

NCIME
THE NATIONAL CONSORTIUM
FOR INDIGENOUS MEDICAL EDUCATION



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POUR LA FORMATION MÉDICALE EN SANTÉ AUTOCHTONE

Guidelines for the Development of Indigenous Studies, Cultural Safety & Anti-racism Assessment in Medical Education

2024



Guidelines for the Development of Indigenous Studies, Cultural Safety & Anti-racism
Assessment in Medical Education

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Copies of this report in English are accessible at www.ncime.ca

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The National Consortium for Indigenous Medical Education (NCIME)

A Virtual Organization

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Our Logo

The Logo is based on circles of concentrically valuing the Four Directions wellness (physical, mental, emotional, and spiritual), Inuit and Métis harvesting practices to nurture, and pass practices on to younger generations from Knowledge Keepers, Medicine Peoples, Language Speakers and Elders. It has Mushkiki filled feather hands that protect, nurture and guide cultural safety in care, uplifting the sophistication of First Nations, Inuit and Métis knowledge translation and land-based healing practices to enrich biomedical education. The Ulu meets the centre of the fire that must be maintained with integrity, responsibility and dedication to creating joyful, community centered environments. This firekeeping work is highly valued in our urban and homeland related communities.

The plants represented in the left/right feather hand imagery are ginseng, willow, plantain, penny-cress, horsetail fritillaries and saskatoon berry.

Acknowledgments

We, the NCIME Staff, Chair and Co-Chair of the Assessment of Indigenous studies, cultural safety, and anti-racism Working Group, are responsible for publishing the Guidelines for the Development of Indigenous Studies, Cultural Safety & Anti-racism Assessment in Medical Education. We would like to express our gratitude to all those who contributed to this important work.

First and foremost, we acknowledge and honour the Indigenous physicians, medical learners, Elders, Knowledge Keepers, and community members who shared their wisdom, knowledge, and lived experiences with us. Their guidance and leadership were essential in shaping the report and ensuring it reflects Indigenous Peoples' realities in Canada.

We also appreciate our non-Indigenous allies who participated in the working group. Your commitment to learning, listening, and taking action to dismantle systemic racism is vital to creating meaningful change.

We thank the scholars, researchers, and health leaders who contributed their expertise and time to this project. Your insights and perspectives were invaluable in shaping the recommendations and ensuring they are evidence-based.

Finally, we would like to thank the Health Care Policy and Strategies Program, Health Canada, for supporting this work. Your investment in anti-racism initiatives demonstrates a commitment to creating a more equitable and just society.

We hope that this report will serve as a tool for medical educators and policymakers, healthcare providers, and others committed to addressing anti-Indigenous racism in medical schools in Canada. May we continue to

work together towards a future where Indigenous Peoples are respected, valued, and treated with dignity and equity.

Table of Contents

LIST OF TABLES.....	7
INTRODUCTION	8
PREAMBLE.....	8
BACKGROUND	10
PURPOSE.....	11
WHO TO INVOLVE.....	17
WHO CAN CARRY OUT THIS WORK? LEADERSHIP AND SUPPORTING ROLES.....	19
WHO CAN WRITE EXAM QUESTIONS/STATIONS? LEADERSHIP AND SUPPORTING ROLES ..	20
THE NEED FOR INDIGENOUS FACULTY	21
POTENTIAL PARTNERSHIPS WITH INDIGENOUS STUDIES.....	21
BIAS AND STEREOTYPING IN ASSESSMENT	23
BIPOC FACULTY ADVANCEMENT.....	23
BIAS IN LEARNER ASSESSMENT	24
PARTNERSHIPS WITH LEADERSHIP	26
CONSIDERATIONS FOR INDIGENOUS LEARNERS	26
DEVELOPING ASSESSMENTS IN INDIGENOUS HEALTH AND CULTURAL SAFETY	30
MULTIPLE CHOICE QUESTIONS.....	32
SHORT-ANSWER QUESTIONS.....	34
LONG-ANSWER QUESTIONS.....	34
OSCE.....	35
DECIDING WHAT TO TEST	36
DEVELOPING QUESTIONS AND SCENARIOS.....	36
MCQs: DEVELOP ANSWER OPTIONS.....	38
CLINICAL ASSESSMENTS AND ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPAs)	39
HOW TO DEVELOP CASE-RELATED CONTENT	39
SAMPLE ASSESSMENT TOOLS	41
SEE APPENDIX C SAMPLE ASSESSMENT QUESTIONS.....	41
DEVELOPING SCORING INSTRUMENTS	42
SCORING CULTURAL SAFETY	43
ESSENTIAL COMPETENCIES.....	45
RECOMMENDATIONS.....	45
REFERENCES.....	49
APPENDIX A.....	57
APPENDIX B.....	59
APPENDIX C – SAMPLE ASSESSMENT QUESTIONS.....	60

List of Tables

Table 1. Cultural Safety & Humility Guidelines	13
Table 2. The Four Principles of Trauma-informed Medical Education (TIME)	28
Table 3. Strengths and Limitations of Multiple-choice Questions	32
Table 4. Guidelines for Developing Case-Related Content	39

Introduction

The National Consortium for Indigenous Medical Education (NCIME) is the result of a collaborative partnership between the Association of Faculties of Medicine of Canada (AFMC), the Medical Council of Canada (MCC), the Indigenous Physicians Association of Canada (IPAC), the College of Family Physicians of Canada (CFPC), and the Royal College of Physicians and Surgeons of Canada (RCPSC). The NCIME's mandate is to provide leadership, guidance, and knowledge translation (KT) tools to medical schools and medical education organizations across Canada. These resources provide essential training and education in Indigenous health and safety and trauma-informed care for all faculty and learners. They also guide the re-evaluation of undergraduate and postgraduate medical education environments to ensure that they are culturally safe and supportive of Indigenous learners and faculty.

The goal of this guideline is to critically evaluate the current assessment tools used in medical education, particularly when applied to Indigenous Peoples and cultural safety. The current state of assessment is underdeveloped in terms of Indigenous studies, cultural safety, and anti-racism and, therefore, fails learners and faculty in assessing their ability to provide safe and appropriate patient care. This lack of safe patient care continues to harm Indigenous Peoples. These guidelines lay out a pathway to address these inadequacies and place all patient care at the forefront of practice.

Preamble

Working concurrently under the direction of the NCIME are six working groups, each with its focus and mandate:

- › Indigenous Student Admissions and Transitions

- › Anti-Racism, Policies, Processes, and Implementation Support
- › Assessment of Indigenous Studies, Cultural Safety, and Anti-racism
- › Improving Cultural Safety in the Curriculum
- › Indigenous Faculty Recruitment and Retention
- › Indigenous Physician Wellness and Joy in Work

The work carried out by the NCIME Assessment Working Group is relational in that we acknowledge the necessity of being accountable to Indigenous Peoples who are impacted by this work while simultaneously holding ourselves accountable to the recommendations we put forth. Achieving the overall goals of Indigenous medical education as set out in these guidelines requires careful consideration and action. Most importantly, there are common themes interwoven throughout all working group materials that reinforce the NCIME's overall vision of culturally safe and anti-racist health care for all Indigenous Peoples in Canada.

Lifelong learning and continuing medical education are core physician competencies. As such, we intend this work to evolve. There is a responsibility, affirmed through initiatives discussed in the following background section of this paper, to continually educate ourselves and grow in our ability to eliminate barriers to Indigenous health sustainably.

Finally, it is essential and appropriate to acknowledge the origin of this work, carried out daily by a group of Indigenous and non-Indigenous subject-matter experts in the six areas listed above. The Assessment Working Group comprises current and future medical practitioners and educational instructors from across Canada, with the added benefit of Elder-provided guidance. (See Appendix A for a complete list of working group members.) We are grateful for their selfless and endless contributions.

Background

The health disparities experienced by Indigenous Peoples in Canada are well documented (Brian Sinclair Working Group 2017; Government of British Columbia 2020¹; Kamel 2021; Levin & Herbert 2005; Nerestant 2021). The experiences of Indigenous Peoples when accessing health care in Canada can be directly linked to colonialism, systemic racism, and disparaging stereotypes that circumscribe the level of care non-Indigenous health professionals are willing to perform for Indigenous Peoples. In the most high-profile cases, this negligence and discrimination of care has fatal consequences for Indigenous Peoples. Equitable treatment in health care is a fundamental human right. According to the Truth and Reconciliation Final Report (2015), Call to Action #18 specifically requires that governing bodies and institutions, at minimum, understand and acknowledge the harms they caused to Indigenous Peoples and rectify these ongoing harms by complying with the healthcare rights of Indigenous Peoples in Canada. Call to Action #23 in the TRC Final Report requires that all levels of government begin supporting and developing future and current Indigenous health professionals while also implementing cultural safety training for healthcare professionals.

The calls to justice regarding access to and competent health care for Indigenous Peoples found in the final report on the National Inquiry into Missing and Murdered Indigenous Women and Girls (MMIWG2S) call for

¹ In light of recent allegations against M.E. Turpel-Lafond, we would like to take the opportunity to share our condolences for the harm that this revelation has caused, and our thoughts are with those who are directly impacted by these claims. However, as an Indigenous organization who is accountable to Indigenous Peoples in Canada, we would like to note that we will continue referencing this report due to its undeniable utility in moving forward conversations around anti-Indigenous racism in health care, until such time that a suitable replacement is made.

institutions and current healthcare professionals to receive ongoing training on the history of colonialism, anti-Indigenous racism, local Indigenous culture and language, and Indigenous health needs and healing practices. Furthermore, Call to Justice 7.2 recommends equitable funding for Indigenous people to obtain medical education.

Purpose

Appropriate assessments provide for the ongoing identification of gaps in knowledge and abilities in learners at every level. The information assessments provide for wiser curriculum creation and integration with proportionate expansion in the curriculum. Learning into the uncomfortable is necessary for all learners to understand the historical and current context as a norm for medical education. In their literature review around the assessment of cultural safety in medical education, Gregorczyk and Bailit (2008) found that there were five common barriers to applying cultural safety:

1. A lack of a consensus on core competency knowledge
2. Erroneous notions of race in cultural competency evaluation instruments
3. Stereotyping the behavior of racial groups
4. Inconsistency of evaluations
5. Inadequate clinical role models

This guideline aims to provide assessment guidelines for medical educators that, as identified in the third consideration above, have been developed by subject-matter experts from Indigenous academics, medical educators, and Indigenous communities. It is important to qualify that the guidelines are intended to provide a map to be used with the other relevant NCIME

documents; however, this is not a complete manual. Much of your institution's work will be in collaboration with local Indigenous communities. Deans of faculties of medicine across Canada have already endorsed the foundational Joint Commitment to Action on Indigenous Health (JCAIH), which is committed to community engagement and partnership.

We should move beyond a cultural competency approach into cultural safety training for non-Indigenous students, faculty, and healthcare professionals (Churchill et al. 2017; Curtis et al. 2019). Cultural safety is defined as:

An outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the health care system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care (FNHA 2022).

Awareness of Indigenous cultures does not result in an improvement in the experience of unequal treatment in healthcare settings for Indigenous Peoples. To support the cultural safety of Indigenous Peoples receiving care and those Indigenous medical students learning to administer care, it is strongly recommended that cultural safety training and protocols be developed in coordination with Indigenous faculty, specialists, and local Indigenous communities (AMC 2009; Phillips 2004). Developing and implementing cultural safety practices and frameworks into medical education and healthcare settings require equal attention to cultural humility — the process of self-reflection where the learner acknowledges their unexamined and socially conditioned biases that contribute to poor outcomes for Indigenous Peoples. A framework that guides and provides direction for implementing cultural safety can be used to support necessary

changes in the health curriculum and assessment of medical students. A significant emphasis is placed on community relationship building, capacity development, and the essential support required for the successful and meaningful implementation of cultural safety and humility programming. All of this is to ensure not only the safe experiences of Indigenous Peoples accessing health care but also to encourage the creation and development of cultural safety skills in health care.

For this document, cultural safety and humility in medical education assessment are exemplified by the following six principles:

Table 1. Cultural Safety and Humility Guidelines

Community-driven collaboration	<ul style="list-style-type: none"> - Local Indigenous communities should have a role in guiding cultural safety and anti-Indigenous racism work. - Community involvement will ensure local specific needs and concerns are brought forward. - Bringing in Indigenous healthcare expertise from outside organizations to guide and advise the implementation of cultural safety and humility work. - Ensures relevance and accountability.
Accountability to Indigenous partners	<ul style="list-style-type: none"> - Accountability mechanisms should be co-developed with community partners to ensure targets are met and deliverables are consistent with community goals and needs. - Accountability means ongoing dialogue and relationship building. - This includes reporting back to relevant stakeholders and establishing regular meetings. - Accountability to Indigenous partners on cultural humility means taking opportunities when working

	with Indigenous partners to re-evaluate internalized anti-Indigenous biases.
Cultural services	<ul style="list-style-type: none"> - Cultural needs of students and Indigenous faculty should be prioritized. - Needs include but are not limited to: <ul style="list-style-type: none"> - Cultural time off (Community Obligation Clause, NCIME 2023) - Facilities for smudging and ceremony - Full-time Elder or Knowledge Keeper access and support - Indigenous-specific mental health services
Relationship building	<ul style="list-style-type: none"> - Liaising with local Indigenous communities in the community. - Inviting local Indigenous communities to participate in institutional programs and events (more than token representation). - Prioritizing funding for community meetings and visits. - Prioritizing funding for community members to attend meetings and events on campus. - Developing community programs (e.g., practicum).
Support Indigenous capacity	<ul style="list-style-type: none"> - Work collaboratively with Indigenous departments and faculties. - Seek guidance and support from Indigenous studies departments on research and collaboration. - Indigenous expertise developed and recruited for: <ul style="list-style-type: none"> - Course content and development - Development of exam questions - Creation and development of clinical scenarios - Developing protocols for institutions and faculties to follow when engaging community partners

Promote
Indigenous
interests

- Ensuring the perspectives of Indigenous experts and communities are at the forefront of decision-making.
- Respecting the decisions of Indigenous experts and stakeholders involved.
- Supporting the capacity and development of Indigenous experts.
- Developing and supporting community research and health capacity.

Adapted from: FNHA 2021. Anti-racism, Cultural Safety & Humility Framework; Carter M, Potiki M, Haggie H, Tipene-Leach D. *Cultural safety within vocational medical training*. Report of Te ORA and the Council of Medical Colleges, May 2021

The principles of cultural safety and humility outlined here should be used as a guide for evaluating Indigenous cultural safety in medical education assessment and for the remainder of this document.

With these goals in mind, Indigenous faculty who choose to take up more active roles in the oversight and development of cultural safety and decolonizing medical education must be supported. These goals can be further advanced by increasing the number of Indigenous medical educators within medicine and consulting and building relationships with Indigenous faculty members outside of medicine faculties, such as Indigenous studies departments and relevant health studies programs within social sciences. It is also essential that these processes and changes be done in consultation with local Indigenous communities both on and off campus. Long-term relationship building with local Indigenous communities will ensure the development of meaningful changes to Indigenous Peoples while also creating the opportunity for non-Indigenous institutions to be guided by the Indigenous community and support their ambitions for culturally safe care.

Experiences of anti-Indigenous racism do not end at the point of care, and discrimination against Indigenous medical students has been verified as well (Anderson DeCoteau, Woods, Lavalley & Cook 2017; Garvey, Rolfe, Pearson & Treloar 2009). Further, research points to challenges faced by faculty and assessors in delivering on newly implemented Indigenous curricula including difficulties conducting self-reflections and confidently teaching Indigenous health content (Vass & Adams 2020; Wolfe, Sheppard, Le Rossignol & Somerset 2018), challenges developing content for Indigenous Standardized Patients (SPs) (Maar, Bessette, McGregor, Lovelace & Reade 2020), frontloading the responsibility to create necessary anti-racist measures to students (Afolabi et al. 2021), and developing cultural competency training targets for supervisors and health professionals (Abbot, Reath, Gordon, Dave, Harnden, Hu, Kozianski & Carriage 2014; Kumas-Tan, Beagan, Loppe, MacLeod & Frank 2007). The combined expert experience of the NCIME working group members also confirms these experiences. Training future and current medical students and practitioners to deliver culturally safe care to Indigenous Peoples is crucial for saving lives. Despite the advancements in incorporating Indigenous content in medical schools across Canada, issues continue to arise.

There exists a need for clear objectives and guidelines regarding the cultural safety of Indigenous Peoples. Likewise, developing and implementing cultural safety practices and frameworks in medical education and healthcare settings require equal attention to cultural humility, as described previously.

This guideline aims to provide support and guidance for evaluating cultural safety and anti-racism policies and processes in medical education assessments, necessitating cultural safety training and cultural humility

practices for all involved parties. A significant emphasis is placed on community relationship building, capacity development, and the necessary support for these recommendations' successful and meaningful implementation. This is intended to ensure the safe experiences of Indigenous Peoples accessing health care and encourage the creation and development of expertise in culturally safe health care.

The importance of this work and providing appropriate care should be carefully considered. The need for healthcare providers to possess a high skill level in the core competencies for First Nations, Inuit, and Métis health should require a demonstration of relevant training, acceptable grades, and skills qualifications that continue through all levels of undergraduate medical education (UGME) and postgraduate medical education (PGME). After PGME, further training during continuing medical education (CME) would then become a learner priority. When an assessment reveals inadequate knowledge, skills, or behaviours that may directly or indirectly lead to patient harm, remediation would be required before a learner can progress.

Who To Involve

What is the Role of the Communities You Serve?

Community service and building reciprocal relationships require earning trust through transparent intent, mutually agreed-upon goals, and actions that reflect the stated intentions and goals. Suppose institutions are in the discovery phase (see Curriculum Framework Model Appendix B). In that case, it is advisable that, as an institution, you begin taking steps towards relationship building with Indigenous partners. Senior leadership and PGME departments can be disconnected from the work of their faculty's Indigenous

programming. Valuable Indigenous resources exist on your campus, and it is recommended that these bodies be sought out for guidance and support.

For example, Indigenous SPs' knowledge and experiences are critical in more than one facet of assessment. Studies like Kamaka, Diane, Paloma & Maskarinec (2011) detail the numerous experiences of Indigenous Hawaiian patients, and their first-hand perspectives demonstrate the erroneous notions of race in cultural safety evaluation instruments and the harm from stereotyping the behaviour of racial groups. Here in Canada, these barriers to culturally safe care led to very real patient harm, as evidenced by the experiences of Joyce Echaquan and Brian Sinclair (Brian Sinclair Working Group 2017; Kamel 2021).

In New Zealand, a study by Huria et al. (2017) concluded the following:

Awareness of historical and contemporary indigenous (sic) perspectives to contextualize knowledge, together with multiple pedagogical approaches, faculty role-modelling, and peer interaction during teaching to support learner engagement and skill development, can build a curriculum that increases learner confidence (7).

This study used a Māori methodology and model and relied on simulated or standardized patients, and the results were very encouraging. Learner feedback highlighted the value of the opportunity to practice the communication and cultural safety skills they had learned. While students recognized this learning as challenging, recognizing the “perceived authenticity of the Māori patient (actor/community member) within the case scenario” (Huria et al. 2017, 6) allowed for a safe peer- and instructor-involved exercise. Indigenous SPs often bring their personal experiences to provide an

accurate immersion, which is the foundation of authenticity. Much like the act of Elders and other residential school survivors exposing their trauma to reveal the truth of our shared history (TRC), it is impossible for Indigenous community SPs not to utilize their lived experiences to inform teachings. Recognizing this makes the value of SP feedback even more evident. An established, safe, and authentic SP case study environment allows learners to practice and consolidate their skills while receiving expert feedback from appropriate individuals.

Feedback from the community is also necessary in developing assessment tools, examinations, and stations. In this context, the term “community” encompasses not only the regional populations under service but also Indigenous physicians and medical education experts who determine the content and method of assessment. Ideally, it should be the community’s input that determines the achievement of a competency. This would be exemplified by enabling community representatives to articulate local and context-specific competencies when they have been achieved according to community representative satisfaction, especially when the competency has not been achieved. Additionally, local knowledge and stories can aid in developing more representative questions and scenarios. When moving into the CME and PGME phases, the local community and historical impact must be recognized and integrated into the curriculum. This honours the reciprocal relationship with communities near your institution and avoids the pitfalls of pan-Indigenous frameworks often applied in curriculum for ease and colloquially checking the box.

Who Can Carry Out This Work? Leadership and Supporting Roles

Removing harm experienced by Indigenous Peoples when accessing health care is a key driver of this work. Individuals knowledgeable about Indigenous cultural safety and medical education should lead the decision-making and implementation processes to achieve this goal. The individuals who can lead and navigate these concerns are Indigenous Peoples, Indigenous physicians, subject-area experts, and non-Indigenous healthcare providers with positive and longstanding relationships with the community and a dedicated service history.

Non-Indigenous physicians and medical educators can be important supporters in this work because they can contribute complementary expertise in relevant aspects of assessments in culturally safe ways. We can provide training to allied non-Indigenous individuals to enhance their capacity as qualified assessors. Assessment of the assessors themselves will be an ongoing part of continuing medical education, and these guidelines encourage the adoption of recommendations made here.

Who Can Write Exam Questions/Stations? Leadership and Supporting Roles

Indigenous voices and faculty must drive this work. Indigenous Peoples can only determine the cultural safety and appropriateness of materials. This means engaging Indigenous faculty, local communities, and other broader institutional sources of Indigenous knowledge. It is recommended that medical schools and governing bodies seek to create an external Elders and Knowledge Keepers or Indigenous community advisory board or committee to oversee this work.

The Need for Indigenous Faculty

One or two Indigenous faculty members cannot be expected to undertake all the work and responsibilities required for successfully implementing culturally safe content and assessments. Fewer faculty means exhausted individuals, resulting in a lack of Indigenous voices and representation at important discussions, thus creating an environment of tokenism that Indigenous communities will be wary of.

This document encourages leadership to connect with a faculty's Indigenous health program when discussing community engagement. Reviewing the existing IPAC-AFMC Community Engagement Toolkit (2011) would also be beneficial. Indigenous health programs are likely already undertaking this work and engaged in these relationships, but most are chronically underfunded and understaffed. Many NCIME working groups' expert members have reflected on this reality in their programs and resources. Other major faculty roles require and receive administrative assistance, as the necessary support is immense. This work will involve both Indigenous faculty and programming administration. Just as community engagement necessitates skill sets and worldviews that are not yet common, those who work with Indigenous communities require uncommon and specific support and assessment to grow and develop without causing severe emotional harm.

Potential Partnerships with Indigenous Studies

While Indigenous faculty are underrepresented within medicine programs, Indigenous studies departments and faculties may have more Indigenous faculty who can provide support. There can be significant contributions to

understanding the current state of Indigenous health when examined through a lens that is not solely focused on biomedical awareness and approach. As a discipline, Indigenous studies emphasizes critiques of settler colonialism but makes significant efforts to support the development of Indigenous research paradigms and methodologies, community-based initiatives, research, and capacity development to support Indigenous sovereignty, self-governance, and self-determination. Seeing as nearly every major university in Canada has an Indigenous studies or related program, and in some cases, an established Indigenous health program, it would be strategically advantageous for medical schools to connect with these existing programs in ways that are mutually beneficial to Indigenous community partners and the Indigenous studies departments and faculties by making connections and building relationships with Indigenous scholars and experts already available on campus. However, it should be noted that these relationships are not merely transactional but should be initiated with respect and proper remuneration. To be clear, opportunities exist for Indigenous studies experts to support and guide the integration of cultural safety and Indigenous perspectives in medical education assessment.

It would be beneficial for medical schools to begin relationship building and collaborating with Indigenous studies departments and faculties to start the process of decolonization and to support critical lenses that challenge the disparities Indigenous Peoples experience when accessing health care and medical education in Canada. A strong foundation in Indigenous studies, utilizing local Indigenous communities and voices will enhance understanding and help address the very real and alarming disparities experienced by Indigenous Peoples.

Bias And Stereotyping in Assessment

BIPOC Faculty Advancement

Although underrepresented minority groups are increasingly being hired for junior faculty positions, the advancement of these groups remains low. According to Fang, Moy, Colburn & Hurley (2000), between 1980 and 1981, 2.6% of newly hired faculty in the US were underrepresented minorities (of which Indigenous Peoples are a part); in 1996–97, that number rose to just 4.6%. Although minority groups are being hired into faculty positions, medical schools in the US face continued difficulties in advancing junior minority faculty (Fang, Moy, Colburn & Hurley 2000). Since this study was published in 2000, the number of underrepresented minority faculty members in the US has slowly but steadily increased (Rodriguez, Campbell & Pololi 2015). That said, the advancement of underrepresented minority faculty in medicine is obstructed mainly by several variables, including the devaluation of diversity, equity, and inclusion (DEI) work that is disproportionately undertaken by minoritized faculty, the pervasiveness of racism in daily work life and promotion processes, racial isolation, a disparity in suitable mentors, and a lack of balance between clinical and scholarly activities (Rodriguez, Campbell & Pololi 2015). Adverse experiences with microaggressions and racial bias undervaluing DEI work and challenges with personal/cultural identities conflicting with the expectations of residency programs have also been noted (Osseo-Asare et al. 2018). In their study, Kulp, Wolf-Wendel, and Smith (2019) found that for racially marginalized faculty, satisfaction with one's service load, department, department chair, and having a supportive culture were considered vital for having any confidence in promotion within a faculty where there is very little clarity on what is required to advance. It remains unclear in the literature whether the advancement of Indigenous faculty

from assistant to full professorship positions in Canada follows the same trajectory as underrepresented minorities in the US; however, internal institutional data does exist but is not publicly available.

Bias In Learner Assessment

Anti-Indigenous racism in medical education is a reality for many Indigenous students and faculty members. According to research conducted by Anderson, Woods, Lavalley, and Cook (2017) at the University of Manitoba, Indigenous students and medical professionals frequently encountered forms of racial discrimination in multiple scenarios (19). These experiences included racially motivated disparaging comments made by peers and superiors, pressure to adhere to a toxic culture of compliance by not speaking out on racist encounters, and differential treatment of students and patients (20–21). Elsewhere, Garvey (2009, 1053) found that Indigenous medical students in Australia reported experiencing subtle and overt forms of anti-Indigenous racism that were targeted at peers and Indigenous Peoples generally. Also, these more overt forms of anti-Indigenous racism, both inside and outside of the institution, created unnecessary challenges for Indigenous students in accessing necessary services like support and housing (Garvey 2009, 1053). Arguably, the discrimination Indigenous students experience while trying to complete medical training increases the burden of stress and adverse outcomes. For example, Rojek et al. (2019) found that certain descriptors were consistently used in narrative assessments for underrepresented minority medical students to evaluate their performance and revealed implicit biases in assessors. Elsewhere, Ross et al. (2017) found consistent differences in keywords used to describe the performance of underrepresented minority student's medical student performance evaluations. Likewise, Klein et al. (2022) found that clinical performance

assessments of underrepresented minority students were consistently lower than non-minority students. The consequences of biased assessments for underrepresented minority students have been coined the “amplification cascade,” an effect that results in diminished opportunities for advancement (Teherani et al. 2018). It can be speculated then that the racism and implicit biases against underrepresented minority students like Indigenous medical students are leading to unnecessary hardships and difficulties in educational attainment and program advancement (Yuce et al. 2020). Addressing issues like implicit bias in Indigenous student assessment will require a diverse approach that incorporates cultural safety and anti-racism frameworks; bias training for faculty, assessors, students, and residents; critical evaluation of Indigenous patient descriptions in courses and evaluations; and identification of pervasive and discriminatory practices, structural racism, stereotypes, and bias in practical evaluations (Royce et al. 2022).

Consistency in delivering and assessing written and practical examinations is a central concern here. Assessor attitude, personality, expectations, and awareness of cultural safety can have negative consequences for Indigenous medical students (Garvey 2009, 1051). Writing, conducting clinical observations, and assessing written exams requires minimum training in the history of colonialism in Canada and its impacts on Indigenous health and, ideally, more focused training on cultural safety and cultural humility (FNHA 2021; San'Yas 2022). Practical examples of successful Indigenous health assessments include a strong focus on community consultation and engagement with positive cultural representations of Indigenous Peoples (Marr et al. 2020; Min, MacNeil, Zekic, and Leung 2021). Further, shifting the narrative in medical education from a deficit lens — where Indigenous Peoples are associated only with adverse health outcomes — to a strengths-based approach that emphasizes community input, Elder guidance,

relationship building, and Indigenous self-determination can be an essential starting point for institutions and faculties looking to address the pervasiveness of anti-Indigenous racism in medical education and delivery (Kennedy et al. 2022). Finally, addressing equity in assessment will require the evaluation of intrinsic, contextual, and instrumental equity in assessment processes (Lucey, Hauer, Boatright & Fernandez 2020) to ensure that program design, methods of assessment, and the learning environment are fair and non-biased.

Partnerships with Leadership

Partnerships with leadership can serve as an opportunity to screen possible racially negative learner and faculty assessments. This plays a significant role in accounting for and mitigating biases. The inclusion of anything other than appropriate feedback for learners or faculty only perpetuates harm against Indigenous Peoples.

Considerations For Indigenous Learners

Facing various forms of racial discrimination during the tenure of their medical school training, Indigenous medical learners are forced to redirect energy to enhance their strength and resilience to achieve the same success as their non-Indigenous peers. Even unintended racial microaggressions can result in Indigenous students shutting down, deflecting, internalizing harm, or recreating a negative self-image that is depreciating their Indigenous heritage and culture. For future and current Indigenous medical students to succeed, improvements and adjustments to medical training and assessment need to be made to centre Indigenous learner needs.

Indigenous students, in many cases, come to medical school with adverse life experiences. They have an increased risk of exposure to trauma, the likelihood of family members who were in residential school, and personal or loved one's experience of racism. Therefore, course content and exam questions can be troubling and upsetting because of vicarious trauma, potentially triggering trauma, grief, or anxiety responses in some learners. Consequently, Indigenous students may require additional support in exam stations to assess Indigenous health, cultural safety, and anti-racism to proceed safely and reasonably with the remainder of the exam.

Understanding the potential for adverse reactions by Indigenous learners and planning for reasonable support is best done as part of a broader understanding and planned support across the medical education experience. Research from Australia and Aotearoa (New Zealand) has shown that culturally significant and guided supports, including culturally informed mental health supports, full-time Elder accessibility, community representation, and land-based engagement, results in a more representative environment that is welcoming and less foreign to Indigenous students (AIDA 2005). Simple and actionable steps to address anti-Indigenous racism and make medical schools safer for Indigenous students include implementing a trauma-informed approach to medical education. The trauma-informed approach fosters awareness that students and trainees can experience trauma from a biased system and culture and advocates for the establishment of policies and practices that support learners to prevent further re-traumatization (McClinton & Laurencin 2020, 1049).

The Trauma-informed Medical Education (TIME) framework operationalizes cultural safety in a way that requires institutions, faculties, educators, and assessors to realize harm is taking place, recognize individual or institutional

bias, respond by developing policies and procedures to address racism and resist the re-traumatization of Indigenous students (McClinton & Laurencin 2020, 1050). Although mechanisms and accommodations can be made to enable Indigenous students to feel supported, it is the responsibility of institutions and medical schools to take steps to relieve the burden of addressing racism from Indigenous students.

Table 2. The four principles of Trauma-informed Medical Education (TIME)

	Non-Indigenous Individuals	Institution
Realize	Anti-Indigenous racism is an issue in medical education and considers the individual's role in perpetuating or dismantling it.	Understand the institution's role in perpetuating or dismantling anti-Indigenous racism in medical education.
Recognize	Identify individual racial bias through reflexivity exercises, implicit association tests, or feedback.	Undertake systematic reporting and surveying to identify bias and discrimination within the institution.
Respond	Implicit bias reduction strategies include cultural humility, safety training, and self-reflexive activities.	Develop in coordination with Indigenous faculty, experts, community policies, and procedures that will address anti-Indigenous racism, bias, and discrimination.
Resist re-traumatization	Self-surveillance to resist re-traumatizing Indigenous Peoples.	Develop anti-Indigenous racism and bias mitigation strategies. Mandate corrective action.

Adapted from: McClinton & Laurencin 2020

As an example of applying TIME principles to the assessment of Indigenous health learning, Indigenous medical educators from the Max Rady College of Medicine at the University of Manitoba met with Indigenous learners to discuss past experiences with Indigenous health assessment and potential support strategies. Past Indigenous students had relayed negative experiences with some standardized assessments that had raised awareness of the need for specific discussion and planning.

Multiple learners relayed experiences of exam stations that they felt contained harmful stereotypes or brought up painful memories and were concerned that their reactions hindered their performance. Learners shared recommendations they thought might help mitigate these potentially harmful impacts. For example, it was recommended that OSCE's with an Indigenous health station should place a break station directly after, with traditional medicines available to provide Indigenous learners time and tools to compose and refocus. In addition, students would welcome input and training from psychologists on recognizing their reactions and strategies to utilize to recenter and be able to carry on confidently with their exams. The skills that enable learners and faculty (See Indigenous Medical Education Faculty Development Paper)² to recalibrate and recompose themselves, including cognitive behavioural therapy (CBT) or dialectical behavior therapy (DBT), schooling, and reinforcement. This training could be offered to Indigenous learners throughout their UGME and PGME and coordinated through the Indigenous health offices, as proved by an example in the above paper.

² The NCIME Indigenous Medical Education Faculty Development paper provides suggested frameworks with which to prepare a medicine program to deliver this content.

Developing Assessments in Indigenous Health and Cultural Safety

Training for students is an important aspect of ensuring cultural safety for Indigenous patients and, potentially, Indigenous students. Those who teach, assess, and preside over examinations must be comfortable with and in compliance with cultural safety training (Marr et al. 2020, 8). Facilitating assessment of examinations and clinical observation, plus providing specific feedback, especially on behavioural aspects of training, is a central aspect of trainers, academic supervisors, and clinicians (Dudek and Dojeiji 2014). The question of who facilitates cultural safety training and education and how it is taught is emerging as a valid research question. In Australia, for example, Vass and Adams (2021) found many of the general practitioner educators they consulted felt they were not qualified to speak to or lacked the requisite training and skills to teach anti-racism, colonialism, Indigenous health, white privilege, and self-reflexive approaches. According to the authors, there is no mandated and formalized anti-racism approach to Indigenous health curricula in Australia, which will inevitably lead to issues in the uptake and successful integration of such content in new students (Vass and Adams 2021, 219). Likewise, Wolfe, Sheppard, Le Rossignol, and Somerset (2018) surveyed academic staff to assess their comfort level and capability to deliver course content related to Indigenous issues and health. Their findings indicate that while 63% of respondents noted some Indigenous course content provided, 60% lacked the confidence to teach this subject area (649). Further, Afolabi et al. (2021) found that the results were not transformative for students even when bias training was provided for faculty members (805).

The lack of competency for trainers and supervisors is further compounded by a pervasive “cultural blindness” where educators, supervisors, and trainers, in some cases, have bought into the idea that healthcare training seeks to

care for patients regardless of a person's cultural, racial, or religious background (Abbot et al. 2014). Cultural blindness, limiting training to identifying stereotypes and biases, limits the visibility of other forms of ethnocentrism, racism, and discrimination that are built into Western medical approaches to care. The unobserved and unchallenged supremacy of white, racial, educational, socio-economic, and cultural privilege are not challenged by positions that favor cultural blindness and seek only to address the more visible and apparent forms of oppression—especially to those in the dominant culture (Kumas-tan, Beagan, Loppe, MacLeod and Frank 2007).

To address these challenges, it is important to begin by requiring students entering medical education to have prior training and understanding of Indigenous Peoples and Indigenous health. The requirements for undergraduate education often do not provide adequate training in Indigenous health and the history of colonialism in Canada (Beavis et al. 2015). This is likely a pervasive issue throughout the educational system. In many cases, the sentiment in medical education has been that Indigenous content is a “nice to know” rather than a “need to know” (Beavis et al. 2015).

Furthermore, content related to Indigenous health, Indigenous science, and Indigenous knowledge should be taught early, often, and given equal weight to Western science and forms of knowledge. The recommendation here is that assessors and SPs should be trained in the core competencies of anti-racism, white supremacy, and Indigenous cultural safety. This will require a clear rubric that guides the expectations for responses below, at, and above level. Providing this rubric and outline of learning objectives and expectations to assessors and SPs before OSCEs and marking short-answer assessments may be the most effective means of reaching this goal.

The standard for assessment of student knowledge retention in medical education is multiple methods, including those that show the student “knows how” and can “show how” (Tabish 2008). This includes a variety of testing methods, including multiple choice questions (MCQ), short-answer questions (SAQ), long-answer questions, such as essays or modified essay questions, and clinical evaluation using the objective structured clinical examination (OSCE). The validity and strengths of each method of assessment are discussed here.

Multiple Choice Questions

MCQs are a quick and efficient way of assessing a wide variety of content to determine retention by students. However, the limitations of using MCQs to assess higher-level learning in students are noted. Students can be evaluated based on their knowledge of discriminatory behaviour against a patient. However, demonstrating the skill to prevent or intervene when discriminatory behavior occurs is best left for clinical assessments. This also points to the importance of integrating Indigenous studies and anti-racist content in curricula early on so students have time to incorporate this learning into their applied knowledge.

Table 3. Strengths and Limitations of Multiple-choice Questions

Strengths	Limitations
<ul style="list-style-type: none"> - Effective for quickly and easily assessing higher/lower-level reasoning. 	<ul style="list-style-type: none"> - Developing quality questions and items is time-consuming and challenging.
<ul style="list-style-type: none"> - Vignettes can range from simple to complex. 	<ul style="list-style-type: none"> - Limits the response from learners.

- Questions can be reused/shared.	- Difficulty in constructing persuasive and incorrect answers.
- High reliability.	- Right or wrong answer limits recognition of partial knowledge.
- Questions are easy to complete and quick to mark.	- Usable only for cognitive level assessment.
- Can test diagnostic reasoning (extended matching items).	- Can't be used to assess all modes of problem-solving.
- Question subject groupings: questions can increase complexity in one subject area.	- Does not assess the organization and expression of ideas.
- Reduces cueing due to a number of potential responses.	- Inadequate for assessing creativity, originality, and higher-level thinking.
- Can assess problem-solving skills, clinical diagnosis, or patient management.	- Can encourage short-term/low-order learning rather than complex understanding.
- Can be used to assess a wide variety of content and concepts in a program.	- Encourages guessing.

Adapted from: Tangianu et al. (2018); Farooqui, Saeed, Aaraj, Sami, and Amir (2018); Moss (2001); Sood & Singh (2012); Tabish (2008); McCoubrie (2004)

Developing functional and concise questions and answers for any exam format is challenging. However, some question formats, such as those that require students to provide some indication of rationale, give a better sense of critical thinking skills. This is particularly useful for assessments of cultural safety and understanding a student's uptake of key concepts such as anti-racism, Western scientific bias, and the historical and ongoing mistreatment of Indigenous Peoples in medicine.

Short-Answer Questions

Short-answer questions are open-ended, allowing students to display creativity, and can include clinical scenarios. However, the short-answer question format has been criticized for the time required to mark (Sam, Hameed, Harris & Meeran 2016; Sood & Singh 2012, 360; Tabish 2008, 4;). To address this, a marking checklist can be created to increase ease of marking. Short-answer questions have the advantage of yielding an assessment of more content than longer-form questions such as modified essay questions (MEQ), constructed response questions (CRQ), or long essay or answer questions (Tabish 2008, 4). Short-answer questions can supplement observed encounters in the form of post-encounter probes on OSCE-style examinations.

Long-Answer Questions

Long-answer or essay questions allow students to weave complex information and concepts into concise and persuasive arguments. Essays and long-answer questions allow students to display more complex processing

and assessment of content (Sood & Singh 2012, 360). Like short-answer questions, essay and long-answer type questions are time-consuming to mark and are more involved. A student can effectively include a limited number of items in an essay, and this is where MCQ-type exams have the advantage of assessing more information in a shorter period. However, students are more likely to accurately convey their understanding of critical thinking and cultural safety through longer-form written responses, and it is here, and in clinical assessments, where the assessor will get the greatest sense of a student's understanding and integration of this information.

OSCE

The objective structured clinical examination (OSCE) is a standardized test of clinical skills. It is a low-risk opportunity for students to be evaluated on clinical skills. While written assessments provide a sense of a student's intellectual understanding and grasp of key skills, the OSCE offers the opportunity to assess a student's communication, history-taking, diagnostic, clinical judgement, and bedside manner (Sood & Singh 2012, 360, 16; Patriciό, Julião, Fareleira, and Vaz Carneiro 2013, 503). Challenges identified here with conducting and amending OSCE exams include assessor training — especially for uptake and evaluation using cultural safety training and Indigenous content — standardization of patients and patient cases, and the short length of time to assess a student's performance (usually 5–15 minutes) (Sood & Singh 2014, 361). Several studies have evaluated the integration of cultural safety and provided best practice guidelines for developing OSCE scenarios and cases, as discussed below.

The OSCE examination offers students, exam creators, and assessors a low-stakes opportunity to practice, apply, and be corrected on elements of

cultural safety in real time. Marr et al. (2020) provide an excellent example of developing OSCE cases with Indigenous participants (i.e., fictional patients) by collaborating with local Indigenous stage actors to create more culturally authentic and realistic case examples. The results indicate that approximately 78% of students who participated in this exercise felt more confident in their ability to consult with and diagnose Indigenous patients (Marr et al. 2020, 5). Alternately, Jeffery et al. (2014) identified several best practice guidelines to modify the intended outcomes of the original OSCE. The most successful of these modifications, according to students surveyed, included the depiction of common lifestyle elements, including common diagnoses in community settings; learning culturally significant processes and protocols for patient assessment (including self-introductions and conversation skills); and integrating real-time feedback from assessors, and SPs (7).

Deciding What to Test

Developing Questions and Scenarios

When creating examinations and questions, clinical scenarios can be developed that could apply across the spectrum of examination tools, including MCQs, OSCE, and short answers. It is important to map the questions and learner levels to various learner outcomes. Learners at the junior medical level require testing for the foundations first. This means a solid understanding of Indigenous health, health determinants, and cultural safety concepts. At the same time, assessments of learners at the senior and resident levels will focus on the application of these concepts and successful graduated outcomes as per the Indigenous health core competencies.

To assess these competencies, when developing clinical scenarios, frameworks need to include the following:

- Patient demographics
- Setting
- Presenting issues
- Key findings (history and physical)

Avoid relegating information about a patient's racial background to solely Indigenous health assessment questions. This will help to avoid cueing the learner and negating important parts of their assessments. Further to this, a simple recognition that a patient is Indigenous is not enough to meet Indigenous health competencies. The learner/outcome map is essential here as the specific assessments can be tuned to the appropriate concepts in Indigenous health and cultural safety. Keeping this in mind with a firm understanding of what is being assessed is a fundamental piece toward a deeper examination of key skills learners need to have.

The next piece in the examination is the selection of scenarios. Cautions here include avoiding the reinforcement of stereotypes, especially negative ones. Instead, consider the opportunity to highlight biases and assumptions a learner might have, allowing room for self-recognition, evaluation, and challenging the cognitive pitfalls one can encounter. To do that properly and successfully, the Indigenous community and voices must be involved initially. In Australia, for example, Wooley et al. (2013) consulted with local Indigenous health professionals, Elders, and community members to determine what the community felt were desirable and necessary attributes incoming medical graduates should have; these included providing professional patient care, knowing culturally relevant modes of communication and cultural knowledge, having an understanding of the local health system, having a positive demeanor, and a desire to engage Indigenous community members (94). Working in collaboration allows for the tailoring of scenarios to be safe for all involved while also being informative, relevant, and reflective of what

local First Nations, Inuit, and Métis individuals and communities we serve are facing.

Be mindful and include current demographics, recognizing that these Indigenous communities have rural and urban populations. Just as these communities are diverse, so are the situations and areas of medicine where one encounters First Nations, Inuit, and Métis patients. The storylines and scripts often focus on emergency or family medicine when there is a need for Indigenous patient care and culturally safe, competent care is always present in health care. This is often neglected in some specialties and surgical settings where the competencies and skills are heavily needed. This aligns with a wholistic, team-based approach, a significant ideal of medicine and health care.

MCQs: Develop Answer Options

In developing multiple-choice questions, counter the instinct to avoid “all of the above,” “none of the above,” or multiple select responses. These kinds of answers are less helpful in clear metrics. Learners should be instructed to select the best response, while all answer options should be realistic and plausible responses. The responses themselves need to be carefully analyzed and vetted to ensure the correct answer highlights the learning objective being assessed. The incorrect but possible responses can be crafted to help identify learners who continue to struggle with appropriate cognitive behavioural tools and submit to the traps of biases, negative stereotypes, and harmful racism. These responses can be flagged using the appropriate rubrics for remediation and learner support (see the essential competencies section below).

To successfully implement these metrics, the questions (already developed with the local Indigenous community and Indigenous scholars) should be piloted or tested, then reviewed and revised using two important lenses. One is the often-thought theory that the question itself is poor. The second lens requires a review of the curriculum and the possibility that the tested area is not emphasized or studied in materials and should, therefore, be included.

Clinical Assessments and Entrustable Professional Activities (EPAs)

The key learning objectives and outcomes should be mapped to clinical assessments and integrated into these assessments across all clinical rotations as an end goal. Careful consideration should be given to situations and patient safety by drawing attention to the invisible power differences between patients and healthcare providers. To do this safely and as a prerequisite, we recommend Indigenous leadership and community partners be part of developing clinical assessments and scenarios. Consider utilizing Indigenous SPs in the evaluation of cultural safety rather than Indigenous patients whose health outcomes stand to be negatively impacted by learners and assessors who are not yet proficient in cultural safety. This would be an opportunity to involve Indigenous patient navigators in both assessment and identifying patients who may be appropriate to participate in learning assessments for cultural safety.

How to Develop Case-Related Content

The following recommendations assist in integrating cultural safety assessments in clinical scenarios and case-related content. These processes must be piloted, reviewed, and revised with Indigenous experts.

Table 4. Guidelines for Developing Case-Related Content

Case stories	<ul style="list-style-type: none">- Including more complete histories of patients.- Be written in a way that is authentic to Indigenous patients.- Need considerations to avoid perpetuating negative stereotypes.
Information for SPs and trainers	<ul style="list-style-type: none">- Identify Indigenous assessors and SPs to take part in assessments.- Have communities identify individuals appropriate to assess or stand in as Indigenous SPs.- Indigenous SPs and trainers will need information on the case scenario, their role as an SP, how to respond to potentially racist remarks from learners, and what supports are in place for them should they experience traumatizing situations in the course of the assessment.
Room descriptions and props	<ul style="list-style-type: none">- Indigenous leadership and community should be consulted on using cultural items in clinical OSCE scenarios to determine appropriateness and relevance to the scenario.
Post-encounter probes	<ul style="list-style-type: none">- To assess deeper understanding and uptake of cultural safety practices, probing questions from SPs should be used.- The question(s) should be used to assess for a deeper understanding of the learning objective in cases where the learner has not demonstrated this level of understanding in their response.
Reflections	<ul style="list-style-type: none">- Useful for formative assessments.

- An opportunity for learners to rate their performance in cultural safety and compare with SP's feedback.
 - Video session for feedback and reflection.
-

Sample Assessment Tools

See Appendix C Sample Assessment Questions

Appendix C contains a selection of sample assessment questions developed by the NCIME Assessment Working Group, which can serve as inspiration for developing Indigenous health assessments in your institution. Indigenous and non-Indigenous physicians and medical education experts across Canada have developed these sample assessments. Committee members drafted questions for review and discussion, and the Working Group went through multiple rounds of review and revision, deliberating on the drafts. Discussions included whether the sample questions were appropriate for learners at various stages of their educational journey, whether they were medically and culturally relevant, whether they helped identify potential racist biases without perpetuating negative stereotypes, how they might be adapted in different jurisdictions, and much more. We then reviewed the sample responses to confirm their accuracy compared to other options, their alignment with the learning objective, and the reasoning behind mapping the specific question. You should expect that developing Indigenous health assessments in your institution will require similarly dedicated and focused attention, as these sample assessments represent hours of collaborative effort.

Developing Scoring Instruments

Scoring instruments for MCQs and short- and long-answer questions should be done in coordination with Indigenous content experts, institutionally established Indigenous committees, Indigenous medical education consultants, Indigenous faculty members, and Indigenous communities. Developing and implementing a mandatory anti-racism and cultural safety program that is embedded into the existing medical education curriculum and that provides training for faculty, trainers, staff, and students is required (Creary-Perry, Maybank, Keeyes, Mitchell, and Godbolt 2020). Any program that addresses Indigenous disparities in medicine and medical education should involve critical and reflexive self-reflection (Diffey 2022) and be adequately funded, formalized, comprehensive, and equal to Western medical content (Jones et al. 2019). Developing exam content, especially those questions and observations that involve Indigenous content should be done with Indigenous faculty, educators, or community members. Developing connections with Indigenous organizations and communities and supporting Indigenous health content in courses and exams requires Indigenous input at nearly all levels of conceptualization, design, and implementation. For example, the OSCE exam, as observed by Marr et al. (2020), can be facilitated by Indigenous participants and be executed in such a way that cultural stereotypes and disparaging or unrealistic depictions of Indigenous patients can be avoided to prepare and assess students adequately. Also, exam content can be developed with critical insight regarding Indigenous health content that draws from an emerging cohort of Indigenous consultants, specialists, staff, or faculty.

Checklist Style Responses

While checklist-style assessments are appropriate for rote memorization, as exemplified by MCQs and even short-answer questions to a limited degree, they are inappropriate for determining whether a student meets the requirements and competencies of cultural safety. These assessment forms should be avoided when proficiency in understanding and delivering cultural safety is expected.

Scoring Cultural Safety

Assessment of cultural safety should begin in undergraduate medical education training and continue into residency and beyond. How cultural safety is assessed, what metrics to use, and who ultimately determines what constitutes safe care is the right of Indigenous Peoples themselves. This right to cultural safety is affirmed by the overarching principles of self-determination, decision-making, protection of culture, and non-discrimination, as outlined by the United Nations Declaration on the Rights of Indigenous Peoples (UNRIP). We have outlined six principles for developing and delivering cultural safety and humility in medical education (Table 1). According to these principles, assessment of cultural safety should be informed by the Indigenous community and Indigenous experts while seeking to be accountable to these partners, Indigenous medical students, Indigenous faculty, and residents. Developing assessments for cultural safety and scoring instruments should be done in collaboration with Indigenous partners to ensure that the outcomes meet the requirements of culturally safe care. Brumpton et al. (2023) have developed a tool for assessing cultural safety that integrates Indigenous perspectives and relies on Indigenous patient definitions of cultural safety to determine its efficacy. To date, this is the first attempt to develop assessment tools based on community-derived definitions of cultural safety, and results are pending. However, West, Mills,

Rowland and Creedy (2018) have developed the Cultural Capability Measurement Tool (CCMT) to assess the cultural safety competency of undergraduate health students. The results of their survey tool indicate that the CCMT items were a reliable and valid metric for determining the level of capability health professional students developed after taking a twelve-week First Peoples health course (West, Mills, Rowland & Creedy 2018). To properly assess cultural safety, it is important to consider longitudinal assessments (over an extended period) and include Indigenous partner/patient feedback, learner self-reflection, and reflexivity assessments (Brumpton, Gupta, Evans & Ward 2022). At a minimum, students, trainers, faculty, and residents should be proficient in the principles of cultural safety as outlined in this document.

Although scoring cultural safety with a yes/no pass/fail dichotomous metric may result in less assessor bias, these metrics leave no opportunity for understanding where the student has done well and requires more training. Measuring core competencies of cultural safety should be based on whether the student falls below, at, or above expectations. Evaluations and assessments for cultural safety should include the opportunity for distraction-free feedback, standard evaluation practices that are clear and free from bias, and qualitative feedback that relies on direct observations rather than interpretations (Johnson, Browning & DeClerk 2021, 699). Further, developing cultural safety assessments should be linked to the level of learning and learning objectives. In keeping with the recommendations made here that Indigenous perspectives and community be engaged in the process of developing and assessments, including Indigenous epistemologies as part of the assessment process, in addition to community approval of competencies as observed in practical exam settings, would be beneficial. They also engage Indigenous SPs in rating students to provide additional feedback that can provide a more fulsome perspective of the student's performance on cultural

safety. It is important to remember that cultural safety is nearly always determined by the patient, so encouraging Indigenous SPs to provide feedback will engender a more thoughtful and thorough assessment of the student.

Essential Competencies

Indigenous cultural safety should be considered an essential competency in the medical education curriculum. Poor performance on Indigenous health or cultural safety should flag the need for review and possible remediation by leadership. However, this is entirely dependent on how cultural safety and Indigenous health are being assessed. If an exam is assessing for cultural safety or Indigenous health, examining the student's overall performance may be helpful. Suppose Indigenous health and cultural safety are embedded into an examination that covers many core competencies. In that case, isolating how learners performed on Indigenous health and cultural safety questions and stations may be beneficial, as those who perform well on other sections may perform poorly on Indigenous sections, which may cause this content to be overlooked. Also, having assessors and Indigenous SPs capable of flagging a learner for review would be helpful. This would be built into the instructions for assessors and SPs, and flagging criteria could include the use of racist language, referencing or making use of negative and disparaging stereotypes, and racist microaggressions, for example. Failure to complete remediation satisfactorily should prevent learners from progressing in the program until the flagged issues have been adequately addressed.

Recommendations

Based on the literature, anti-racist and decolonial education needs to begin at the undergraduate level. The recommendation is that undergraduate

students looking to attend medical school should be familiar with or have taken at least one (or possibly more) related critical Indigenous studies courses that address issues of anti-racism and white supremacy, ideally with a focus on medicine. Further, instructors in medical education may be incapable or do not have the required training to field conversations around structural racism; thus, their ability to deliver such training may be inadequate (Diffey 2022, 186; Sotto-Santiago 2022). The recommendation here is that training supports, mentorship, and anti-racist practices be introduced and implemented among instructors as well. Making the Indigenous health curriculum a priority is critical. To do this well, Indigenous health content needs to be mandatory, students need to be conversant in cultural safety and critical thinking skills, and the foundations of training for Indigenous health in medical education need to emphasize anti-racism and challenge the pervasive invisibility of white privilege.

Recommendations

1. **Cultural safety:**

- 1.1 Cultural safety training should be undertaken by all faculty members, trainers, assessors, and administration.
- 1.2 Cultural humility training should be included to develop a mechanism to challenge implicit racial biases, the culture of complicity, the hidden curriculum, and white privilege.

2 **Relationship building:**

- 2.1 Consult and build relationships with Indigenous communities, community organizations, and relevant bodies.

2.2 Build mutually beneficial relationships with Indigenous studies departments and administration.

2.3 Seek out Indigenous support for guidance on campus.

3 Advisory board or committee:

3.1 Establish an Indigenous Elder's advisory board or Knowledge Keeper's committee comprised of experts for oversight, content development, and guidance.

4 Policy development and reform:

4.1 Take actionable steps towards addressing anti-Indigenous racism experienced by Indigenous medical students.

4.2 Assess existing policy to address anti-Indigenous racism to determine if it is meeting the needs of students.

5 Mandatory IS course pre-requisite

5.1 Undergraduate students who apply to medical schools should be required to take one or more courses from an Indigenous studies department.

5.2 These courses ideally should have a focus on any of the following subject areas:

5.2.1 Social determinants of health for Indigenous Peoples in Canada.

5.2.2 History of Medicine and Indigenous Peoples in Canada.

5.2.3 Critical Indigenous perspectives on whiteness/white supremacy in medicine.

5.2.4 Indigenous medical knowledge.

5.2.5 Land-based course delivery or in-community research/practicum experience through the IS department or faculty.

6 Anti-racism training

6.1 Anti-racism training should be taken by all faculty members, trainers, assessors, and administration.

6.2 Anti-racism training should be specific to Indigenous Peoples and focus on strategies for identifying and addressing all levels of white privilege and invisibilized supremacy.

6.3 Anti-racism training should also have a component of critical self-reflection.

References

- Abbot, P., J. Reath, E. Gordon, D. Dave, C. Harnden, W. Hu, E. Kozianski and C. Carriage. 2014. "General Practitioner Supervisor Assessment and Teaching of Registrars Consulting with Aboriginal Patients — Is Cultural Competence Adequately Considered?" *BMC Medical Education* 14, no. 167: 1–8.
- Afolabi T., et al. 2021. "Student-led Efforts to Advance Anti-racist Medical Education." *Academic Medicine* 96, 6: 802–808.
- Anderson DeCoteau, M., A. Woods, B. Lavallee and C. Cook. 2017. "Unsafe Learning Environments: Indigenous Medical Students' Experiences of Racism." In *LIME Good Practice Case Studies Volume 4*. Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne.
- Anderson, Kristin J., and Gabriel Smith. 2005. "Students' Preconceptions of Professors: Benefits and Barriers According to Ethnicity and Gender." *Hispanic Journal of Behavioral Sciences* 27, no. 2: 184–201.
- Australian Indigenous Doctor's Association (AIDA). 2005. Healthy Futures: Defining Best Practice in the Recruitment and Retention of Indigenous Medical Students. <https://aida.org.au/app/uploads/2021/01/AIDA-Healthy-Futures-Report-1.pdf>
- Australian Medical Council (AMC). 2009. *Assessment and Accreditation of Medical Schools: Standards and Procedures, 2009*. <https://limenetwork.net.au/wp-content/uploads/2017/10/standards.pdf>

Barriers According to Ethnicity and Gender. *Hispanic Journal of Behavioral Sciences* 27(2): 184–201. <http://doi.org/10.1177/0739986304273707>

Beavis, A., A. Hojjati, A. Kassam, D. Choudhury, M. Fraser, R. Masching, and S. Nixon. 2015. "What All Students in Healthcare Training Programs Should Learn to Increase Health Equity: Perspectives on Postcolonialism and the Health of Aboriginal Peoples in Canada." *BMC Medical Education* 15, no. 155: 1–11.

Brian Sinclair Working Group. 2017. Out of Sight: A Summary of the Events Leading up to Brian Sinclair's Death and the Inquest that Examined it and the Interim Recommendations of the Brian Sinclair Working Group. The Brian Sinclair Working Group. <http://ignoredtodeathmanitoba.ca/>

Brumpton, Kay, Raelene Ward, Rebecca Evans, Henry Neill, Hannah Woodall, Lawrie McArthur, and Tarun Sen Gupta. 2023. "Assessing Cultural Safety in General Practice Consultations for Indigenous Patients: Protocol for a Mixed Methods Sequential Embedded Design Study." *BMC Medical Education* 23, no. 1.

Brumpton, Kay, Tarun Gupta, Rebecca Evans, and Raelene Ward. 2022. "Assessment of Cultural Safety in a Post-Objective Structured Clinical Examination (OSCE) Era." *AJGP* 51(1–2): 90–93.

Chávez, K., & Mitchell, K. (2020). Exploring Bias in Student Evaluations: Gender, Race, and Ethnicity. *PS: Political Science & Politics* 53(2), 270–274. doi:10.1017/S1049096519001744

Churchill et al. 2017. "Evidence Brief: Wise Practices for Indigenous Specific Cultural Safety Training Programs." <http://www.welllivinghouse.com/wp->

[content/uploads/2019/05/2017-Wise-Practices-in-Indigenous-Specific-Cultural-Safety-Training-Programs.pdf](https://www.fnha.ca/Content/uploads/2019/05/2017-Wise-Practices-in-Indigenous-Specific-Cultural-Safety-Training-Programs.pdf)

- Crear-Perry, J., A. Maybank, M., Keeyes, N., Mitchell, and D., Godbolt. 2020. "Moving Toward Anti-racist Praxis in Medicine." *The Lancet* 369 (August): 451–453.
- Curtis, E., R. Jones, D. Tipene-Leach, C. Walker, B. Loring, S.J. Paine & P. Reid. 2019. "Why Cultural Safety Rather than Cultural Competency is Required to Achieve Health Equity." *International Journal for Equity in Health* 18(174): 1–17.
- Diffey, L. 2022. "Teaching Indigenous Health Within an Anti-racist, Anti-colonial Pedagogical Framework: Using Indigenous Resurgence to Explore the Experiences of Medical School Instructors." PhD diss., University of Manitoba.
- Dudek N., and S. Dojeiji. 2014. "Twelve Tips for Completing Quality In-training Evaluation Reports." *Medical Teacher* 36(12): 1038-1042.
- Fang, Di, Ernest Moy, Lois Colburn, and Jeanne Hurley. 2000. "Racial and Ethnic Disparities in Faculty Promotion in Academic Medicine." *Jama* 284(9): 1085-1092.
- Farooqui, F., N. Saeed, S. Aaraj, M.A. Sami, and M. Amir. 2018. "A Comparison Between Written Assessment Methods: Multiple-choice and Short Answer Questions in End-of-clerkship Examinations for Final Year Medical Students." *Cureus* 10(12): 2–8.
- FNHA 2021. Cultural Humility. Anti-racism, Cultural Safety and Humility Framework. <https://www.fnha.ca/Documents/FNHA-FNHC-FNHDA-Anti-Racism-Cultural-Safety-and-Humility-Framework.pdf>

FNHA 2022. Cultural Safety. Framework for Cultural Safety and Humility
<https://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/cultural-safety-and-humility>

Garvey, G., I.E. Rolfe, S. Pearson & C. Treloar. 2009. "Indigenous Australian Medical Students' Perceptions of Their Medical School Training." *Medical Education* 43: 1047–1055.

Harlow, R. (2003). "Race Doesn't Matter, but...": The Effect of Race on Professors' Experiences and Emotion Management in the Undergraduate College Classroom. *Social Psychology Quarterly* 66(4), 348. <http://doi.org/10.2307/1519834>

Nychuk, A., Hill, B. and Kitty, D. (2024). The First Nations, Inuit, Métis Health Core Competencies: A Curriculum Framework Second Edition. National Consortium for Indigenous Medical Education.
<https://ncime.ca/our-work/ncime-catalogue/>

Jeffery C., M. Mitchell, A. Henderson, S. Lenthall, S. Knight, P. Glover, M. Kelly, D. Nulty and M. Groves. 2014. "The Value of Best-practice Guidelines for OSCEs in a Postgraduate Program in an Australian Remote Area Setting." *Rural and Remote Health* 14: 1-9.

Jeffrey, Carol, Marion Mitchell, Amanda Henderson, Sue Lenthall, Sabina Knight, Pauline Glover, Michelle Kelly, Duncan David Nulty, and Michele Groves. 2014. "The Value of Best-Practice Guidelines for OSCEs in a Postgraduate Program in an Australian Remote Area Setting." *Rural and Remote Health*.

- Johnson, Ragan, Kristine K. Browning, and Leonie DeClerk. 2021. "Strategies to Reduce Bias and Racism in Nursing Precepted Clinical Experiences." *Journal of Nursing Education* 60(12): 697–702.
- Jones, R., et al. 2019. "Educating for Indigenous Health Equity: An International Consensus Statement." *Academic Medicine* 94, 4 (April): 512–520.
- Kamel, G. 2021. "Investigation Report: Law on the Investigation of the Causes and Circumstances of Death for the Protection of Human Life Concerning the Death of Joyce Echaquan 2020-00275," https://www.coroner.gouv.qc.ca/fileadmin/Enquetes_publicques/2020-06375-40_002_1_sans_logo_anglais.pdf.
- Klein, Robin, Nneka N. Ufere, Sarah Schaeffer, Katherine A. Julian, Sowmya R. Rao, Jennifer L. Koch, Anna Volerman, et al. 2022. "Association between Resident Race and Ethnicity and Clinical Performance Assessment Scores in Graduate Medical Education." *Academic Medicine* 97(9): 1351–59.
- Kulp, A., Wolf-Wendel, L., & Smith, D. 2019. "The possibility of promotion: How race and gender predict promotion clarity for associate professors." *Teachers College Record* 121(5).
- Kumas-Tan, Z., B. Beagan, C. Loppe, A. MacLeod, and B. Frank. 2007. "Measures of Cultural Competence: Examining Hidden Assumptions." *Academic Medicine* 82(6): 548–558.
- Levin, R., & Herbert, M. 2005. "The Experience of Urban Aboriginals with Health Care Services in Canada." *APRCi* 39(1–2): 165–179.

- Lucey, Catherine R., Karen E. Hauer, Dowin Boatright, and Alicia Fernandez. 2020. "Medical Education's Wicked Problem: Achieving Equity in Assessment for Medical Learners." *Academic Medicine* 95(12S): S98–108.
- Maar, M., N. Besette, L. McGregor, A. Lovelace, and M. Reade. 2020. "Co-creating Simulated Cultural Communication Scenarios with Indigenous Animators: An Evaluation of Innovative Clinical Cultural Safety Curriculum." *Journal of Medical Education and Curricular Development* 7: 1–9.
- McCoubrie, P. 2004. "Improving the Fairness of Multiple-choice Questions: A Literature Review." *Medical Teacher* 1(8): 709–712.
- Min, J., K. MacNeil, F. Zekic, and L. Leung. 2021. "Assessing Indigenous Cultural Safety Learning Using Modified Reflexive Visual Arts." *Innovations in Pharmacy* 12(3): 1–5.
- Moss, E. 2001. "Multiple-choice Questions: Their Value as an Assessment Tool." *Current Opinion on Anesthesiology* 14: 661–666.
- Nerestant, A. 2021. "Racism, Prejudice Contributed to Joyce Echaquan's Death in Hospital, Quebec Coroner's Inquiry Concludes." Canadian Broadcasting Corporation, <https://www.cbc.ca/news/canada/montreal/joyce-echaquan-systemic-racism-quebec-government-1.6196038>.
- Osseo-Asare, Aba, Lilanthi Balasuriya, Stephen J. Huot, Danya E. Keene, David D. Berg, Marcella Nunez-Smith, Inginia Genao, Darin Latimore, and Dowin Boatright. 2018. "Minority Resident Physicians' Views on the Role of Race/Ethnicity in Their Training Experiences in the Workplace." *JAMA Network Open* 1(5): e182723.

Patrício M.F., M. Julião, F. Fareleira and A. Vaz Carneiro. 2013. "Is the OSCE a Feasible Tool to Assess Competencies in Undergraduate Medical Education?" *Medical Teacher* 35: 503–514.

Phillips, G. 2004. *CDAMS Indigenous Health Curriculum Framework*.
<https://medicaldeans.org.au/md/2018/07/CDAMS-Indigenous-Health-Curriculum-Framework.pdf>

Rodríguez, José M., Kendall M. Campbell, and Linda H. Pololi. 2015. "Addressing Disparities in Academic Medicine: What of the Minority Tax?" *BMC Medical Education* 15(1).

Rojek, Alexandra E, Raman Khanna, Joanne Yim, Rebekah Gardner, Sarah Lisker, Karen E. Hauer, Catherine R. Lucey, and Urmimala Sarkar. 2019. "Differences in Narrative Language in Evaluations of Medical Students by Gender and Under-Represented Minority Status." *Journal of General Internal Medicine* 34(5): 684–91.

Ross, David, Dowin Boatright, Marcella Nunez-Smith, Ayana Jordan, Adam M Chekroud, and Edward R. B. Moore. 2017. "Differences in Words Used to Describe Racial and Gender Groups in Medical Student Performance Evaluations." *PLOS ONE* 12, no. 8: e0181659.

Royce, Celeste S., Helen Morgan, Laura Baecher-Lind, Susan Cox, Elise N. Everett, Angela Fleming, Scott C Graziano, et al. 2022. "The Time Is Now: Addressing Implicit Bias in Obstetrics and Gynecology Education." *American Journal of Obstetrics and Gynecology*.

Sam, A.H., S. Hameed, J. Harris, and K. Meeran. 2016. "Validity of Very Short Answer Versus Single Best Answer Questions for Undergraduate Assessment." *BMC Medical Education* 16(266): 1–4.

- San'yas 2022. San'yas Anti-racism Indigenous Cultural Safety Training Program <https://sanyas.ca/>
- Sood, R., and T. Singh. 2012. "Assessment in Medical Education: Evolving Perspectives and Contemporary Trends." *The National Medical Journal of India* 25(6): 357–365.
- Sotto-Santiago, S., et al. 2022. "A Framework for Developing Antiracist Medical Educators and Practitioner-Scholars." *Academic Medicine* 97(1) (January): 41–47.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist* 62(4), 271–286. <http://doi.org/10.1037/0003-066X.62.4.271>
- Tabish, S. 2008. "Assessment Methods in Medical Education." *Int J Health Sci (Qassim)* 2(2): 3–7.
- Tangianu F., et al. 2018. "Are Multiple-choice Questions a Good Tool for the Assessment of Clinical Competence in Internal Medicine?" *Italian Journal of Internal Medicine* 12: 88–96.
- Teherani, Arianne, Karen E. Hauer, Alicia Fernandez, Talmadge E. King, and Catherine R. Lucey. 2018. "How Small Differences in Assessed Clinical Performance Amplify to Large Differences in Grades and Awards." *Academic Medicine* 93(9): 1286–92.
- Turpel-Lafond, M. E. 2020. "In Plain Sight: Addressing Indigenous-Specific Racism and Discrimination in B.C. Health Care," Government of British

Columbia. <https://engage.gov.bc.ca/app/uploads/sites/613/2020/11/In-Plain-Sight-Summary-Report.pdf>.

Vass, A., and K. Adams. 2021. "Educator Perceptions on Teaching Indigenous Health: Racism, Privilege and Self-reflexivity." *Medical Education* 55(2) (February): 213–221.

Wolfe, N., L. Sheppard, P. Le Rossignol, and S. Somerset. 2018. "Uncomfortable Curricula? A Survey of Academic Practices and Attitudes to Delivering Indigenous Content in Health Professional Degrees." *Higher Education Research & Development* 37(3): 649–662.

Woolley, Torres, Sundram Sivamalai, Simone Ross, Glenda Duffy, and Adrian Miller. 2013. "Indigenous Perspectives on the Desired Attributes of Medical Graduates Practising in Remote Communities: A Northwest Queensland Pilot Study." *Australian Journal of Rural Health* 21(2): 90–96.

Yuce, Tarik K., Patricia V. Turner, Charity C. Glass, David B. Hoyt, Thomas J. Nasca, Karl Y. Bilimoria, and Yue Yung Hu. 2020. "National Evaluation of Racial/Ethnic Discrimination in US Surgical Residency Programs." *JAMA Surgery* 155(6): 526.

Appendix A

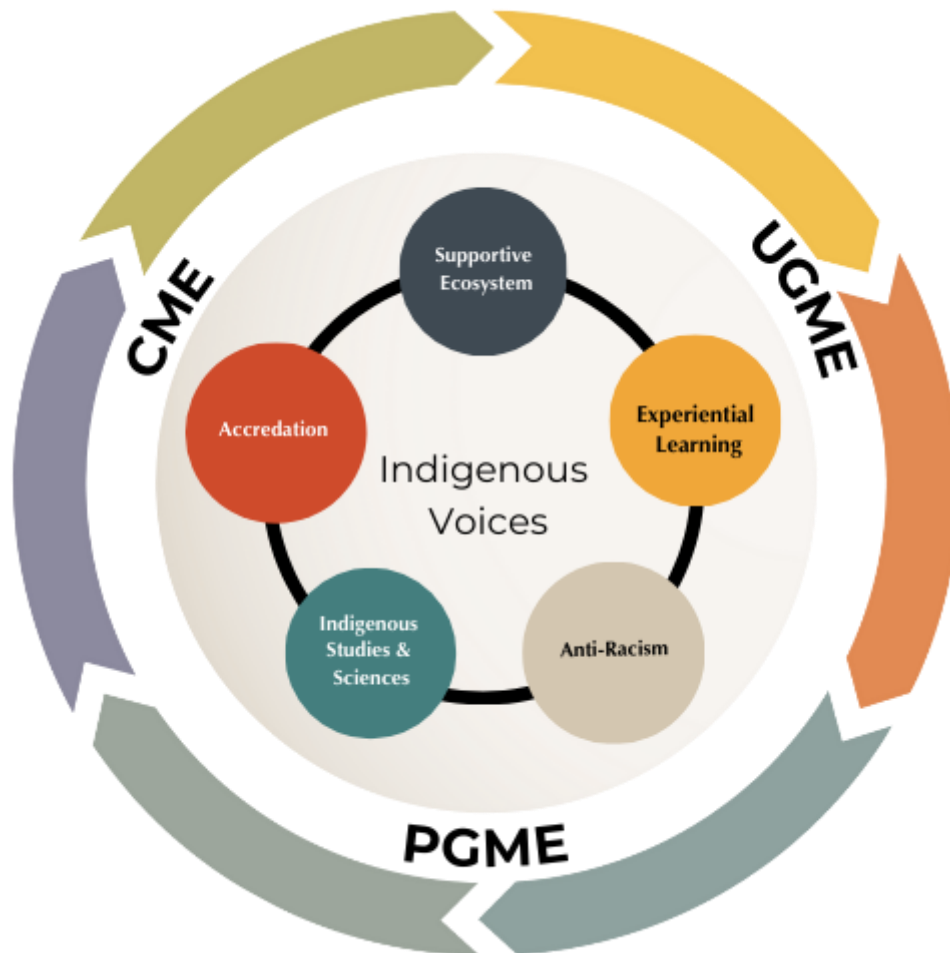
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Appendix B

This represents identified gaps in Indigenous medical education. It is used to overlay existing materials to determine where gaps are in the spectrum of UME, PGME, and continuing medical education. It is a useful tool when beginning this work and to identify areas of need within curriculum development and assessment tools.



Appendix C – Sample Assessment Questions

These are sample questions that could be used to test learners' knowledge of Indigenous health. They should not be used verbatim. Questions that do not have a national approach (e.g., policy, historical events with similar national impact, etc.) should be written specifically to be relevant to the territory in which the examination is taking place.

Tips:

1. We recommend ensuring that all three Indigenous groups — First Nations, Inuit, and Métis — are represented in the questions.
2. Appropriate language should be used to reflect regional differences, such as Traditional Healer versus Medicine Person. Choose the language that most reflects the communities you serve.
3. Questions should be written to address key competencies and learning objectives (please see “The First Nations, Inuit, Métis Health Core Competencies: A Curriculum Framework, Second Edition”) at the appropriate level of the learner. Certain questions may address more than one objective simultaneously.
4. To avoid having multiple possible correct responses for MCQs, a rationale should be developed and reviewed explaining why the correct answer is the most correct and the other options less so.
5. These sample questions focus on multiple-choice questions; however, we have included selecting short-answer, long-answer, or OSCE-style prompts to demonstrate how a single learning objective or prompt may lend itself to different types of assessments.
6. We have included potential responses to short, long, and OSCE assessments. These are not exhaustive and only represent some potential correct responses. These assessments should be accompanied

by rubrics indicating what constitutes a response below the learner's expected level, meeting, or exceeding expectations. We have not provided these rubrics at this time.

Sample Tool Development Process:

It is essential to note the process involved in developing these sample tools. The NCIME Assessment Working Group developed the sample assessments comprising Indigenous and non-Indigenous physicians and medical education experts from across Canada. Committee members drafted questions for review and discussion. The drafts went through multiple rounds of review and revision and were deliberated on by the Working Group. Discussions included whether the sample questions were at the appropriate level for a learner at various stages of their educational journey, were medically and culturally relevant, helped identify potential racist biases without perpetuating negative stereotypes, could be adapted in different jurisdictions, and much more. Sample responses were reviewed to ensure the answers were correct compared to other options and in keeping with the learning objective and rationale. These sample assessments represent hours of collaborative effort, and it should be expected that developing Indigenous health assessments in your institution will require similarly dedicated and focused attention.

Sample Questions:

Question 1a.

A 62-year-old Inuit cisgender woman is admitted to hospital for a hypertensive emergency. During the admission, she requests to see her Traditional Healer (Indigenous Healer). Which one of the following is the best next step?

1. Request that the healer only provide psychosocial support but not medicine
2. Explain that the healer isn't credentialed at the hospital and, as such, cannot provide care here
3. **Meet with the patient and the healer to see how their care can be integrated into the treatment plan**
4. Inform the patient that traditional medicines aren't evidence-based, so the healer cannot be part of the team

Learning objective:

The graduating student will demonstrate effective collaboration skills with Indigenous and non-Indigenous healthcare professionals, Traditional Medicine Peoples, and Healers in providing effective health care for First Nations, Inuit, and Métis patients/populations.

Rationale:

Taking a collaborative approach that respects Indigenous rights is important in meeting the needs of this patient. It is also important to understand what kind of care the Healer provides to the patient to ensure you can align your approach with theirs.

Question 1b.

Sample short-answer question:

A 62-year-old Inuit cis-woman is admitted to the hospital for a hypertensive emergency. During the admission, she requests to see her Traditional Healer (Indigenous Healer). What are some of the impacts of colonization that lead to the exclusion of Indigenous healthcare providers from the Canadian health system?

Potential responses could include but are not limited to:

1. Racism in the Canadian healthcare system making the environment unsafe for Indigenous providers.
2. The health system does not value Indigenous science and traditional practices and excludes the professionals who are trained in these areas.
3. Prioritizing Western based epistemologies.
4. Distrust of the medical system amongst Indigenous providers resulting from historical experiences, for example, the Indian Hospital System, forced experimentation, and forced or coerced sterilization.
5. Loss of traditional practices as a result of the Indian Act bans on some conventional practices, residential school systems, and history of cultural genocide.

This is not an exhaustive list of appropriate responses.

Question 1c.

Sample long-answer prompt:

A 62-year-old Inuit cis-woman is admitted to the hospital for a hypertensive emergency. During the admission, she requests to see her Traditional Healer (Indigenous Healer). How can physicians respond to Truth and Reconciliation Call to Action 22 to collaborate effectively with Indigenous and non-Indigenous healthcare professionals, Traditional Healers, and Medicine Peoples in providing care to their patients?

Potential responses could include but are not limited to:

1. Physicians should be aware of the resources available in their setting and what is available through other resources in their community. They should

also be familiar with the process of referring to or engaging with Traditional Healers in their communities.

2. Physicians can ensure patients have access to these services without undue delay when requested.
3. Physicians must take time to learn and understand the role and scope of the different Traditional Healers engaged in their patients' care to work together with the patient to provide the best care possible.
4. Physicians can advocate including Traditional Healers in rounds and patient discussions.
5. Physicians can use their power and privilege to advocate to ensure that their work setting values and welcomes Traditional Healers and that there is a safe environment for these professionals to work free of racism and oppression. This includes ensuring they and their team members are trained in anti-racism and cultural safety practices.

Question 1d.

Sample OSCE prompt:

A 62-year-old Inuit cis-woman is admitted to the hospital for a hypertensive emergency. During the admission, she requests to see her Traditional Healer (Indigenous Healer). Have a culturally safe conversation about the modalities of traditional healing the patient would like to integrate into their care.

Potential responses could include but are not limited to:

“I would like to admit that I don't know very much about traditional healing practices. I would like to know a little bit more about these practices to help ensure that the care I am providing is working in alignment. Would you be okay to answer some questions for me? First, do you have a Traditional Healer in mind, or are you hoping we can help connect you with someone? ... Would you like to meet with the Healer and the whole team so that we can all

be on the same page about our roles in your care and how we're all working together? ... Can you tell me a bit about what healing practices you're interested in integrating? ... Do these practices include any traditional medicines? ... I will do some reading to help fill in my gaps in knowledge, and we can schedule a meeting to bring the Healer in as soon as possible and will have regular touch points to make sure we're all still on the same page."

Question 2.

A 78-year-old cis-gendered male patient from a northern First Nations fly-in community is transferred to your hospital due to multiple fractures from a motor vehicle collision. Following orthopedic surgery and physiotherapy, they are now awaiting transfer to a long-term care facility as they can no longer care for themselves at home because of their injuries. The discharge planner informs you they have been accepted to a facility in a neighbouring community and will be transferred the following day. The patient expressed concerns that this facility is very far from their home community, and their family won't be able to commute there. Still, the discharge planner explained that it is hospital policy that they must accept the first available bed.

Sample short-answer prompts:

Explain how this policy, if equally applied, would lead to inequity for this patient and his family.

Potential responses could include but are not limited to:

1. The impact of this policy being applied equally is that every patient will receive the same resources, and there will be no recognition of the patient's unique circumstances and needs.

2. Equally applying this policy means that this patient will not have the same opportunities to see his family and support system simply because of who he is and where he is from. An equitable application of this policy would consider that each patient requires different resources or opportunities to succeed.

Learning objectives: Understand the difference between equality and equity and how each model impacts patient outcomes. Identify ways of redressing inequity in health care and health information access for First Nations, Inuit, and Métis patients/populations.

Question 3.

A 54-year-old cisgender male Métis patient is being seen in your family medicine clinic for panic attacks. As part of your detailed history, you ask about substance use, which can contribute to panic attacks. Per your usual practice, you provide samples of the substances you ask about. When you ask about mushrooms, the patient says they have been drinking a medicinal mushroom tea since they were young and asks if that's what you mean. What is the best next step?

1. Discuss with the patient that hallucinogens could be contributing to their anxiety symptoms
2. Explain to the patient that there is no evidence of the effect of medicinal mushrooms
3. Advise the patient to stop taking the tea and see if their symptoms improve

4. Ask what kind of mushrooms, where they get the tea, and what the tea helps him with

Learning objective:

Demonstrate how to appropriately enquire whether an Indigenous patient is taking traditional herbs or medicines to treat their ailments and how to integrate that knowledge into their care.

Rationale:

It would be wrong to assume that these mushrooms are hallucinogenic without more information. Indigenous medicines/culture have been systemically excluded from academia; to assume because it has not been researched, it does not provide benefit would also be wrong. Advising the patient to stop the tea without more information would be premature. It is important to be aware of the medicines, herbs, and supplements a patient is taking, their effects, and how the patient benefits from them. Knowing this information can help guide a conversation around how to move forward.

Question 4a.

A 64-year-old Indigenous cisgender woman presents to the Emergency Department with delirium secondary to a urinary tract infection and is admitted to the hospital. During handover rounds the next day, your co-resident infers that the delirium is likely related to alcohol withdrawal. However, there was nothing in history, physical exam, or investigations to suggest that the patient drinks alcohol. Which one of the following is the best next step?

1. Ask the patient again about her alcohol use
2. Mention privately to your colleague that the patient doesn't drink alcohol
3. **Engage the group in a discussion about racist stereotypes**
4. Say nothing; perhaps your colleague knows more than you do about this case

Question 4b.

Sample OSCE prompt:

A 64-year-old Indigenous cisgender woman presents to the Emergency Department with delirium secondary to a urinary tract infection and is admitted to the hospital. During handover the next day, your co-resident infers to you that the delirium is likely related to alcohol withdrawal. However, there was nothing in history, physical exam, or investigations to suggest that the patient drinks alcohol.

Demonstrate how you would address this comment with your colleague.

Potential responses could include but are not limited to:

- Clarify with the colleague where this presumption comes from or if they have more information than you.
- Given there is no evidence available to support this claim, acknowledge that this is a racist stereotype.
- Explain to your colleague the severe potential impacts on patient care by perpetuating racist stereotypes.

Suggest that we speak with the group at rounds to ensure that this assumption is corrected and that the group also understands the impact of these statements.

*Note: If your institution has anti-racism policies, it would be appropriate for students to reference these in their responses.

Learning objective:

Given an Indigenous patient, the candidate will demonstrate anti-racist care.

Rationale:

Demonstrating anti-racism requires one to use one's privilege to address racist biases actively. Although one may also talk to a colleague privately, since the statement is made in a group setting, the racist assumption/stereotype must be addressed and corrected in the group setting as well so that it is clear it is unacceptable.

Question 5.

A 56-year-old Indigenous transgender man is admitted to the hospital with a new diagnosis of metastatic colon cancer. He would like to incorporate the use of both Western and traditional medicines in the treatment of his cancer.

Which one of the following is the most appropriate response?

1. **Include the Indigenous Healer as part of the care team**
2. Explain that traditional medicines are not evidence-based and will not be beneficial
3. Organize a family meeting to discuss his wishes
4. Advise him that you cannot offer chemotherapy if he chooses to use traditional medicines

Learning objective:

Given an Indigenous patient, the candidate will demonstrate respectful discussion and collaboration regarding using traditional health practices.

Rationale:

Patients have the right to include traditional health practices in their care. Gathering information about the medicines they wish to include can help inform a discussion about risks and benefits (including potential interactions.) Medicines that are grounded in Indigenous science but haven't been studied according to Western science may still offer benefits to patients. Involving family members of a competent patient is not required when making treatment decisions — they should be involved only if that is the patient's wish.

Question 6.

An 80-year-old Inuk cisgender man presents to the clinic and is diagnosed with reactivated pulmonary tuberculosis. Which would most significantly likely increase his risk of exposure to this infection?

1. **Attendance at a residential school**
2. Hunting and harvesting during the winter seasons with his family members
3. Incomplete immunizations
4. Genetic predisposition

Learning objective:

Given an Indigenous patient, the candidate will describe the connection between historical and current government policies and actions toward Indigenous Peoples (including but not limited to colonization, residential schools, treaties, and land claims) and the resulting intergenerational health outcomes. (MCC Examination Objective on Indigenous Health.)

Rationale:

Poor conditions in residential schools, including malnutrition, overcrowding, and poor ventilation, contributed to high rates of tuberculosis (TB) in students.

Question 7.

You are seeing a 68-year-old cisgender female First Nations patient from Regina who is a residential school Survivor. Before attending residential school, they followed a traditional Indigenous diet in their home community. As a residential school attendee, they experienced severe malnutrition as part of dietary experiments. They were diagnosed with type 2 diabetes in their mid-30s and have been well-managed on metformin since. Which of the following would most significantly increase this patient's risk of T2DM?

1. Traditional Indigenous diet in youth
2. Low socioeconomic status
3. Genetic predisposition
4. **Attending residential schools**

Learning objective:

Describe the connection between historical and current government practices towards First Nations, Inuit, and Métis peoples (including, but not limited to, colonization, residential schools, treaties, and land claims) and the resultant intergenerational health outcomes.

Rationale:

Indigenous children suffered severe hunger and malnutrition, which has contributed to Indigenous Peoples' elevated risk of obesity and diabetes. Although low socioeconomic status and a lack of access to healthy foods in remote Indigenous communities are risks, this patient is from Regina, and there is no information about their socioeconomic status. Traditional

Indigenous diets tend to be lower in carbohydrates and be protective against diabetes.

Question 8.

You conduct an initial telehealth video appointment with a 75-year-old Cree (First Nations) man who was diagnosed with stage IV colon cancer living in a remote, fly-in community. Available treatments at this time include palliative chemotherapy, which requires transportation to a cancer centre, and comfort-focused care that could be delivered at his home. He wishes to remain in his community and thus would prefer a comfort-focused approach, including traditional medicines. Although his first language is Cree, he speaks some English. Family members are with him during the appointment and express some uneasiness about his decision. What is the best next step?

1. Review the decision options again with the patient and family to ensure understanding
2. Explain the importance of patient autonomy in medical decision-making
3. Plan an in-person family meeting to discuss the decision further
4. **Schedule a follow-up appointment that includes a trained medical interpreter**

Learning objective:

Identify barriers to equitable health and health care for Indigenous Peoples and advocate for change at the systems level (e.g., organizational policy, healthy public policy).

Rationale:

Language is an essential aspect of Indigenous culture and in understanding decisions. Ensuring healthcare discussions are conducted in the patient's first language is important for guaranteeing understanding of treatment options and alternatives. Informed consent includes ensuring the patient understands and does not confuse expected social cues like nodding along or not asking questions as understanding.

Question 9.

(The following stem applies to both questions)

You assess a 10-year-old female from a nearby First Nations community brought to the emergency department by her mother. The patient, recently diagnosed with muscular dystrophy, has fallen multiple times in the past week and has been seen in the emergency department on two previous occasions. The necessary homecare supports have been ordered but are delayed while the home care/home health agency confirms government funding.

Jordan's Principle is a policy passed in the Canadian House of Commons that:

1. **Aims to ensure that First Nations children have equitable access to all government-funded services at the time they are needed**
2. Applies to all Indigenous children (Métis, First Nations, and Inuit) across all provinces or territories in Canada
3. Aims to protect healthcare needs for Indigenous children in foster care
4. Specifies the funding responsibilities of Federal and Provincial governments in providing healthcare for First Nations children

Choose the best approach to advocating for this patient's needs from the options below.

1. Engage hospital administration to pursue urgent government funding approvals
2. Admit the patient to the hospital until approval for homecare
3. **Reach out to the community's Jordan's Principle Worker/Health Technician to ensure the patient's needs are met**
4. Engage child protective services to ensure a safe home environment

Learning objectives:

Describe the various health services delivered to Indigenous Peoples and how multi-jurisdictional health care (federal, provincial, regional) can increase the risk of critical incidents, adverse events, medication errors, administrative barriers, and/or interruptions in continuity of care.

Describe specifically the equal right to the highest attainable standard of health, the right to traditional medicines and health practices, and the right to access all social and health services without discrimination.

Rationale:

Health practitioners should all be familiar with Jordan's Principle. The case highlights its application, which ensures that treatment is provided when it is needed, regardless of any ongoing government disagreements related to funding.

Question 10.

You are seeing a 26-year-old non-binary Métis patient in your clinic. They tell you they are having issues with the cost of their medications. They explain that they don't have benefits through work as they run an independent business, and as a result, taking their medications regularly has been difficult. What is the best next step?

1. Explain to the patient that they are Indigenous and have coverage through Non-Insured Health Benefits (NIHB.)
2. Advise the patient to go on social assistance so they have some drug coverage
3. **Contact the pharmacy to see if there is a lower-cost option for the class of medication they are taking.**
4. Advise the patient to consider getting a job with health benefits

Learning objective:

Demonstrate awareness of the diversity of access to federal non-insured health services and benefits (NIHB) for First Nations (status and non-status), Métis, and Inuit.

Rationale:

Métis people are excluded from the Non-Insured Health Benefits Program. It would be wrong to assume that the patient could afford a private health benefits plan. First, it would be best to explore whether there are cost savings opportunities with the pharmacy.

This is a sample rubric and should not be used verbatim. The domains in this rubric include elements of cultural safety and anti-racism. They should be adapted to assess the aspects of Indigenous health being tested in a specific OSCE case.

The importance of involving the standardized patient (SP) in marking learners across each of these domains cannot be understated. Further, it is the SP who is most appropriate to determine the learner’s cultural safety level based on their interaction experience. We recommend having a standardized question or form for SPs to complete. Ensuring the safety of Indigenous SPs as part of the assessment process is critical.

Global Performance			
Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
<ul style="list-style-type: none"> - Did not demonstrate an acceptable level of skills - Unsafe or unsuitable to progress 	<ul style="list-style-type: none"> - Inconsistent performance of skills - Demonstrated some aspects of skill; however, omissions and inaccuracies present 	<ul style="list-style-type: none"> - Acceptable performance - Majority of aspects of skills demonstrated 	<ul style="list-style-type: none"> - Excellent performance - Outstanding demonstration of all aspects of skills

Knowledge of Indigenous health			
Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
<ul style="list-style-type: none"> - Minimal familiarity with Indigenous health concepts presented in case - Not able to elucidate how the patients' Indigeneity and Indigenous culture are part of their health or goals of care 	<ul style="list-style-type: none"> - Somewhat familiar with Indigenous health concepts presented in case - Unclear if the learner has determined how the patients' Indigeneity and Indigenous culture are part of their health or goals of care 	<ul style="list-style-type: none"> - Familiar with Indigenous health concepts presented in case - Learner able to determine how the patients' Indigeneity and Indigenous culture are part of their health or goals of care - Able to analyze the impact of colonization and racism on patient health 	<ul style="list-style-type: none"> - Clear knowledge of the complexities of Indigenous health concepts presented in case - Learner able to demonstrate a clear understanding of how the patients' Indigeneity and Indigenous culture are part of their health or goals of care - Able to analyze the impact of colonization and racism on patient health and demonstrate

			critical reflection and plans to advocate for change
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Communication skills

Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
<ul style="list-style-type: none"> - Patient experiences racism or stereotyping, and the learner is not responsive to feedback - Interrupted patient - Imposed judgment or 	<ul style="list-style-type: none"> - Patient experiences racism or stereotyping However, the learner is responsive to feedback, but no effort is made to demonstrate 	<ul style="list-style-type: none"> - Patient may experience racism or stereotyping However, the learner is responsive to feedback, apologizes, and makes an apparent effort to 	<ul style="list-style-type: none"> - Patient does NOT experience any racism or stereotyping - Attentive to verbal and non-verbal cues and able to guide discussion accordingly

created an unsafe environment for the patient	openness to change - Unfocused or uninterested	demonstrate openness to learning and improving - Attentive to verbal and non-verbal cues	
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Organization

Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
- Scattered organization	- Minimal organization	- Logical organization - Clear organization with the integration of presented Indigenous health concepts	- Clear organization with the integration of presented Indigenous health concepts with specific reference to mental, emotional, physical, and spiritual elements of health

Collaboration and planning

Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
- Does not include the	- Minimal involvement of	- Involves patient in decision-	- Skillful integration of

<p>patient in formulating a plan</p> <ul style="list-style-type: none"> - Dictates what the next steps are without seeking patient input -Fails to recognize unique circumstances as they relate to aspects of patient's Indigenous identity (e.g., NIHB coverage, access in reserve communities vs. urban Indigenous communities, access to traditional medicine or healers, etc.) 	<p>the patient in the formulation of a plan</p> <ul style="list-style-type: none"> - Seeks patient input but does not consider this in planning -Recognizes unique circumstances as they relate to aspects of patients' Indigenous identity but not how these impact their care (e.g., NIHB coverage, access in reserve communities vs. urban Indigenous communities, access to traditional medicine or healers, etc.) 	<p>making and formulation of plan</p> <ul style="list-style-type: none"> - Seeks patient input and considers it as part of formulating a planning -Recognizes unique circumstances as they relate to aspects of the patient's Indigenous identity and how these impact their care but are not able to integrate into planning (e.g., NIHB coverage, access in reserve communities vs. urban Indigenous communities, access to 	<p>patient-centred approach in the decision-making process and formulation of a plan that shifts final decision-making to the patient, where desired</p> <ul style="list-style-type: none"> - Seeks patient input, provides options that take this input into consideration, and respect the patient's decision -Recognizes unique circumstances as they relate to aspects of patient's Indigenous identity and how these impact their care AND actively collaborates with
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		traditional medicine or healers, etc.)	relevant partners for planning and discharge to ensure patient needs are met (e.g., NIHB coverage, access in reserve communities vs. urban Indigenous communities, access to traditional medicine or healers, etc.)
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Cultural safety

Does not meet expectations	Borderline meets expectations	Meets expectations	Exceeds expectations
- Person felt disrespected as an Indigenous person - Discomfort discussing Indigeneity or Indigenous culture with the patient and how	- Awkward discussing Indigeneity or Indigenous culture with the patient and how this impacts how the patient accesses care or	- Comfortable discussing Indigeneity or Indigenous culture with the patient and how this impacts how the patient accesses care or	- At ease, confident, and skillful approach to discussing Indigeneity or Indigenous culture with patients and how this impacts how the patient

<p>this impacts how the patient accesses care or the type of care they access</p> <ul style="list-style-type: none"> - Invalidates patient's experiences of racism and previous negative experiences in the health system and the impacts on their health -Patient would not recommend the provider to a family member because they did not feel culturally safe 	<p>the type of care they access</p> <ul style="list-style-type: none"> - Discusses patient's experiences of racism and previous negative experiences in the health system and the impacts on their health but does not validate these experiences - Patient unsure if they would recommend provider to a family member due to unease around cultural safety 	<p>the type of care they access</p> <ul style="list-style-type: none"> - Validates patient's experiences of racism and previous negative experiences in the health system and the impacts on their health - Patient would recommend the provider to family members with minimal hesitancy because they felt culturally safe 	<p>accesses care or the type of care they access</p> <ul style="list-style-type: none"> - Validates patient's experiences of racism and previous negative experiences in the health system and the impacts on their health and able to reflect on their role in advocating for change - Patient would unreservedly recommend the provider to family members because they felt culturally safe
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