disabilities provide essential experiential expertise and help to increase cultural safety by creating a profession that better represents the population it serves<sup>6,7</sup>. In addition, medical schools that continue to deny accommodations for people with disabilities risk liability under provincial law and both the Canadian Human Rights Act and Accessible Canada Act<sup>8</sup> which mandate that all people “must have barrier-free access to full and equal participation in society”<sup>9</sup>.

## II. Foundational Concepts

**Disability:** According to the World Health Organization<sup>10</sup>, disability is an umbrella term that links variability in body/mind function or structure with an activity limitation or a participation restriction in an individual’s social and/or physical environment. The Accessible Canada Act<sup>8</sup> defines disability 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”.

**Disability Accommodation** refers to academic adjustments and auxiliary aids that enable students with disabilities to have access to education equivalent to that of their non-disabled peers. The purpose of accommodations is to facilitate equal opportunity for success<sup>11</sup>.

Accommodations may include the use of intermediaries or access assistants who perform specific clinical tasks that facilitate the learner’s acquisition of clinical information. Intermediaries operate under the explicit direction of the student and do not interpret clinical findings or act independently<sup>12</sup>.

**Duty to Accommodate:** Reasonable accommodation is a legal term that references obligations under human rights law. Accommodation to the point of undue hardship is another way to state the obligation.

Each jurisdiction (federal, provincial, and territorial) in Canada has its own human rights legislation and, while specific wording may vary, decisions on the duty to accommodate as articulated by the Supreme Court of Canada are generally considered to be applicable to all individual human rights statutes. As well, equality rights under the *Charter* have been held to similar principles in relation to whether differential access that is harmful is a violation of the *Constitution*. Context in application of general rules and principles in this area of law is important but,

generally, the standard of proof required to demonstrate undue hardship by government, including public sector entities, is high (see Appendix 1, section “Canadian cases involving a post-secondary institution and disabilities”).

### III. Rationale and Considerations

The spirit of this document is both an affirmation/cultural approach<sup>13</sup> and a human rights approach; embracing disability as a valued aspect of human diversity, a common experience<sup>5, 14</sup>, and a protected category under Canadian Human Rights<sup>8</sup>.

1. Disability is common. Lifetime prevalence in Canada is twenty percent<sup>5, 14</sup>.
2. Experience of disability enhances capacity to provide patient care, beyond what can be achieved through education alone<sup>6,7</sup>. Despite this, persons with disabilities are underrepresented among medical learners<sup>2</sup>.
3. The Technical Standards, mainly derived from the 1979 AAMC Special Advisory Panel on Technical Standards<sup>3</sup> are outdated. Advances in assistive technology, changes in legislation<sup>8</sup>, and emerging practices in the domain of disability inclusion demand that we revisit Technical Standards<sup>15,6,16,17</sup>.
4. Medical schools may need to re-examine the imperative of producing “undifferentiated graduates” as being capable of performing the history, physical examination, or any medical procedure without accommodation<sup>18</sup>.
5. Concerns about disability inclusion and the “real world” of medicine must be met education of what the capability imperative is and how to combat its presence as a context-specific manifestation of ableism<sup>19</sup>.
6. Ideally medical schools demonstrate social accountability by actively recruiting learners with disabilities and track outcomes of those recruiting strategies including longitudinal assessment of their experience in undergraduate and postgraduate medical education<sup>20</sup>. Additionally, schools recognize the additional labour of these learners and educators<sup>21,22</sup> in co-creating access in clinical settings.
7. This project depends on commitment to accessible admissions processes.

### IV. Desired Outcome - Commitment to Disability Inclusion in UGME

#### ***All Canadian Medical Schools will:***

1. Promote a cultural shift of institutional support for people with disabilities through inclusive learning environments by universal design and the provision of accommodations that promote wellbeing and belonging.
2. Provide disability-informed and accessible admissions policies and procedures that incorporate principles of universal design and align with institutional policies and procedures.
3. <sup>23</sup>Adopt a Functional Ability based approach<sup>18,24</sup> to technical standards for students entering and completing medical education, that specifies abilities required for successful completion while allowing flexibility on *how* those abilities are acquired and performed.
4. Provide institutional support that includes human resources with expertise in healthcare education and inclusion (contracted from outside the faculty as appropriate) to partner with students with disabilities. Together they will navigate personalized accommodations allowing equal opportunity for learning outcomes to be achieved despite disability in all educational settings including placements with clinical affiliates. This team must protect learner’s confidentiality and not act in an evaluative capacity within the Faculty of Medicine.
5. Integrate principles of universal design<sup>21</sup> in content delivery, assessment, and school policies, acknowledging that the institution rather than the individual, will bear the costs association with creating accessible environments.

6. Promote alignment across the medical education continuum, advocating for support for learners with disabilities entering postgraduate and, later, independent practice.
7. Contribute to a physician workforce that is more socially accountable and representative of the population it serves and, ultimately, provides improved patient care.

## V. Admissions

Accommodation in the application process is a separate but crucial issue that needs to be aligned with accommodations available after the candidate has received the offer letter. Gerstman et. al. (2023)<sup>15</sup> offer insight into disability-informed and accessible admissions policies and procedures. Ideally, admissions websites would provide information on the types of accommodations that may be possible during the admissions process for students to view without personal disclosure. Subsequent offers of admission should include instructions to all students advising that those with disabilities, whether or not already disclosed, should connect with disability resources as soon as possible after acceptance identify appropriate accommodations.

## VI. Core Competencies for Students Entering Medical School

The following functional abilities form the basis of the knowledge, skills, and behaviours required to achieve the medical education program objectives, and in conjunction with the academic standards, are requirements for admission. These entrance core competencies support the retention, promotion, and graduation of medical students. Students with disabilities may require accommodation<sup>1</sup> to demonstrate their abilities. The term “learner” refers to candidates for admission to medical school as well as current medical students who acquire disabilities during their studies in the program.

Functional Ability	Description of Ability (with or without reasonable accommodation)
Learning and Assessment of Learning	<p>Learners acquire knowledge, skills, and behaviours through a variety of modalities, including, but not limited to, classroom instruction; laboratory instruction, including cadaver lab; physical demonstrations, small-group, team, and collaborative activities; participation in the provision of patient care in clinical settings; individual study; preparation and presentation of reports; and use of technology.</p> <p>Learners will be assessed on the acquisition of knowledge, skills, and behaviours through a variety of assessment modalities including, but not limited to, written or computer-based examinations; workplace-based assessments; reflective activities (written and oral); and observed structured clinical examinations, as required by the program for advancement, promotion, and graduation.</p>
Communication	<p>Learners actively communicate; conveying information effectively in person and virtually:</p> <ul style="list-style-type: none"> <li>• with peers, administrative staff, multidisciplinary team members, and preceptors to enable learning and effective participation in the program;</li> <li>• with patients and their supporters, building rapport, eliciting their perspectives, and collaborating in management;</li> </ul> <p>and record elicited information clearly and accurately.</p>

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<sup>1</sup> *Accommodation* refers to academic adjustments and auxiliary aids that enable students with disabilities to have access to education equivalent to that of their non-disabled peers.

Knowledge Integration	Learners interpret information obtained through interview, observation, examination, and medical research to formulate a hypothesis, recommend, and pursue interventions, as appropriate.
Patient Safety and Quality	Learners practice within their level of competence to recruit or deliver patient-centered care. This includes: <ul style="list-style-type: none"> <li>• Participating as a team member in responding to patient safety situations, recognizing that team roles are not limited to performing procedures or directing emergency responses;</li> <li>• Complying with safety standards in the learning and clinical environment, following universal precaution procedures.</li> </ul>
Professional Behaviours	Learners <ul style="list-style-type: none"> <li>• Engage in self-reflection to identify personal and professional learning needs to maintain competence;</li> <li>• Respect boundaries, confidentiality, and privacy for patients and colleagues regardless of gender, gender identity or expression, age, race, colour, sexual orientation, religion, disability, political beliefs, or any other protected status;</li> <li>• Limit their actions to the ethical and legal norms of the medical profession.</li> </ul>

## VII. Resource Organizations:

Canadian Association of Physicians with Disabilities: <https://www.capd.ca>

Docs with Disabilities Initiative: <https://www.docswithdisabilities.org>

Equity in Health Systems Lab: <https://www.eghslab.com/advocacy>

## VIII. Legal Principles

The legal obligations of the university and its faculty of medicine are nuanced, depending on the specific facts of each circumstance. Broadly the principles include:

1. Medical Schools must develop and implement accessibility standards and regulations with the goal of achieving the highest level of accessibility.
2. Medical schools must collaborate with people with disabilities and organisations that provide assistance and education to people with disabilities.
3. Medical Schools should review policies to identify implicit ableist bias and modify policies to address this bias.
4. Policies, programs, services, and structures must consider how different kinds of barriers and discrimination intersect.
5. Medical Schools actively seek to include people with disabilities. This requires intentional education on recognizing ableism, accessibility standards, accommodations for people with disabilities, seeking the expertise of people with disabilities and acknowledging their contributions.

6. Medical schools have a duty to inquire where it is reasonable to believe, based on observation, that the learner may have a disability or medical condition that is affecting their performance or behavior. It is therefore prudent to make inquiries as to whether there is a medical issue that is affecting performance or behaviour. If there is no medical condition, then there is no duty to accommodate. If the learner provides documentation from a medical provider indicating a medical employment limitation, then there is a duty to accommodate.

See Appendix 1 for Applicable Legislation.

## IX. Annotated Bibliography

Meeks (2020)<sup>1</sup>: This book chapter outlines the difference between organic and functional technical standards and provides a roadmap to revising technical standards including current best practices. In contrast to organic technical standards, a more progressive view is based on functional technical standards that focus on the students' abilities, with or without the use of accommodations or assistive technologies. The use of functional technical standards can assist in removing barriers that prevent students with disabilities from entering health professional education programs and then into health professions, improving the diversity of the healthcare professional workforce. Functional technical standards allow students with disabilities to include rapidly developing, cutting-edge assistive technologies (e.g., amplified stethoscopes, specialized motorized wheelchairs, magnifying devices) and accommodations (e.g., extended test times) to meet technical standards of the health professional school or training program.

The Future of Admissions in Canada Think Tank (FACTT) (2020)<sup>2</sup>: The FACCT Proposed Strategy for Enhancing Admissions report to the AFMC explores national consensus on the definitions of diversity and social accountability and defines persons with Disabilities among the three underrepresented groups that warrant national policy and accreditation changes. According to Canadian Association of Physicians with Disabilities, and Delisa and Lindenthal (2012)<sup>9</sup>, **the two major barriers to having more persons with disabilities as medical students are the cost of accommodating those persons and medical schools' technical standards.** Persons with disabilities bring a unique perspective to the profession<sup>6</sup>. The FACCT report recommends that medical schools, ***“Ensure admissions processes are consistent with applicable standards of accommodation for persons with disabilities”.***

Curry et. al. (2020)<sup>3</sup>: Efforts to include people with disability as students and practitioners in the health professions have gained momentum in recent years. However, prevailing technical standards at U.S. medical schools have biases that can prevent or impede their admission, promotion, and graduation. These standards derive from an approach first promulgated in 1979 and have since remained largely unaltered. **Current technical standards at most medical schools are now at odds with changes occurring since the 1990 enactment of broad civil rights protections for people with disability and current aspirations for diversity, equity, and inclusion in the medical profession. It is time to replace the technical standards construct with an approach more consistent with current medical practices, and with societal imperatives of equity and social justice. Such an approach should assess candidates' demonstrable skills and merits, rather than relying on a preconceived construct identifying the presence or absence of defined levels of ability.** The maturation of competency-based approaches to curricular design and assessment provides an opportunity to reconceptualize the abilities required to practice medicine, foster the appropriate inclusion of physicians with disability, and better align medical education and training with broader societal needs and goals.

Stauffer et. al. (2022)<sup>4</sup>: Technical standards document US medical school's nonacademic criteria necessary for admission, persistence, and graduation and communicate the school's commitment to disability inclusion and accommodation but are considered one of the largest barriers for students with disabilities. Calls for more inclusive technical standards have increased in recent years, yet the impact of this work on changing technical standards has not been measured. The authors conducted a document analysis of 15 newly formed medical schools' technical standards to determine the availability and inclusive nature of the standards as they pertain to students with sensory and mobility disabilities. Technical standards were coded for: ease of obtaining technical

standards, the school's stated willingness to provide reasonable accommodations, the origin of responsibility for accommodation request and implementation, and the school's openness to intermediaries or auxiliary aids. Of the 15 schools, 73% of the technical standards were not easy to locate online. Few (13%) included language that support disability accommodations. Most (73%) used language that was coded as 'restrictive' for students with physical or sensory disabilities. Coding of the newly accredited US MD and DO medical schools suggests that newly created technical standards are more restrictive than those in previous studies. The authors conclude that **efforts to create more inclusive technical standards have not yet been realized**. Newly formed US MD- and DO-granting medical schools may perpetuate historically restrictive technical standards that serve as barriers to applicants with disabilities. **Future research should evaluate the role of medical school accrediting bodies to go beyond simply requiring technical standards to ensuring that the standards are readily available and appropriately convey the availability of reasonable accommodations for students with disabilities.**

Statistics Canada (2018)<sup>5</sup>: An estimated one in five Canadians (or 6.2 million) aged 15 years and over had one or more disabilities that limited them in their daily activities, according to findings from the 2017 Canadian Survey on Disability (CSD).

For many of these Canadians, challenges and obstacles in their day-to-day lives may limit their full participation in society. Understanding the challenges faced by persons with disabilities in their personal, employment, or economic situations helps inform government policy.

Gulli (MacLeans) (2015)<sup>6</sup>: In this article, disabled doctors are interviewed about their experiences. They suggest that impairment can facilitate better doctor-patient relationships: **A disabled doctor may empathize more with patients, who, in turn, may relate to or trust a disabled doctor more because they feel understood**. They add, "Any candidate who comes from an extraordinary background with a unique perspective, they often do make extraordinary physicians."

Battalova (2020)<sup>7</sup>: This study explored the role that clinicians' ability to draw on their personal experiences of living with a disability have on their interactions with clients and patients. The authors identified three social processes that interact as epistemic connections are formed: understanding, advocacy, and the tensions between having a disability as a health care professional and health care settings. The results reveal that students and clinicians with disabilities consider their personal disability experiences as important factors in shaping their clinical practice. A shared experience of living with a same or similar disability facilitates a deep sense of understanding that lays a foundation for improved quality of clinician–client interaction. The concordance (same diagnosis/disability) is not the only component of understanding. The emotional connection of simply knowing what it means to navigate the world with a disability, even if specifics of the individual experiences are different is also a component of understanding.

Accessible Canada Act <sup>25</sup> (2019)<sup>8</sup>: The Accessible Canada Act has 7 principles:

1. All persons must be treated with dignity regardless of their disabilities;
2. All persons must have the same opportunity to make for themselves the lives that they are able and wish to have regardless of their disabilities;
3. All persons must have barrier-free access to full and equal participation in society, regardless of their disabilities;
4. All persons must have meaningful options and be free to make their own choices, with support if they desire, regardless of their disabilities;
5. Laws, policies, programs, services and structures must take into account the disabilities of persons, the different ways that persons interact with their environments and the multiple and intersecting forms of marginalization and discrimination faced by persons;

6. Persons with disabilities must be involved in the development and design of laws, policies, programs, services and structures; and
7. The development and revision of accessibility standards and the making of regulations must be done with the objective of achieving the highest level of accessibility for persons with disabilities.

The ACA defines “barrier” as 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, including a physical, mental, intellectual, cognitive, learning, communication or sensory impairment or a functional limitation.

DeLisa et. al. (2012)<sup>9</sup>: Whereas people with disabilities constitute about 20% of the population, only between 2% and 10% are practicing physicians. **The two major barriers to having more persons with disabilities as medical students are the cost of accommodating these persons and medical schools' technical standards.** The authors offer suggestions for overcoming these barriers, and the additional barrier of communication with persons with various disabilities, such as deafness or visual impairment. The authors also discuss some of the issues involved in having greater representation of minorities in medicine. In addition, they stress the need for more training in cultural awareness for students and residents and for physicians well along in their careers. Medical educators will be increasingly called on to create new models designed to sensitize students and faculty to racial, ethnic, and other types of diversity, while documenting the efficacy and costs of extant ones, from the standpoint of both practitioner and consumer. The authors hope that the moves toward greater diversity and more training in cultural awareness will increase the efficacy of health care while reducing its cost. The demands of these efforts will require the commitment of diverse, intellectually capable, and compassionate people at many levels of academic medicine.

CMA 2021 National Physician Health Survey (2022)<sup>14</sup>: The Canadian Medical Association <sup>26</sup> reports that among the 23% of physician respondents who identify as having a disability, the most prevalent disabilities include chronic long-term conditions, such as diabetes or multiple sclerosis (10%) and mental health conditions (8%). Additionally, 3% identify as having a neurodevelopment disorder (such as ADHD, autism, or dyspraxia), 2% with a hearing or speech disability, 2% with a physical mobility disability and 2% with another form of disability. Further, in comparing outcomes between those living with disabilities and those who are not, those living with disabilities have poorer mental health outcomes across all key psychological factors. They are significantly more likely to be “languishing” in their mental health (12%\* vs. 6% of those not living with a disability), to be burned out (61%\* vs. 39%), to screen positive for depression (62%\* vs. 43%), to report having moderate or severe anxiety (36%\* vs. 21%) and to report having considered suicide (lifetime) compared with those without disabilities (56%\* vs. 29%).

Stergiopoulos et. al. (2018)<sup>16</sup>: **Medical students with disabilities hold firsthand knowledge as health care recipients yet face barriers to disclosure and support.** Their experiences provide a unique lens for understanding professional identity construction; this study explored how disabled medical students experience training as both patients and trainees. Two dominant discourses emerged from the interviews and texts, revealing institutionalized notions of the perceived "good student" and "good patient." These roles held contradictory demands, demonstrating how institutions often implicitly and explicitly framed wellness as a means to optimal academic performance. Two additional themes, "identity compartmentalization" and "identity intersection," captured students' experiences navigating identities as patients and trainees. Although students lacked explicit opportunities to express their expertise as patients in the formal curriculum, their experiences in both roles led to improved communication, advocacy, and compassion. The authors conclude that institutional discourses around disability and academic performance hold material implications for curricular content, clinical teaching, and availability of supports in medical school. **By repositioning students' experiences with disability as sources of expertise, this study highlights opportunities for teaching compassionate care.**

Stergiopoulos and Martimianakis (2023)<sup>17</sup>: What constitutes a 'good doctor' varies widely across groups and contexts. While patients prioritize communication and empathy, physicians emphasize medical expertise, and



medical students describe a combination of the two as professional ideals. The authors explored the conceptions of the 'good doctor' held by medical learners with chronic illnesses or disabilities who self-identify as patients to understand how their learning as both patients and future physicians aligns with existing medical school curricula. According to participants, dimensions of the 'good doctor' included empathy, communication, attention to illness impact and boundary-setting to separate self from patients. **Students reported that formal teaching on empathy and illness impact were present in the formal curriculum, however ultimately devalued through day-to-day interactions with faculty and peers.** Importantly, teaching on boundary-setting was absent from the formal curriculum, however participants independently developed reflective practices to cultivate these skills. **The authors identified two operating discourses of the 'good doctor': an institutionalized discourse of the 'able doctor' and a counter-discourse of the 'doctor with lived experience' which created a space for reframing experiences with illness and disability as a source of expertise rather than a source of stigma.** Perspectives on the 'good doctor' carry important implications for how we define professional roles, and hold profound consequences for medical school admissions, curricular teaching and licensure. **Medical students with lived experiences of illness and disability offer critical insights about curricular messages of the 'good doctor' based on their experiences as patients, providing important considerations for curriculum and faculty development.**

Reichgott (1996)<sup>18</sup>: Medical schools have a very low proportion of physically disabled students, **which the author argues is largely a result of schools' conception of the "undifferentiated graduate" as being capable of performing the history, physical examination, and any medical procedure without an intermediary. But the author maintains that medical students need not be unblemished physically; medical educators' obligation is to educate those students who are qualified to become physicians by virtue of intelligence, professional attitude, and ability to effectively interact and communicate.** With respect to clinical training, it is important to consider whether personal, hands-on experience is required for adequate learning to occur. Because most physicians limit the scopes of their practices and do not perform all procedures, because those physicians who develop physical disabilities are not precluded from continuing in some forms of medical practice, and because technologic advances allow for the substitution of imaging and diagnostic testing for the more conventional approach to the physical examination, the requirement for hands-on capability becomes less compelling. Yet not every physically disabled applicant should be admitted to medical school, and those admitted require coaching, guidance, and career advice in order to succeed with their physical limitations. The author suggests that one of the seminal concepts of medical education, "without handicap," should be seen not as referring to the pre-existing physical status of students but instead as the obligation of educators to provide all their students with the broadest possible learning experiences so that they will be without the handicap of inadequate education when they proceed to their chosen fields.

Jain et. al.(2022)<sup>19</sup>: Medical education programs profess commitments to justice, equity, and inclusion, seeking to diversify the profession and better serve patient populations. Although disability has more recently joined recognized categories of valued diversity, significant barriers remain for disabled learners in medicine. This paper develops the concept of the capability imperative, derived from a constructivist grounded theory study examining disability inclusion at four U.S. medical schools that analyzed technical standards policies and interviews with 19 disabled students and 27 school officials (faculty and administrators). Through three motifs (the selfless superhuman; the "real world" of medicine; and the malleable student), the capability imperative enforces the characteristics of a good physician, justifies institutional arrangements, and seeks to produce a learner who can conform to these expectations. Drawing on critical disability theories of ableism and crip theory, this paper argues **that the capability imperative represents a context-specific manifestation of ableism that upholds a cultural logic of compulsory hyper-ablebodiedness and mindedness. This logic is antithetical to inclusive goals.** Exploration of what constitutes a physician and whom this vision serves may help to shift the professional culture towards justice and unroot disabled peoples' ongoing marginalization in the medical profession.

Mace Basic Principles of Universal Design (1990)<sup>21</sup>: In 1997, Ronald Mace led a working group of architects, product designers, engineers, and environmental design researchers, to create the 7 principles of universal design to help guide the design process of environments, products and communications.

Summary of the principles.

- **Principle 1: Equitable Use.** The design is useful and marketable to people with diverse abilities.
- **Principle 2: Flexibility in Use.** The design accommodates a wide range of individual preferences and abilities.
- **Principle 3: Simple and Intuitive Use.** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
- **Principle 4: Perceptible Information.** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- **Principle 5: Tolerance for Error.** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- **Principle 6: Low Physical Effort.** The design can be used efficiently and comfortably and with a minimum of fatigue.
- **Principle 7: Size and Space for Approach and Use.** Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Bulk et. al. (2023)<sup>22</sup>: “The invisible work of co-creating disability access in work integrated learning” describes the unrecognized labour of educators in co-creating access in health professions clinical education contexts, particularly highlighting: putting in extra time, doing emotional labour, engaging in relational work, and navigating complexities. This labour is unrecognized and optional, and therefore its result—access to education—is inequitably distributed.

Kezar et. al. (2019)<sup>24</sup>: The medical profession first addressed the need for technical standards (TS), defining the non-academic requirements deemed essential for participation in an educational program, in guidelines published by the Association of American Medical Colleges in 1979. Despite many changes in the practice of medicine and legal, cultural, and technological advances that afford greater opportunities for people with disabilities, the profession’s approach to TS largely has not changed over the ensuing four decades. Although physicians with disabilities bring unique perspectives to medicine and contribute to a diverse physician workforce of culturally competent practitioners, they remain underrepresented in the profession. **The authors describe the need for an updated TS framework, outlining interval changes in the legal and regulatory climate, medical practice, and medical education since the initial TS guidelines were put forth.** They conclude by offering eight recommendations and two functional approaches to TS that are consistent with now-prevalent competency-based medical education constructs. Further, **schools should consider the principles of universal design to create policies and assessments that work for all learners, to the greatest extent possible, without the need for after-the-fact accommodations.**

## X.References

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## XI. Appendix 1: Disability Legislation

### Canadian cases involving a post-secondary institution and disabilities:

- Brar and others v. B.C. Veterinary Medical Association and Osborne, 2015 BCHRT 151. <https://canlii.ca/t/glsds>
- Dunkley v. UBC and another, 2015 BCHRT 100. <https://canlii.ca/t/gjxjm>
- Fernandes v. City University of Seattle in Canada and another (No. 2), 2020 BCHRT 116. <https://canlii.ca/t/j7x19>
- Heck obo Heck v University of Alberta, 2021 AHRC 85. <https://canlii.ca/t/jfrq>
- Kelly v. University of British Columbia (No. 4), 2013 BCHRT 302. <https://canlii.ca/t/g2h3d>
- Konesavarathan v. College of Physicians and Surgeons of Ontario, 2017 HRTO 973. <https://canlii.ca/t/h5660>
- Providence Health Care v. Dunkley, 2016 BCSC 1383. <https://canlii.ca/t/gsp2d>

### Applicable Disability Legislation

*CCSM c H175 | The Human Rights Code*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/mb/laws/stat/ccsm-c-h175/latest/ccsm-c-h175.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1lgInBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplIEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=28>

*CQLR c C-12 | Charter of Human Rights and Freedoms*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/qc/laws/stat/cqlr-c-c-12/latest/cqlr-c-c-12.html?searchUrlHash=AAAAQAhhm1bWFFuIHJpZ2h0cyIlgQU5EiChjb2RlIG9yIGFjdCkgAAAAAAE&resultIndex=1>

RSA 2000, c A-25.5 | *Alberta Human Rights Act*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/ab/laws/stat/rsa-2000-c-a-25.5/latest/rsa-2000-c-a-25.5.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

RSBC 1996, c 210 | *Human Rights Code*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/bc/laws/stat/rsbc-1996-c-210/latest/rsbc-1996-c-210.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

RSC 1985, c H-6 | *Canadian Human Rights Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/ca/laws/stat/rsc-1985-c-h-6/latest/rsc-1985-c-h-6.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1glnBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=22>

RSNB 2011, c 171 | *Human Rights Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/nb/laws/stat/rsnb-2011-c-171/latest/rsnb-2011-c-171.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1glnBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=4>

RSNS 1989, c 214 | *Human Rights Act*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/ns/laws/stat/rsns-1989-c-214/latest/rsns-1989-c-214.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

RSO 1990, c H.19 | *Human Rights Code*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/on/laws/stat/rso-1990-c-h19/latest/rso-1990-c-h19.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

The **Canadian Human Rights Act** recognizes that all individuals should have an opportunity equal with other individuals to make for themselves the lives that they are able and wish to have and to have their needs accommodated without discrimination and, in particular, discrimination on the basis of disability.

RSPEI 1988, c H-12 | *Human Rights Act* | *CanLII*. (n.d.). Retrieved May 8, 2023, from <https://www.canlii.org/en/pe/laws/stat/rspei-1988-c-h-12/latest/rspei-1988-c-h-12.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

SBC 2021, c 19 | *Accessible British Columbia Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/bc/laws/stat/sbc-2021-c-19/latest/sbc-2021-c-19.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1glnBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=12>

SC 2019, c 10 | *Accessible Canada Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/ca/laws/stat/sc-2019-c-10/latest/sc-2019-c-10.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1glnBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=23>

SM 2013, c 40 | *The Accessibility for Manitobans Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/mb/laws/astat/sm-2013-c-40/latest/sm-2013-c-40.html?searchUrlHash=AAAAAQBhKCJwb3N0LXNlY29uZGFyeSlgT1glnBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wiiE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=18>

SNL 2010, c H-13.1 | *Human Rights Act, 2010*. (n.d.). CanLII. Retrieved May 8, 2023, from <https://www.canlii.org/en/nl/laws/stat/snl-2010-c-h-13.1/latest/snl-2010-c-h-13.1.html?searchUrlHash=AAAAAQAhImh1bWFuIHJpZ2h0cyIlgQU5EiChjb2RIIG9yIGFjdCkgAAAAAAE&resultIndex=1>

SNS 2017, c 2 | *Accessibility Act*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/ns/laws/stat/sns-2017-c-2/latest/sns-2017-c-2.html?searchUrlHash=AAAAAQBhKCJwb3NOLXNlY29uZGFyeSlgT1glInBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wilE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=5>

SO 2001, c 32 | *Ontarians with Disabilities Act, 2001*. (n.d.). CanLII. Retrieved May 4, 2023, from <https://www.canlii.org/en/on/laws/stat/so-2001-c-32/latest/so-2001-c-32.html?searchUrlHash=AAAAAQBhKCJwb3NOLXNlY29uZGFyeSlgT1glInBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wilE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=28>

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SS 2018, c S-24.2 | *The Saskatchewan Human Rights Code, 2018* | CanLII. (n.d.). Retrieved May 4, 2023, from <https://www.canlii.org/en/sk/laws/stat/ss-2018-c-s-24.2/latest/ss-2018-c-s-24.2.html?searchUrlHash=AAAAAQBhKCJwb3NOLXNlY29uZGFyeSlgT1glInBvc3Qgc2Vjb25kYXJ5IiBPUiAibWVkaWNhbCBzY2hvb2wilE9SIHVuaXZlcnNpdHkplEFORCBkaXNhYiogQU5EIGFjY2Vzc2liKgAAAAAB&resultIndex=8>

Other informative policies, statements etc.

*Accommodation Carries a Price Tag, but the Bottom—ProQuest*. (n.d.). Retrieved September 28, 2023, from <https://www.proquest.com/docview/1752066151/abstract/2254219DAD3B48F0PQ/1>

Canadian Human Rights Commission (Ed.). (2007). *Bona fide occupational requirements and bona fide justifications under the Canadian Human Rights Act: The implications of Meiorin and Grismer*. Canadian Human Rights Commission. <https://www.chrc-ccdp.gc.ca/en/resources/publications/bona-fide-occupational-requirements-and-bona-fide-justifications-under-the>

*Policy on accessible education for students with disabilities* | Ontario Human Rights Commission. (n.d.). Retrieved April 28, 2023, from <https://www.ohrc.on.ca/en/policy-accessible-education-students-disabilities>

*Policy on preventing discrimination based on Mental health disabilities and addictions*. (n.d.). <https://www.ohrc.on.ca/en/policy-preventing-discrimination-based-mental-health-disabilities-and-addictions>

*With learning in mind* | Ontario Human Rights Commission. (n.d.). Retrieved September 28, 2023, from <https://www.ohrc.on.ca/en/learning-mind>

## XII. Appendix 2: Working Group Members

Dr. Cheryl Holmes, *Associate Dean, Undergraduate Medical Education (UGME), University of British Columbia*

Dr. Laura Farrell, *Associate Dean, Student Affairs, University of British Columbia*

Dr. Ginger Rudy, *Assistant Dean, Student Affairs, University of Saskatchewan*

Dr. Laura Yvonne Bulk, *Assistant Professor Teaching, Occupational Science & Occupational Therapy, University of British Columbia*

Dr. Lynn Ashdown, *Board member Canadian Association of Physicians with Disabilities (CAPD) & Investigator- Equity and Health Systems Lab, Patient partner-Lead Advisor to the AFMC*

Dr. Quinten Clarke, *Vice-President, Canadian Association of Physicians with Disabilities (CAPD)*

Dr. Franco Rizzuti, *Public Health & Preventative Medicine, University of Calgary & President, Canadian Association of Physicians with Disabilities (CAPD)*

Dr. Lee Toner, *Associate Dean, Undergraduate Medical Education, Northern Ontario School of Medicine (NOSM) University*

Dr. Alex Scott, *Head, UBC Department of Physical Therapy, University of British Columbia*

Dr. George Kim, *Associate Dean, Admissions, Schulich School of Medicine & Dentistry, Western University*

Dr. Julia Ersilia Hanes, *Resident, Physical Medicine and Rehabilitation, University of British Columbia*

Dr. Charles Su, *Interim Vice-Dean, Undergraduate Medical Education, University of Ottawa*

Ms. Rachel Giddings, *UBC Student, Class of 2026*

Dr. Lisa Graves, *Secretary, Committee on Accreditation of Canadian Medical Schools (CACMS)*

Ms. Melissa Shahin, *Chief Operating Officer and Lead, Social Accountability, The Association of Faculties of Medicine of Canada*

Dr. Saleem Razack, *Professor, Division of Critical Care, Department of Pediatrics, Faculty of Medicine, University of British Columbia*

Dr. Michael Quon, *Division of General Internal Medicine, The Ottawa Hospital*

Dr. Erene Stergiopoulos, *Clinician Scientist, Department of Psychiatry, University of Toronto*

Dr. Naomi Lear, *Associate Director Student Advocacy and Wellness Centre, Cumming School of Medicine, University of Calgary*

*Special thanks to Ms. Kacey Krenn LLB and Ms. Meredith Holmes LLB— for lending their legal expertise and to Dr. Sarah Knitter, Director of the Centre for Accessibility at the University of British Columbia for her input.*

### XIII. Appendix 3: Organizations Consulted

AFMC Undergraduate Medical Education Deans Committee

AFMC EDI & Anti-Racism Committee

AFMC Standing Committee on Social Accountability

AFMC Postgraduate Medical Education Deans Committee

AFMC Admissions Network

AFMC Student Affairs Committee

AFMC Clerkship Network

AFMC Pre-clerkship Network

AFMC Clinical Skills Network

The Federation of Medical Regulatory Authorities of Canada (FMRAC)

Medical Council of Canada (MCC)

Council of the Ontario Faculties of Medicine (COFM)

Canadian Association of Physicians with Disabilities

Canadian Federation of Medical Students (CFMS)

Fédération médicale étudiante du Québec (FMEQ)

Committee on Accreditation of Canadian Medical Schools (CACMS)

College of Family Practice Canada (CFPC) Accreditation Committee

Royal College of Physicians and Surgeons of Canada (RSPSC)

Council of Ontario Faculties of Medicine (COFM) and Professional Association of Residents of Ontario (PARO)

Docs with Disabilities Initiative

*Medical Schools will need to consult internally as well. This will include Center of Accessibility/Student Accessibility Services (or equivalent), Legal Counsel, governing committees, and other bodies, as required.*