Teaching Culturally Safe Care in Simulated Cultural Communication Scenarios During the COVID-19 Pandemic: Virtual Visits with Indigenous Animators

Marion Maar, PhD[1], Lorrilee McGregor, PhD[1],
Danica Desjardins, MPH[2], Kerri Z. Delaney, BSc[3],
Nicole Bessette, B. Ed, MA[2] and
Maurianne Reade, MD, CCFP(EM), FCFP[1]

[1]Faculty of Medicine, Northern Ontario School of Medicine University, Sudbury, ON, Canada. [2]Department
of Undergraduate Medical Education, Northern Ontario School of Medicine, Sudbury, ON, Canada.
[3]Department of Health, Kinesiology and Applied Physiology, Concordia University, Montréal, Québec,
Canada.

ABSTRACT: Clinical learning activities involving Indigenous patient actors that specifically address the development of culturally safe care skills among medical students are important in order to improve health care for Indigenous people. In 2020, the COVID-19 pandemic led to strict physical distancing regulations and regional lockdowns that made the in-person delivery of Simulated Cultural Communication Scenarios (SCCS) with Indigenous patient actors impossible due to the disproportionate risk that public health emergencies pose for Indigenous communities. As the pandemic continued in 2021, we co-created a *Virtual Visit* approach to SCCS for the education of culturally safe care to pre-clerkship medical students. We report on student and tutor evaluation of these virtual sessions and contextualize our findings with our previous results delivering *In-Person* SCCSs. We found that *Virtual Visit* SCCS were highly effective in providing authentic exposure to and feedback from Indigenous patients. However, students rated their learning outcomes with *Virtual Visit* lower than the *In-person* approach to SCCS. We recommend formal training on interacting with patients in virtual care scenarios prior to *Virtual Visit* SCCS. We also found that exposure to SCCS with Indigenous animators has the potential to conjure up a diverse spectrum of sometimes unresolved negative feelings related to colonialism among students and tutors including discomfort, embarrassment, and anxiety. Our findings underscore the importance of resolving these sentiments within the safe environment of a classroom. To prepare Indigenous as well as non-Indigenous students and tutors adequately, it is important to acknowledge and critically deconstruct the embodiment of colonialism and Indigenous-settler relations when teaching physicians, as well as future physicians, preparedness for culturally safe care of Indigenous peoples.

KEYWORDS: MeSH terms: health services, indigenous, patient simulation, cultural competency

CORRESPONDING AUTHOR: Marion Maar, PhD, Faculty of Medicine, Northern Ontario
School of Medicine University, 935 Ramsey Lake Rd, Sudbury, ON, P3E 2C6.
Email: mmaar@nosm.ca

"Truth is a seed planted deep. If you want to get it, you have to dig."

—— *Katherena Vermette, River Woman*[1]

Introduction

Since its inception in 2004, the Northern Ontario School of Medicine (NOSM) committed to a social accountability mandate that includes a focus on Indigenous peoples' health. In 2018, the school further committed to responding to the Calls to Action of the Truth and Reconciliation Commission (TRC) of Canada.[2] The Call to Action Number 24, the most relevant to undergraduate medical education, states:

"We call upon medical and nursing schools in Canada to require all students to take a course dealing with Aboriginal health issues, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, and Indigenous teachings and practices. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism."[3]

NOSM has a history of significant successes in the development of innovative Indigenous health and cultural safety curriculum designed for teaching in both classroom and community settings.[4–6] However, a lingering challenge is translating the social accountability mandate into clinical curriculum that facilitates the expression of authentic Indigenous voices and experiences in the learning process.[7] To address this gap, a group of academic educators entered into a long-term collaboration with an Indigenous theater group to co-create authentic curricular experiences designed to foster culturally-safe interpersonal skills and cultural understanding among medical practitioners.[7–10] This collaboration later led to the co-creation of a new teaching modality entitled "Simulated Cultural Communication Scenarios" (SCCS), an educational strategy intended to offer students authentic, culturally-relevant, simulated clinical encounters with Indigenous people, delivered in-person on both urban campuses of the School. SCCS are distinct from typical standardized patient (SP) enabled teaching as patient scenarios are co-developed with animators based on their individual lived experiences and personal Indigenous knowledge. Learning goals aim to allow students to safely practice participating in

authentic patient scenarios with Indigenous animators, without the constraints of standardization.[7]

Responding to the Curriculum Delivery Challenges During the Pandemic

The COVID-19 pandemic led to strict physical distancing regulations and regional lockdowns that made the in-person delivery of SCCS impossible due to the disproportionate risk that public health emergencies pose for Indigenous communities.[11] Once it was determined that the SCCS could not be offered safely in-person, we adapted the SCCS from an *In-Person* to a *Virtual Visit* format. This format is mirrored in primary care practice during the pandemic and will likely be maintained in the future as appropriate, to reduce the costs and climate impacts of healthcare-related travel.

In this paper, we report on our assessment of the pedagogical suitability of delivering this SCCS in a *Virtual Visit* format to support learning on the practice of culturally safe care to pre-clerkship medical students based on evaluation research with students and tutors. We contextualize our findings with our previously published results of delivering the SCCSs in its original *In-Person* format.[7]

Methods

Overview of Virtual Simulated Cultural Communication Scenarios

The implementation of COVID-19 physical distancing protocols in March 2020 required rapid adaptation of all medical

education instruction to a remote learning format. This included our *In-Person* SCCS approach that we previously co-designed with Indigenous patient actors, who refer to themselves as animators because they "impart life, interest, spirit, or vitality" to characters they portray.[7] We collaborated with the animators to redesign the *In-Person* SCCS to a *Virtual Visit* SCCS using the clinical framework of a new patient intake completed over video conferencing technology.

Similar to the *In-Person* SCCS, a learning resources and a brief orientation session were provided to students prior to the session.[7] Learning objectives for the session focused on both culturally safe care and clinical skills, with the overall objective to establish a positive physician–patient relationship.

Students were instructed to conduct a new patient intake interview in a way that would provide the foundation for a positive therapeutic relationship and the elicitation of the patient's perspective while allowing for the collection of accurate medical information in the context of culture, community, and language. A list of skills and guiding questions for the patient interview was provided to students in the form of a skills worksheet. The worksheet included a reflection component to assist learners in self-assessing their patient encounter.

Videoconferencing Setup

The *Virtual Visit* SCCSs were conducted via videoconference on the Webex platform.[12] Due to travel restrictions, videoconferencing was established between each of the two urban campuses of the medical school and the several rural locations of animators and tutors. Technical difficulties were anticipated because low bandwidth in the rural locations would likely affect video quality. Mitigation strategies included prior testing and distributing the animators in diverse rural office locations to reduce the connectivity demands on local networks.

On the day of the SCCS, all participants were asked to log in to a virtual meeting room. Tutors and animators were instructed to log in 30 minutes in advance of learners to allow for discussion with the academic coordinators of the session. Students and animators then joined the videoconference ten minutes later, allowing 20 minutes to assign all participants to virtual breakout rooms. Each virtual breakout room hosted four students and a tutor. Animators were assigned a schedule that automatically moved them to a different virtual room with a new student group at the end of each scenario to allow each student group to experience four animated scenarios.

To mimic the use of in-person observation rooms, observing students were asked to turn off their webcams and mute their microphones. Tutors were instructed to read the introductory case scenario to the interviewing student, and then join the observing students. Both the animator and the interviewing student kept their microphones and webcams on for the duration of the interview, which lasted approximately 20 minutes. Once the interview was completed, the tutor and

Table 1. Guiding questions for animator feedback regarding their experience of cultural safety in the interview.

Student performance feedback prompts	Additional probes
What did the interviewer do well?	Did the interviewer make you feel respected?
Did the interviewer do or say anything that made your character uncomfortable?	If yes, identify what happened and what could have happened to bring the interview to a stronger conclusion. Please remember to be sensory based in your feedback – be specific about what was said or what was done and how that could be interpreted in ways the student hadn't thought of.
Did the questions illicit topics your character wanted to explore?	Was there anything your character would have liked to explore, but didn't?
From a cross-cultural perspective, was there anything that could have been done differently to allow your character to feel more at ease, as though the interviewer "got" your animated character?	Is there a way that the student made your character feel at ease to discuss their choices in traditional and Western medicine?

observing students turned their cameras back on to simulate returning to the interview room for a feedback period. This 20-minute period began with the interviewing student describing how they felt coming out of the interview and outlining their areas of strengths and those needing improvement. Next, the animator was invited to provide feedback to students on their experience of cultural safety in the interview, guided by the prompts in Table 1. Finally, the tutor provided their observations. If time remained, the observing students were also able to remark on the encounter. Tutors utilized the same formative assessment tool that is used in other simulated patient scenarios, a Skills Worksheet that includes skills-based questions on opening the interview, information gathering, and prompts for self-awareness for the observing and the interviewing student.

Participants

The SCCS was conducted with pre-clerkship medical students at the beginning of their second year. Tutors were selected for their previous experience in facilitating clinical skills sessions and their interest in culturally safe care. The animators were selected based on factors determined by their organization such as years of experience, ability to support more junior animators, and perceived personal attributes such as resiliency with students who are just beginning to learn about cultural competency. Coincidentally, this selection framework resulted in an all male animator crew, which was not planned, but we fully respected the animators' expertise to keep their troupe as prepared and safe as possible.

Demographic details are provided in Table 2. The study was approved by the Laurentian University Ethics board (Ref No: 6020453).

Table 2. Participant information.

Group (n)	Demographics	Participants n (% of participants in group)
Tutors (9)	Female	6
	Male	3
	Faculty with 10 + years teaching experience	7
	NOSM graduates	3
Animators (9)	Female	0
	Male	9
	Indigenous	9
Students (63)	Female	42 (67%)
	Male	21 (33%)
	Indigenous	7 (11%)
	Francophone	10 (16%)

Data Collection

Separate surveys for students and tutors were created and administered through Qualtrics as part of the curriculum evaluation process. Questions were designed a) to elicit students' perspectives regarding their preparation to provide culturally safe care to Indigenous patients, and b) to gain insight into tutors' observations regarding student readiness to provide culturally safe care to Indigenous patients.

Students rated their level of agreement with five statements regarding the impact of the SCCS on their learning using a Likert scale. The tutor survey allowed facilitators to rate their agreement with five similar statements regarding their impression of the impact of SCCS on students' learning. Four open-ended questions with ample space for narrative responses were included (Table 3).

Students and tutors received an electronic link via email to the evaluation survey they were able to submit anonymously. Students were also given time to complete the survey during another learning session within four weeks of the SCCS session. Participation rates were 63/63 (100%) for students, and 6/9 (66.7%) for tutors. These participation rates are higher than average for program evaluations at NOSM.

Data Analysis

Narrative data was analyzed using a reflexive approach to the thematic analysis organized around the central concept of the pedagogical suitability of the *Virtual Visit* SCCS to practice culturally safe care. A collaborative research team composed of faculty researchers, tutors, academic staff, and a medical student who experienced the session were involved in the coding. The student researcher was recruited after all data collection was completed to provide a student perspective on the analysis and facilitate member checking with students. Each

Table 3. Open-ended questions included in the SCCS student and tutor evaluations.

Open-ended questions to elicit student perspectives	Open-ended questions to elicit tutor perspectives about student learning
Was this session useful for your learning?	Was this session useful for student learning?
Was there anything in particular that you found challenging about this session? If yes, please describe the challenge(s).	Was there anything in particular that you or your students found challenging about this session? If yes, please describe the challenge(s).
Comment on your experience with the animators. Was this session comparable to traditional SCS sessions? Why?	Comment on your experience with the animators. Was this session comparable to traditional SCS sessions? Why?
Do you have any suggestions for improving this session for future students?	Do you have any suggestions for improving this session for future students?

researcher analyzed the data separately. The analysis was finalized during several group meetings where consensus was reached on the themes and selected illustrative quotes.

Summary statistics were calculated for quantitative data. The *Virtual Visit* SCCS data was then compared with the previously published *In-Person Visit* SCCS data.[7] Both data sets were checked for normality using a Shapiro-Wilks analysis. The distribution of responses for each question was not normal, therefore differences between responses in the *Virtual* and the *In-Person Visit* SCCS were examined using a Chi-Squared test. Data was analysed using IBM SPSS Statistics v22 (Armonk, NY) and are reported as mean $\pm$ SD. P-values of <0.05 were considered statistically significant.

Results

Quantitative Student Ratings

The majority of students (57.1%, n = 36) agreed or strongly agreed that as a result of the SCCS, they felt better prepared to respond appropriately to the clinical presentation of an Indigenous patient (Q1). The same number of students (57.1%, n = 36) agreed or strongly agreed that they felt better able to develop a perspective of the patient's problem that goes beyond the presenting [medical] problem (Q2). Moreover, 52.4% of students (n = 33) agreed or strongly agreed that they felt better able to judge when they had established good rapport (or not) with a patient (Q3). An equal proportion of students (52.4%, n = 33) agreed or strongly agreed that they learned more about how to respond appropriately to a patient's emotions as they are expressed (Q4). Lastly, 63.5% of students (n = 40) agreed or strongly agreed that they had gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment because of this session (Q5). On all posed questions, no more than 15% (n = 9) responded that they disagree or strongly disagree. The results of the student evaluation are summarized in Figure 1.

When comparing the *In-Person*[10] to the *Virtual Visit* SCCS, it was found that students in the *Virtual Visit* session rated their experience approximately 0.5 of a point (out of 5 possible points) lower than the *In-Person* session (Table 4). This means that on average, students perceived that the remote learning experience was not as successful as the in-person learning experience. The difference between scores was found to be statistically different for Q1–4 (Table 4). The power calculation conducted for Q5, in which students rated if they gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment, because of the session, yielded a beta value of 0.30. Therefore *In-Person* and *Virtual Visit* scores for Q5 could not be reliably compared (Table 4).

Quantitative Tutor Ratings

The results of the tutor evaluations are summarized in Figure 2. All who responded to the survey (100%, n = 6) agreed or strongly agreed that because of this session, students gained knowledge and skills to respond appropriately to the clinical presentation of an Indigenous patient. All responding tutors (n = 6) also agreed or strongly agreed that students improved their judgement regarding when they have established good rapport (or not) with a patient, and that students gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment. Additionally, 83.3% of tutors (n = 5) agreed or strongly agreed that students gained insight on how to develop a perspective of the patient's problem that goes beyond the presenting problem. Similarly, 83.3% of faculty members (n = 5) agreed or strongly agreed that students learned more about how to respond appropriately to a patient's emotions as they are expressed. None of the responding tutors disagree or strongly disagree with any of the statements for which they were asked to rate their agreement. The small sample of tutor responses did not allow for a statistical comparison between the *In-Person* and *Virtual Visit* experiences.

Thematic Analysis of Student and Tutor Narratives

Several themes emerged from the thematic analysis of the responses to open-ended questions in the student and faculty evaluations that provide insight into how culturally safe care may be taught in *Virtual Visit* SCCS. Notably, students spoke of the SCCS as an important opportunity to practice interview skills in culturally authentic scenarios, but they also spoke of strengths, challenges, and limitations of remote learning medical education. Suggestions to improve the session included adjusting the timing of the SCCS and further clarifying expectations for students, faculty, and animators. Two overarching narratives included the personal struggles with the problematization of the colonial history of Indigenous-settler relations in the clinical setting, and the embodiment of those relations as apprehension and anxiety during education sessions on culturally safe care.

Practicing Interview Skills Though a Virtual Patient Intake Scenario. Most students (79%) explicitly stated in an open-ended question that the *Virtual Visit* SCCS was useful for their learning. When asked to expand on their perception, many students commented that the animators offered more authentic and complex stories than standardized patients, and that overall, they were highly successful in delivering this session, even in the virtual format.

> Animators were much more "real" so to speak, with more human complexities to unpack. On the one hand that made the session more enjoyable, but also more challenging.
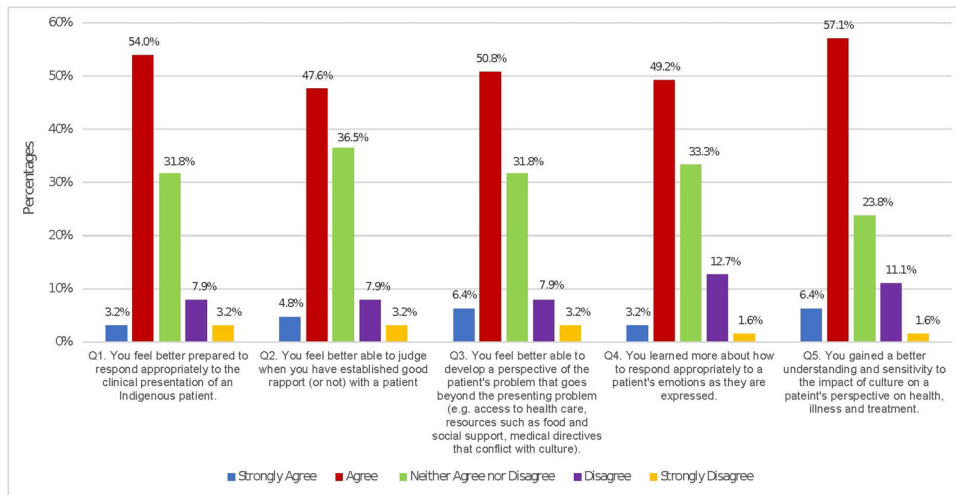
Figure 1. Student evaluation of virtual SCCS - Likert scale questions. Histograms depicting the distribution of responses for each Likert scale question. Values expressed as percentages.

Yes--it gave us an authentic interview experience and more realistic stories that will help us in the future.

A significant number of students also felt that this session offered a good opportunity to practice and hone their interview skills.

It provided an opportunity to gauge our approach with Indigenous patients, with the feedback provided [being] the most useful aspect. […] it did highlight a few key areas of importance in terms of interviewing this population.

However, some students, who had previous clinical experience working with Indigenous patients elsewhere in Northern Ontario, felt that the SCCS did not offer an opportunity for further skills development for them, but felt the session was of value for others with less experience.

I do not believe the session itself helped me specifically, as I have interviewed Indigenous patients for many years in my role as a nurse, but altogether I believe it was a very good session.

Strengths and Limitations of Teaching Culturally Safe Care in a Virtual SCCS. Several students offered commentary on the newly applied COVID-19 physical distancing protocols. Some students noticed that the videoconferencing format made it more difficult for them to establish rapport with the patient during their interviews.

The online format was a challenge. It makes it more difficult to build a proper rapport with a patient through a screen, especially when they are speaking to you about emotional and impactful experiences.

Some who experienced connectivity difficulties felt perturbed by the technological glitches and were not ready to

manage these real-life challenges in addition to an intake interview.

Wireless communication was difficult as a learning process. May have been better delivered on a local server in school (still socially isolated) rather than from home to limit connectivity issues.

Other students embraced the technical difficulties as a learning opportunity to practice telemedicine interviews, knowing that this is the reality for many patients and physicians during the pandemic and beyond.

I felt it was realistic in a sense that the online platform is a likely platform in the future for [healthcare providers] to provide care to [patients] in remote area[s].

A few students expressed having such a struggle with the remote learning format that they did not believe that culturally safe care could be learned at all using videoconferencing technology.

… without spending time with the patient in person, I believe the 'cultural sensitivity and communication' was lost.

Timing of the Session. Overall, students had mixed opinions on how to most effectively use the 40 minutes allocated to each of the four scenarios the groups experienced. Some felt that a single opportunity to interview for each student was not enough, or, that the 20 minutes was not enough time to complete their interviews and/or the subsequent 20 minutes was not enough to receive feedback from the animator and tutor. Others appreciated that each student had a chance to interview, as opposed to the usual format in which two students interview and two merely observe in each of their weekly clinical skills sessions, Structured Clinical Skills (SCS). Several students commented that they would have preferred more culturally

Table 4. Student evaluation of in-person versus virtual SCCS - Likert scale questions.

Questions "As a result of this session…"	Mean Score Virtual Visit	Mean Score In-Person Visit[7]	Mean Difference	Chi-Squared (p-value)
Q1. You feel better prepared to respond appropriately to the clinical presentation of an Indigenous patient.	3.46 ± 0.82	3.98 ± 0.72	0.51	0.02
Q2. You feel better able to judge when you have established good rapport (or not) with a patient.	3.45 ± 0.84	3.91 ± 0.9	0.49	0.01
Q3. You feel better able to develop a perspective of the patient's problem that goes beyond the presenting problem (eg access to health care, resources such as food and social support, medical directives that conflict with culture).	3.49 ± 0.86	3.95 ± 0.94	0.46	0.01
Q4. You learned more about how to respond appropriately to a patient's emotions as they are expressed.	3.67 ± 0.81	3.89 ± 0.86	0.49	0.01
Q5. You gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment.	3.56 ± 0.84	3.92 ± 1.17	0.33	---
Averages	3.47 ± 0.83	3.92 ± 0.92	0.49	---

Virtual visit: n = 63. In person visit: n = 37. Data are mean ± SD. All responses, except for Q5, had a power score that allowed for statistical analysis.
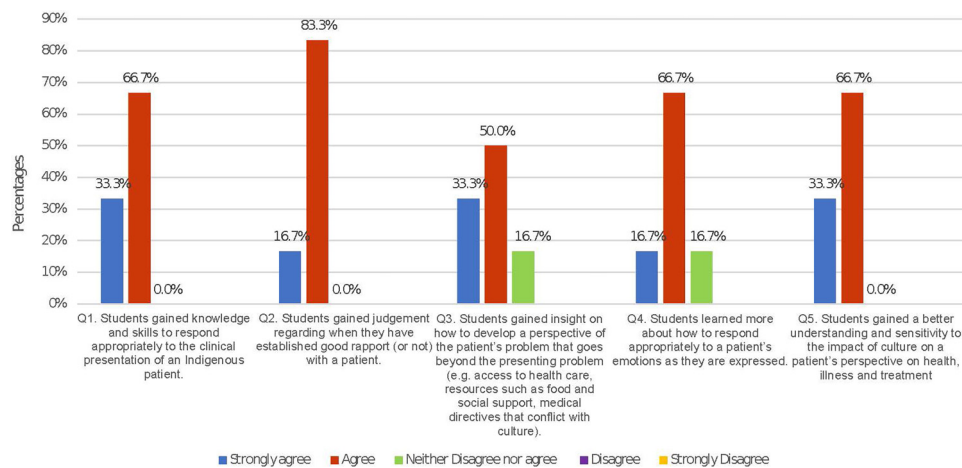

Figure 2. Tutor evaluation of virtual SCCS – Likert scale questions. Histograms depicting the distribution of responses for each Likert scale question. Values expressed as percentages.

focused SCS throughout the year to be able to practice their culturally safe care skills more often.

The SCCS took place over the course of a ten-hour workday for animators and tutors, to enable them to see four groups of students in the morning and four in the afternoon, due to limited scheduling options in the packed curriculum. The student groups were scheduled for 3.25 hours, and some students felt that this was too demanding, and that students, tutors, and animators were too tired at the end of the day to give adequate feedback. This sentiment was exacerbated because students felt screen fatigued prior to the session, given the challenges of remote learning during the pandemic. Students suggested splitting the SCCS over two days to allow more time for interviews and feedback.

> It would be good to divide the session in half. It is difficult to provide thoughtful feedback/listen closely to the encounters after about 2–3 hours of SCS. Especially with being virtual, I find I lose focus after about 2 hours of screen time.

The Embodiment of Indigenous-Settler Relations in the Education of Culturally Safe Care. Coming to terms with teaching and learning about clinical skills with patients from a historically oppressed group was experienced as social discomfort by some tutors and students. One of the tutors commented:

> I felt the student doing the interview was in awe, afraid of a faux-pas, unsure whether they were doing the right thing or blundering. Some retreated to the safety of deluging the [patient] with clinical questions. Others were tongue-tied, hesitant, lost on how to manage the interview. I found it challenging to impress on the students that the interview was not about the medical condition, but how to take a history from an Indigenous patient.

The comment points to some students, and perhaps tutors, feeling a significant level of apprehension and anxiety heading into an Indigenous SCCS. Despite several coordinating sessions where this new format was discussed, some tutors and students still felt unsure or unprepared heading into the session and wished for additional instructions prior to the SCCS, perhaps in hopes that further clarification of the delivery format would result in more confidence. Some students indicated that they would have liked more preparatory resources, or more time beforehand, to discuss the expectations related to the timing and focus of the interview with their tutors.

> I found that there was confounding information to what this session was supposed to be about (an intake interview vs. an interview with an actual issue) and that was difficult to navigate.

Clearly, some students found it difficult to transition from the familiar SCS format with SPs to the novel *Virtual Visit* focused on a cultural communication with an Indigenous patient. On the other hand, some of the students who had prior experience with Indigenous patients struggled with opening themselves up to new learning with Indigenous people from a different tribal affiliation or who had different life experiences than those they had worked with in the past, believing they were so experienced they could not learn anything new.

Some Indigenous students, who chose to self-identify in the survey, described a different struggle of feeling comfortable with the scenario: they perceived themselves as singled out as an Indigenous person when presented with the Indigenous animators in the SCCS.

> Improvement could be made by tying these sessions into SCS throughout the year, so it does not feel like Indigenous people need to be isolated from the rest of the population. As an Indigenous person it felt rather isolating and mildly humiliating to need a whole separate session to learn how to talk for 30 min to an Indigenous person when this doesn't happen to our many, many other different backgrounds in Canada.

While many students appreciated the breadth of patient stories in the non-standardized scenarios, some wished for the comfort of predictability inherent in the standardization of their typical SCS.

> I really enjoyed this session, but I wish there would have been more standardization and clear expectations outlined to the animators prior to having the session. As students, we were told to prepare for a general intake interview without addressing any specific health concerns at the time of the visit. Some animators had not been given this message which caused a little confusion and difficulty for certain people throughout the interviews. Having clearer expectations outlined would greatly aid in the flow of these sessions.

Requesting that Indigenous animators provide standardized, medical model feedback would, however, exercise hegemonic dominance, undermine the legitimacy of Indigenous ways of teaching about Indigenous health, silence their voice in the collaborative process, and compromise the *raison d'être* of reflective learning about cultural safety.

Discussion

The journey to providing successful skills-based medical education corresponding to the Calls to Action of the Truth and Reconciliation requires significant administrative demands, financial and human resources.[13] Curriculum must be modified, and sufficient teaching time must be allocated.[13] In our work, we have found that curriculum designers need to be prepared to navigate many tensions associated with expanding curriculum that addresses Indigenous health priorities. They include potential resistance to displacement of other core curriculum; fears of losing face when confronting the legacy of Indigenous-settler relations in a clinical setting; and the need to consider the specific positionality of Indigenous students when designing Indigenous health curriculum.

Engagement with Cultural Safety Pedagogy

A systematic review focused on the implementation and impact of Indigenous health curricula internationally, conducted by Pitama *et al*,[14] revealed that learners tend to value Indigenous curriculum when they are provided with specific skills or knowledge that can be adopted into their clinical practice. Learning methods that incorporated immersion experiences, clinical placement, and simulated patient encounters fostered translation into practice.[14] Transformative clinician behaviors were more likely to arise from clinically relevant curriculum.[14] As medical educators, we strove to maintain these learning methods as we transitioned from the *In-Person* to a *Virtual Visit* SCCS. In both versions, almost all students highly valued the richness and authenticity of the clinical and cultural scenarios the animators provided.[7] This underscores the value of learning culturally safe care through collaborative pedagogy with Indigenous animators using the SCCS format. However, students experienced diverse levels of readiness for these *Virtual Visits*.

The Implications of the COVID-19 Pandemic for Virtual Visit SCCS

Some students commented that the remote nature of this exercise was a good opportunity to practice skills in telemedicine, while others found interviewing using videoconferencing overwhelming. Layered within these perspectives were ongoing student anxieties of adapting to the uncertainty of medical education during a pandemic. The reality is that the COVID-19 pandemic has thrust telemedicine into the spotlight. Many health organizations across Northern Ontario and globally have shifted to using telehealth for patients whose concerns could be addressed virtually, to lower the risk of infection and

to reduce requirements for personal protective equipment. Videoconferencing provides a way to deliver care while adhering to public health measures regarding social distancing, minimizing contact, or quarantining.[15] It also allows for safer triage and for the provision of services that would otherwise have been shut down due to distancing protocols.[16]

Beyond its applications in a pandemic situation, telehealth is an indispensable tool in everyday medicine.[16] Arguably, its greatest advantage is the increased access to health services that it offers to patients living in rural and remote communities. This is particularly relevant to trainees at NOSM since residents of Northern Ontario are more frequent users of telemedicine than their Southern Ontario counterparts.[17] Additionally, with approximately 80% of First Nations people in Ontario living in Northern Ontario,[18] learning culturally safe care skills for telemedicine consults is important for future physicians practicing in this region.

While historically there have been barriers for primary care providers to adopt telehealth and virtual models of care, the COVID-19 pandemic offered few alternatives, and in fact, hastened the development of more reliable and user-friendly technology.[19] Telehealth offers advantages to rural and remote patients by eliminating the need to travel to receive medical care, thereby reducing financial cost to patients and allowing them to remain in their community with their support systems. Considering the cost-effectiveness of the telemedicine system as a whole, it is very likely that telemedicine is here to stay and its inclusion in undergraduate medical education will become increasingly important.[20]

On average, students score their attainment of cultural communication skills as significantly lower than the previous cohort of students who practiced the SCCS in-person. This underscores the need for increased opportunities to practice virtual interviewing skills within the context of all patient populations. What was initially an inadvertent yet unavoidable compromise of SCCS training for medical students in 2020–2021 should be considered a critical element of enhanced training moving forward and we recommend formal training on interacting with patients in virtual care scenarios prior to *Virtual Visit* SCCS.

Overconfidence Bias in Understanding Indigenous Patient Encounters

Overconfidence bias is a form of cognitive bias that is associated with physician affect or personality. It pertains to the tendency to be overconfident in one's decision-making skills or knowledge base that may lead to further errors of commission or omission. In clinical medicine, overconfidence bias and other cognitive biases have been used primarily in discussions related to diagnostic error.[21–24] However, we believe the SCCS feedback exposed overconfidence in some students and tutors with regard to cultural communication. For example,

one student found the scenarios, which were created by the animators based on their lived experience, as "too stereotypical" while others felt that their previous experience with Indigenous patients was sufficient learning related to cultural communication. Several students commented that their tutor directed them to focus on the health issue instead of the communication, which indicates that the tutor may not have prepared adequately for the session or undervalued the need to prepare.

While research on debiasing strategies with medical students is still in the early stages, concerns have been raised that novice students may not immediately benefit from debiasing strategies.[25–27] Further research is needed to explore how critical reflection on cognitive bias, specifically overconfidence bias, can enhance culturally safe care or cultural competence curriculum.

Future considerations will be given to the review of cognitive bias, particularly overconfidence bias, attribution error, framing effect, and ascertainment effect in the preparatory sessions with both students and tutors.

Changing Assessment Tools for Cultural Safety Learning

During the development of this SCCS, new learning tools were considered, including the RESPECT tool[28] which was seen as an assessment instrument that could support the focus on cultural safety in the SCCS. The learning components in the tool include *Respect; Explanatory model; Social context, including Stressors, Supports, Strengths, and Spirituality; Power; Empathy; Concerns; Trust/Therapeutic alliance/Team.*

Ultimately, a decision was made to utilize the standard SCS learning tools and formative assessment forms to reduce confusion and maintain consistency. Thus, standardizing medical education assessment tools trumped the cultural competency experience itself. Unfortunately, the decision to privilege consistency likely compromised the quality of the group conversations. In retrospect, the team would have benefitted from heeding the warning by Kumagai and Lypson about the "danger that knowledge, skills, and attitudes may be quickly reified into rather inflexible categories that test competencies empty of internalized values."[29]

Cultural competency programs have been criticized for a lack of rigorous evaluation methods; however, these programs are situated in the complex environments of medical schools.[14] To thrive, designers of learning activities for cultural competency and curriculum on culturally safe care require sufficient autonomy to ensure that the entire process (from curricular development, delivery and assessment to program evaluation) supports the learning outcomes.

Pedagogy of Optimizing Timing for SCCS

Similar to our evaluation of the *In-Person* SCCS, the *Virtual Visit* SCCS also included suggestions to adapt the timing. In

both cases students wanted more time to get to know the animators ahead of the interview. For the *Virtual Visit*, the schedule was also adapted to allow each student to have one interview opportunity plus three opportunities to observe, which was not possible with the time allotted for the in-person session. Although the time for each half-day was extended, the adaptation meant that the pre-briefing and de-briefing times were abbreviated. Student groups had a 3.25 hour session, while tutors and animators worked for the full day of nine hours. The decision to provide each student with direct interview experiences increased the diversity of Indigenous patient narratives and scenarios students observed. However, unintended consequences included reduced time for pre-briefing, for recovery from technical challenges and for reflection, and an increase of fatigue for everyone involved.

The change in format and the reduction in time for preparation and transitions may in some cases have affected receptiveness to the learning experience. Behrens et al[30] remind us that "[a]s students work to the edge of their abilities, there is a fine tipping point of potentially overwhelming students emotionally." Participants in complex simulations can perceive an experience as judgmental rather than strictly as a supportive learning experience.[30]

Even a subtle decrease in timing available for debriefing risks oversimplification, especially when debriefing with less experienced learners.[31] For example, counterfactuals, defined as "the deliberate formulation of explanations for how *potential* alternative outcomes could have eventuated from the same *actual* antecedent events" [31] are particularly informative to explore with Indigenous animators, but they require ample time.

The implementation of the increased number of scenarios resulted in challenging experiences for the animators as well. Further time to regroup and recharge would be recommended, particularly for those who had incorporated emotionally intense background stories into their patient portrayals.

Simulation research has often explored the "how" (practicalities, site, and equipment) at the expense of the "why" of simulation: dialogue on the purpose and potential of simulation education.[32] In this project we identified the reverse. The focus on culturally safe care and communication opportunities for the whole class led to a subtle change in timing, which created some challenges for all. When exploring complex and socially charged topics such as cultural safety, racism, or multigenerational trauma in simulation-based education, the importance of increased time in the curriculum cannot be overemphasized.

Discomfort and Anxiety: Embodiment of Indigenous–Settler Relations in Cultural Safety Medical Education

Several Indigenous and non-Indigenous students shared commentary that we could only describe as an embodiment of the consequences of the complicated history of Indigenous-settler relations transposed into the clinical classroom.

For example, several Indigenous students, self-identified in the survey, expressed some discomfort with the session because it focused solely on Indigenous patients. One expressed that this experience felt "*rather isolating and mildly humiliating*" although acknowledging "*that the session was useful*". Another Indigenous student mentioned that "*it would make more sense to have Indigenous patients sprinkled in throughout different SCS sessions in each module. Having it separate kind of felt inappropriate to me, as Indigenous patients should be treated just like any other patient would be: with dignity and respect*". However, previous approaches at the School using the SP model had revealed other issues: standardized patient scenarios did not resonate with Indigenous SPs, and without preparing students and facilitators extensively, there could be unintended negative interactions.[7]

Research that deconstructs concerns such as those described by these students is still limited. Several studies have examined Indigenous post-secondary students' experiences with Indigenous content in the curriculum. In a study on racism that involved 17 participants, students felt discomfort when they perceived their Indigeneity to be on display.[33] In a different study on micro-aggressions involving six participants, Indigenous students felt that there was often a misrepresentation of Indigeneity in the curriculum.[34] In another study with seven students, a theme of racial segregation emerged from the interviews.[35] Students in that study noted that when there is a distinct divide between Indigenous and non-Indigenous people, it can lead to feelings of social isolation. While these were small-scale studies, these findings may reflect what some Indigenous students at NOSM experienced during the SCCS as Indigenous animators portraying highly realistic, but difficult patient histories. Further dialogue with Indigenous students is required to better understand how they can be safely invited to reflect on their discomfort when confronted with simulated Indigenous patients and their stories.

Non-Indigenous students also shared a broad spectrum of experiences. One tutor commented that they "*observed that the students [in their group] felt that they were doomed to make mistakes and inevitably offend the patient*" or that too much "*mysticism surrounding interviewing Indigenous patients*" had been created. Some students appeared to experience significant anxiety around potentially offending and not being able to walk back the offense, and subsequently feeling exposed, embarrassed, or ashamed. The understanding that NOSM has a social accountability mandate may increase the trepidation that some students feel as they are observed by tutors and peers, and potentially judged in their interaction with Indigenous people.

Strength and Resilience in Medical Education for Culturally Safe Care

It is very important to underscore that despite the pandemic, the videoconferencing limitations, and a lack of familiarity

with learning from Indigenous animators, many students embraced the SCCS experiences. Some called for more SCCS experiences, feeling that "*the animators were a great addition to [their] clinical experiences. The animators' cases seemed more 'real' compared to standardized patients, in the sense that they came in with diverse personalities and previous experiences.*" Many experienced the SCCS session as a challenging but safe environment "*to interview someone from a different cultural background, in this case from a First Nation background*" in a teaching setting. Some gained confidence in their abilities and "*realized that [they] actually knew more than [they previously] thought*" and that "*the online format was an adequate learning experience for culturally sensitive care.*"

Finally, some students even found the SCCS to be a pleasure:

> I thoroughly enjoyed this session and feel that I am more comfortable addressing the cultural aspect of patient health. I found the Stimulated Cultural Communication Scenarios to be helpful in becoming comfortable communicating with patients from different cultures. It was nice to be able to practice asking questions about things such as traditional medicines and practices before we do so in the real world.

This comment resonates with the ultimate focus of the SCCS, which is to help students learn how to provide good care to Indigenous patients, while ensuring that the learning process does not oppress or otherwise harm Indigenous patients in any way, even unintentionally.

Limitations

A limitation of this study was that we did not collect analogous survey data from the animators. This step was omitted because animators did not perceive a survey to be a good way to communicate their perspective. However, we have jointly used Indigenous research methods to conduct a learning circle to understand the animators' experiences of the medical school's, faculty's and students' skills used to support their own sense of cultural safety in this co-creation process, which will be reported in a separate publication.

Another limitation was that at the time of the *Virtual Visit* session, unexpectedly, only male actors fit the resiliency criteria to present the cases to students. While this reduced the informal learning about Indigenous women's perspectives, we do not believe that the learning outcomes were compromised overall: The students had ample interactions planned over the coming four weeks with female Indigenous community members and health care workers as they embarked on their four-week placement in an Indigenous community.[4]

Conclusion

It is critical that learning activities that specifically address Indigenous peoples' health continue to be provided to increase culturally safe care skills among all students, and to build on the medical schools' responses to the TRC's Call to Action. Cultural communication scenarios are highly effective in providing authentic exposure to, and feedback from, Indigenous patients to practice culturally safe care in medical education. Many students enjoyed and benefitted from the scenarios, but virtual delivery requires additional preparation to develop virtual interviewing skills.

The SCCSs have the potential to conjure up a diverse spectrum of feelings related to colonialism among students and tutors including discomfort, embarrassment and anxiety. These feelings might be heightened in the disconnect of the virtual environment, underscoring the need for opportunities to practice in the safety of the classroom. To prepare students and tutors adequately for educational sessions to provide culturally safe care of Indigenous peoples, it is important to acknowledge and critically deconstruct the embodiment of colonialism and Indigenous-settler relations. Medical education enhancements need to be developed to help students and tutors to confidently address the legacy of a colonial past that we found embodied in culturally safety learning in the classroom, and which ultimately impacts negatively on Indigenous patient care. Further exploration into the concept of cognitive bias may create opportunities for enhanced learning and decreased resistance to initiatives aimed at educating on culturally safe care. Finally, appropriate assessment tools are needed to unearth that truth of the "seed planted deep."[1] These learning activities all require faculty and administrative commitment as well as sufficient space in the curriculum.

Ethical Approval

Not applicable, because this article does not contain any studies with human or animal subjects.

Informed Consent

Not applicable, because this article does not contain any studies with human or animal subjects.

Trial Registration

Not applicable, because this article does not contain any clinical trials.

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Appendix 1. Student evaluation of SCCS - results from Likert scale questions

Question "As a result of this session…"	5	4	3	2	1	Total n (%)
	Strongly agree n (%)	Agree n (%)	Neither disagree nor agree n (%)	Disagree n (%)	Strongly disagree n (%)	
Q1. You feel better prepared to respond appropriately to the clinical presentation of an Indigenous patient.	2 (3.2%)	34 (54.0%)	20 (31.8%)	5 (7.9%)	2 (3.2%)	63 (100%)
Q2. You feel better able to judge when you have established good rapport (or not) with a patient.	3 (4.8%)	30 (47.6%)	23 (36.5%)	5 (7.9%)	2 (3.2%)	63 (100%)
Q3. You feel better able to develop a perspective of the patient's problem that goes beyond the presenting problem (eg access to health care, resources such as food and social support, medical directives that conflict with culture).	4 (6.4%)	32 (50.8%)	20 (31.8%)	5 (7.9%)	2 (3.2%)	63 (100%)
Q4. You learned more about how to respond appropriately to a patient's emotions as they are expressed.	2 (3.2%)	31 (49.2%)	21 (33.3%)	8 (12.7%)	1 (1.6%)	63 (100%)
Q5. You gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment.	4 (6.4%)	36 (57.1%)	15 (23.8%)	7 (11.1%)	1 (1.6%)	63 (100%)

Appendix 2. Tutor evaluation of SCCS - results from Likert scale questions

Question "As a result of this session…"	5	4	3	2	1	Total n (%)
	Strongly agree n (%)	Agree n (%)	Neither disagree nor agree n (%)	Disagree n (%)	Strongly disagree n (%)	
Q1. Students gained knowledge and skills to respond appropriately to the clinical presentation of an Indigenous patient.	2 (33.3%)	4 (66.7%)	0 (0%)	0 (0%)	0 (0%)	6 (100%)
Q2. Students gained judgement regarding when they have established good rapport (or not) with a patient.	1 (16.7%)	5 (83.3%)	0 (0%)	0 (0%)	0 (0%)	6 (100%)
Q3. Students gained insight on how to develop a perspective of the patient's problem that goes beyond the presenting problem (eg access to health care, resources such as food and social support, medical directives that conflict with culture).	2 (33.3%)	3 (50.0%)	1 (16.7%)	0 (0%)	0 (0%)	6 (100%)
Q4. Students learned more about how to respond appropriately to a patient's emotions as they are expressed.	1 (16.7%)	4 (66.7%)	1 (16.7%)	0 (0%)	0 (0%)	6 (100%)
Q5. Students gained a better understanding and sensitivity to the impact of culture on a patient's perspective on health, illness, and treatment	2 (33.3%)	4 (66.7%)	0 (0%)	0 (0%)	0 (0%)	6 (100%)