

Identifying Potential Areas of Change to Medical School Curricula to Better Support Canadian Rural Healthcare Physicians in Serving Indigenous Populations

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Received: October 08, 2025; **Accepted:** October 13, 2025; **Published:** October 22, 2025

ABSTRACT

Indigenous peoples in Canada experience a comparatively poorer level of health relative to other Canadians. Factors contributing to this include limited healthcare accessibility and other disparities including anti-Indigenous racism. This project is a thematic analysis which draws on the experiences of rural physicians currently working with Indigenous populations to suggest changes that can be made to medical school curricula. The authors collected response data from physicians via convenience sampling at a 3-day rural and remote medicine conference, inquiring into the participants' training, practice, and experiences with providing healthcare to Indigenous patients. The study included data from 29 participants across Canada who have practiced medicine in a rural setting (population <50 000) for at least 5 years. The emerging themes were grouped into four categories: systemic barriers to healthcare access (physical distance, impact of colonialism), physicians' personal barriers in providing care (lack of cultural awareness, time and resources), physician support (Indigenous community involvement, pay model, access to training), and suggestions for how to support future rural physicians (curricular changes, Indigenous representation, exposure to Indigenous peoples and communities during training). Based on these results, we propose to curriculum developers the importance of increasing exposure to rural and Indigenous communities during medical school and increasing the supports available to medical school students interested in rural and Indigenous healthcare.

Keywords: Indigenous Healthcare, Thematic Analysis, Medical School Curriculum, Rural Healthcare, Canadian Indigenous Peoples

Abbreviations

TRC - Truth and Reconciliation Committee

Introduction

In Canada, Indigenous peoples make up approximately 5% of the total population. From 2016-2021, the Indigenous population grew by 9.4%, surpassing the growth of non-Indigenous peoples in the same period [1]. Despite this population increase, Indigenous peoples in Canada currently experience the poorest level of health status, and their health indicators are often similar to that of developing countries [2]. Indigenous peoples continue to face a lower life expectancy and higher risk of many chronic health conditions, such as cardiovascular disease, diabetes, and mental health challenges, compared to the general population.

There are a multitude of factors that interact in order to lead to these poor health outcomes, such as colonization, experiences within and the legacy of the residential school system, barriers to healthcare access, and negative experiences within the healthcare system [3].

Geographically, many Indigenous peoples live within rural and remote communities and thus often have limited access to healthcare services, thereby increasing the risk of poor health outcomes [4,5]. In order to attain specialist care, residents of these communities often must travel far distances under challenging conditions with little economic support [2]. This thereby creates a geographical barrier to accessing specialized healthcare in a timely manner. Unfortunately, data surrounding the number of healthcare providers available in isolated communities in Canada is not readily accessible, nor is data regarding the availability of healthcare providers to Indigenous patients on remote reservations.

Citation: Dani Lee, Jade Chow, Alexis Baker, Patricia Farrugia. Identifying Potential Areas of Change to Medical School Curricula to Better Support Canadian Rural Healthcare Physicians in Serving Indigenous Populations. *J Clin Med Health Care*. 2025. 2(4): 1-8. DOI: doi.org/10.61440/JCMHC.2025.v2.22

Moreover, anti-Indigenous beliefs and practices that are often propagated by healthcare providers further decreases the quality of care received by Indigenous patients. Oftentimes this is due to stereotypes and assumptions made by the physician, which may be attributed to inadequate cultural safety education of the healthcare provider [6,7]. Healthcare education in Canada has been criticized for its failure to include adequate cultural competency and sensitivity training pertaining to Indigenous health. Specifically, many schools do not acknowledge the effects of colonization on Indigenous communities and fail to include a focus on traditional, holistic approaches to medicine that align with Indigenous practices [8]. Recently, most Canadian medical schools have worked to integrate more Indigenous health content into their curricula. However, the effectiveness of these changes in preparing students to work with Indigenous communities has yet to be clearly elucidated. One survey interviewing medical students found that while changing sociopolitical attitudes has led to students placing a greater importance on knowledge of Indigenous health, longitudinal teachings and experiential learning pertaining to Indigenous health has yet to be integrated into most schools' curricula [9].

Multiple ideas have been proposed to increase Indigenous peoples' access to healthcare and to mitigate geographical disparities. For instance, increasing the scope and accessibility of telehealth in remote Indigenous communities via increased access to high-speed internet reduces geographical limitations in accessing care and reduces patients' travel burden [3]. In addition, increased funding for ambulatory care services in remote Indigenous communities is integral to reducing geographical barriers to healthcare. Furthermore, The Truth and Reconciliation Committee (TRC) has identified 94 Calls to Action that must be put into place to address the ongoing impact of colonization and residential schools on Indigenous peoples in Canada. Call to Action #24 specifically urged for mandatory courses on Indigenous health issues to be incorporated into medical school curricula [10]. Strategies that have been proposed to improve Indigenous medical education include increasing collaboration between Indigenous communities and universities and placing more emphasis on holistic views of health in the medical curriculum [8]. Incorporating these strategies into rural medicine education specifically may be an opportunity to ameliorate the services that rural physicians can provide to Indigenous patients.

Our project aimed to elucidate the challenges faced by rural providers when interacting with Indigenous patients to ascertain how to build on current medical school curricula to educate future generations of rural physicians. Our primary objective was to identify common barriers described by Canadian rural physicians when interacting with Indigenous populations and to identify improvements that can be made to medical school curricula to address these barriers.

Methods

Study Design

The authors conducted a qualitative survey to assess physicians' attitudes and perceptions of common barriers to providing culturally safe care to Indigenous populations in a rural setting. The authors chose this methodology for its ability to incorporate and compare multiple perspectives.

Researcher Characteristics

An Indigenous faculty member and physician supervised the research team, which was composed of three medical students from a Canadian medical school.

Participants

The population of interest for the study was Canadian physicians practicing rural medicine. Participants were included if they had practiced medicine in a rural community (defined here as a community with a population <50 000) in the past five years for a minimum of one year and if they had provided healthcare to Indigenous patients. The population cut-off of 50 000 was taken from the Ontario Ministry of Agriculture, Food, and Agribusiness's definition of rural [11]. Participants were excluded if they had not practiced in a Canadian community or if they were unable to read or write in English.

Participant Recruitment

The research team members recruited participants face-to-face via convenience sampling at a marked booth near the registration area of a rural medicine conference across all three days of the conference. After explaining the questionnaire's goals, the team members recruited all attendees who approached the booth. The authors selected a minimum goal of 12 participants as per recommendations from Ando et. al and Guest et al. for thematic analysis based on the expectation of a homogenous sample population [12,13].

Data Collection

The research team collected data via questionnaires designed to outline participants' background, experiences, and perspectives on serving Indigenous patients in rural communities. The team developed the questionnaires, which were based on barriers specific to Indigenous health and rural medicine that were previously identified in the literature, in consultation with Indigenous medical experts [3,6,7]. The participants filled out the questionnaires, which took an estimated 10-30 minutes to complete, independently at the recruitment booth via written text-based responses on paper immediately after recruitment. Research team members were available for clarification at all times during questionnaire collection.

Data Analysis

The research team anonymized and transcribed the questionnaires verbatim. The team estimated participants' demographics and training background through descriptive statistics. The team used a thematic analysis approach for the rest of the questionnaire responses. Transcripts were organized and grouped based on the question stems from the original questionnaire: perceived systemic barriers to access; personal barriers in providing care; perceived requirements for physician support; and ways to support future physicians. Two research team members (co-authors DL and AK) then independently generated initial codes from the transcribed data. Well-demarcated codes with no overlap were then discussed by the respective coders to ensure consistency of the coding structure. Responses were analyzed for themes of broader significance by a different research team member (co-author JC). Themes were then reviewed by all team members and a secondary level of analysis was completed, ensuring that the identified themes were relevant to the objectives of the study and also identified higher-level categories. This

process was repeated for all four groups of responses collected. The results were reviewed in order to identify areas of possible changes to medical school curricula.

Validity and OCAP Principles

The Consolidative Criteria for Reporting Qualitative research was used to report findings. Credibility was established by investigator triangulation with researchers from diverse perspectives, including those with interests in rural medicine and Indigenous health and those with extensive experience working with Indigenous populations. An Indigenous faculty member supervised the project in its entirety, provided guidance throughout the research process and reviewed all components of data analysis, manuscript writing and data collection. Furthermore, to increase the transferability of findings, thick descriptions were used to describe the study sample and setting. Dependability and confirmability were addressed by clearly documenting the research process and maintaining an audit trail.

Participant and Public Involvement

An Indigenous faculty member and physician was directly involved in the creation of this study. The study was reviewed at all stages by a member of the Indigenous research hub at an institutional Indigenous Health Learning Lodge.

Ethics

Informed consent was obtained from all participants prior to questionnaire completion. No identifying information was collected and all responses were anonymized. This study received approval from the Hamilton Integrated Research Ethics Board (study number 16121).

Results

Participant Demographics

In total, approximately 40 conference attendees were approached. Out of this 40, 4 participants were excluded, as they did not meet the five minimum years of practice in a rural setting, and 29 completed the questionnaire (Table 1). Out of the total of 29 participants who participated in this study, 31% were from British Columbia (n=9), 41% were from Ontario (n=12), 14% were from Quebec (n=4), and 7% were from Alberta and Saskatchewan respectively (n=2). There were no participants from Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, the Northwest Territories, Yukon, or Nunavut. 76% of participants had graduated from medical school prior to 2010 (n=22). 66% of participants had not received any formal Indigenous education in medical school (n=19). 90% of participants had received some training dedicated to Indigenous history, healthcare and culture outside of medical school (n=26) (Table 2).

Table 3: Questionnaire Groups and Themes

Summary of groups and themes identified in the questionnaire responses

Group 1: Perceived systemic barriers to rural healthcare access for Indigenous patients	
Impacts of colonialism on the healthcare system	Medical system structure/appointment-based care, racism and biases, lack of communication with Indigenous communities, failure to include Indigenous Elders in decision-making, poor representation of Indigenous healthcare providers

Table 1: Participant Demographics

Demographics of participants who completed the questionnaire distributed at the rural and remote medicine conference.

Province of Practice	
Province	n (%)
Alberta	2 (6.9%)
British Columbia	9 (31.0%)
Ontario	12 (41.4%)
Quebec	4 (13.8%)
Saskatchewan	2 (6.9%)
Years of Practice	
Average	22.4
Median	21
Range	n (%)
<10	5 (17.2%)
10-19	9 (31.0%)
20-29	4 (13.8%)
30-39	7 (24.1%)
>=40	4 (13.8%)

Table 2: Indigenous Health Training Background of Participants

Training received by rural physicians on Indigenous health in and outside of medical school.

Training in Medical School ^a	n (%)
Yes	12 (42.9%)
No	16 (57.1%)
Training Outside of Medical School ^b	
Yes	20 (90.9%)
No	2 (9.1%)

^a1 participant did not fill out this area of the questionnaire. ^b7 participants did not fill out this area of the questionnaire

Groups and Themes

Themes describing practitioners' perceptions were described in relation to four overarching groups: 1) perceived systemic barriers to access; 2) personal barriers in providing care; 3) perceived requirements for physician support; and 4) ways to support future physicians (Table 3). Each theme is described in relation to its grouping below.

Geographic isolation	Cost of traveling, long travel distances, lack of specialist services
Group 2: Rural physicians' personal barriers to providing quality care to Indigenous patients	
Lack of cultural awareness	Lack of knowledge of local Indigenous communities/history, personal biases, heightened anxiety, lack of training in trauma-based care
Perceived lack of personal time and resources	Fee-for-service model limiting appointment times, limited Indigenous-specific supports in isolated communities, lack of time to pursue continuing education
Group 3: Physician Supports	
Community involvement	Increased collaboration and bonding with local Indigenous communities, attending traditional ceremonies and cultural activities where appropriate
Increased accessibility to training	Increased formal training in medical school, learning from Indigenous communities directly
Group 4: Training future rural physicians	
Curricular changes	Earlier exposure to Indigenous ways of knowing, formal mandatory teaching on the Residential School system and impacts of colonialism in healthcare, increase teaching on local Indigenous communities in medical school
Indigenous representation	Increasing Indigenous representation among medical students, increasing Indigenous and rural faculty and mentors
Exposure to rural medicine in Indigenous communities in medical school training	Clinical experiences in rural and/or Indigenous communities in medical school

Perceived systemic barriers to access. The two primary themes that emerged pertaining to systemic barriers to healthcare accessibility for Indigenous patients living in rural communities included the A) impact of colonialism on the healthcare system and the current limitations of the Western model of healthcare in providing care to Indigenous peoples and B) geographic isolation as a consequence of being in a rural setting

Impact of colonialism on the healthcare system and current limitations of the Western healthcare system. Over half of the participants stated that the influence of colonialism on the shaping of the Canadian healthcare system meant that Indigenous ways are not integrated into healthcare interactions. Some examples included the appointment-based model of primary care and the conflicts between healthcare confidentiality requirements and Indigenous cultural aspects of community and family involvement. The clinicians felt unsure as to how to navigate different cultural expectations within a colonialist healthcare system.

Barriers to healthcare accessibility. Approximately a quarter of the participants highlighted how physical access to healthcare for rural Indigenous communities was very limited in regard to transportation, travel funding, and inability to treat complex diseases in a rural setting. Five participants mentioned that those living in Indigenous communities often needed to travel significant distances to be seen by a provider, often without having access to transportation. In addition, if further testing was required in an urban setting, many patients in rural Indigenous communities did not have the ability to travel for testing or specialist appointments.

Personal barriers to providing care. The two primary themes regarding personal barriers to providing care to rural Indigenous populations that emerged were A) a lack of cultural awareness

regarding best care practices for Indigenous populations, plus B) a perceived lack of personal time and resources.

Lack of cultural awareness. Over three quarters of participants highlighted that they were unable to provide culturally appropriate care to rural Indigenous populations based on lack of knowledge (including knowledge of local Indigenous communities) and/or personal implicit biases. Furthermore, some Indigenous participants stated that they had observed their colleagues asking inappropriate questions or making assumptions based on a patient's Indigenous status. Other participants highlighted an increase in anxiety when working with Indigenous populations due to a heightened awareness of issues with Indigenous' populations interactions with the healthcare system, thus leading to difficulties with communications due to fear of inadvertently acting in an inappropriate manner.

Perceived lack of personal time and resources. Approximately half of the participants stated they felt that they did not have the time necessary to provide culturally safe care. Many provided examples of the fee-for-service model leading them to feel that they could not communicate effectively with Indigenous populations in the time allocated for appointments. Others felt they did not have the personal time necessary to take continuing education regarding Indigenous peoples outside of working hours. Some felt limited by the inability to access Indigenous-specific supports for their patients due to decreased resources in rural settings.

Physician support. Themes regarding providing further support to physicians included 1) more community involvement from Indigenous peoples and 2) increased accessibility to training regarding culturally safe practices.

Community involvement. Many participants felt that having more community involvement from Indigenous communities would help them provide better patient care. Some highlighted how attending traditional cultural ceremonies had allowed them to bond with their respective Indigenous communities and provided a better cultural context for them to provide care. Others stated that speaking to the communities directly regarding their specific healthcare needs and challenges would help them provide better care.

Increased accessibility to training. Many participants stated they would feel more confident in providing care to Indigenous communities if they had more training. Many stated that they had only had superficial lectures, workshops, or online modules in the past, and would benefit from learning from Indigenous persons themselves. Many stated that they had no formal training in Indigenous history in medical school, and had to seek out further educational opportunities as a practicing physician.

Future Physicians. Themes regarding how to better support future rural physicians included 1) curricular changes 2) increased representation in medical schools and 3) early exposure to Indigenous peoples in medical training.

Curricular changes. Many stated that they believed that changes to the medical school curriculum would be beneficial for future practitioners working with rural Indigenous communities. Some examples included early exposure to Indigenous ways of knowing, residential schools, and the history of colonialism in healthcare. Some participants felt that having more education regarding Indigenous communities in medical school would have aided them in their current rural practices.

Indigenous representation. Some participants stated that having more Indigenous medical students and thus more Indigenous providers would be beneficial with regards to providing healthcare to Indigenous communities. Many highlighted that having more Indigenous physicians working in their communities would be very beneficial both for healthcare access and relationship building.

Exposure to Indigenous peoples in medical training. Many participants highlighted that early exposure to Indigenous communities and learning from Indigenous communities directly would greatly benefit future rural physicians. Some mentioned that their most beneficial learning was directly in Indigenous communities. Many felt that exposure to Indigenous communities and hearing directly from the communities helped them better comprehend the systemic barriers that Indigenous peoples face; as such, they recommended that early exposure be integrated into medical school training directly.

Discussion

Rural Indigenous populations experience a markedly lower quality of healthcare in comparison to the rest of Canada. This disparity becomes apparent with the increase in unmet healthcare needs and lower life expectancy among Indigenous patients in comparison to the general population [14]. This lower quality of health among the Indigenous population can be attributed in part to discrimination from healthcare providers as well as to the shortage of healthcare services physically accessible

for those living in geographically isolated communities. Our study sought to elucidate rural physicians' experiences with serving Indigenous populations and their perspectives on how to improve care, particularly in the context of adapting medical school curricula to train future physicians to better address these health inequities.

The majority of themes identified regarding structural and personal barriers to accessing quality healthcare were consistent with those documented previously in the literature. These include difficulties managing the long travel distances to access care as well as the lingering effects of colonialism. For example, one study found that 23% of Indigenous mothers living in a rural area travelled 200 km to access care in comparison to 2.1% of non-Indigenous mothers living in a rural area [15]. With regards to geographic isolation, previous ideas that have been proposed to improve accessibility to quality healthcare for Indigenous peoples living in remote areas include increasing access to high-speed internet to improve telehealth services and increasing funding for ambulatory care services and transportation [3,8].

Some of the questionnaire responses also identify barriers that are less commonly explored. For instance, participants commented on the perceived shortage of time as a barrier to providing culturally safe care, particularly in fee-for-service based settings, and their heightened anxiety about inadvertently causing harm. These experiences highlight an ongoing need for Canadian medical schools to more routinely offer hands-on clinical experiences to help students learn to effectively navigate clinical encounters with Indigenous patients.

With regards to areas of support for rural physicians working with Indigenous communities, many physicians advised increasing opportunities to learn about and engage with the local community both in and out of the clinical setting. An explorative research study interviewing primary healthcare providers and patients in northern Canadian remote communities found that healthcare providers felt better prepared to serve their communities when provided with relevant orientation and cultural training before practicing in the community. There was also an expectation that to build rapport with patients, the healthcare providers would need to be engaged with the community [16].

Interestingly, the responses provided regarding suggestions for Indigenous health teaching in the setting of rural medicine were almost unanimous. While all respondents had received training on Indigenous health during their careers, very few received formal education in the area during their medical school training. All respondents unanimously suggested that increasing exposure to rural medicine in Indigenous communities through both clinical rotations and classroom teaching would better prepare future rural physicians to work with Indigenous populations. This directly relates to the Call to Action #24 of the TRC which states "We call upon medical and nursing schools in Canada to require all students to take a course dealing with Aboriginal health issues... This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism" [10]. Other strategies that have been proposed in the past include increasing collaboration between Indigenous communities and universities and placing more emphasis on holistic views of health that better align with Indigenous practices in the medical curriculum [8].

Currently, the degree to which rural- and Indigenous-specific health training is incorporated into Canadian medical school curricula varies greatly across institutions. Some, but not all, medical schools include a mandatory rotation in rural medicine. Only 50% of Canadian medical schools offered longitudinal integrated clerkship opportunities based in rural communities [17]. Even fewer medical school programs offer rural rotations in which students have the opportunity to work directly in an Indigenous community. One Ontario school, the Northern Ontario School of Medicine (NOSM), has implemented Indigenous health as a core competency of its program and has incorporated a mandatory pre-clerkship placement in a Northern or rural Indigenous community into students' training; a study examining the effectiveness of the NOSM Indigenous Health curriculum found that students experienced a growth in knowledge and confidence in serving Indigenous patients [18,19]. Unfortunately, similar initiatives are lacking among other schools across the country. Moreover, while the prevalence of Indigenous health content in healthcare training is increasing, the effectiveness of existing Indigenous cultural safety training programs in healthcare remains an under-researched topic [20]. One systematic review reported that the time allocated to Indigenous health content across medical and health professional education programs ranged from "one-off" sessions to longitudinal learning, with total hours of training ranging from 1 to more than 40; of note this review was not limited to Canadian undergraduate medical school programs [21].

In order to address the primary aim of the study, we utilized the themes from the data analysis and responses from questionnaire participants to create suggestions for changes to medical school curriculum. These proposals were not previously identified as specific objectives for the intersection of Indigenous Health curriculum and rural medicine learning objectives by the Association of Faculties of Medicine Canada and the National Circle for Indigenous Medical Education. The suggested changes are as follows (Table 4):

1. Introducing earlier and longitudinal mandatory courses specifically dedicated to teaching medical students the history of Indigenous peoples of Canada, the consequences of the Residential school system, Indigenous worldviews and practices particularly in the context of medicine, challenges experienced by Indigenous patients and patients living in rural areas, and the history and culture of local Indigenous groups.
2. Including mandatory cultural competency and safety training, in addition to trauma-based care, prior to starting clinical placements.
3. Implementing mandatory rural clinical placements and clinical placements within Indigenous communities, in partnership with the communities involved. Site-specific orientation, including background on the rural community and local Indigenous populations, should be provided in advance.
4. Increase student awareness about their local Indigenous health services.
5. Increasing Indigenous faculty and mentors in combination with increased mentorship opportunities for students interested in rural medicine. This may include future opportunities to partner with the Society of Rural Physicians of Canada to inquire about facilitators who can support

current learning needs of students pertaining to Indigenous patients and rural care challenges.

Table 4: Summary of Recommendations

Recommendations proposed for Canadian medical school curricula.

Recommendations
Increasing formal and longitudinal, teaching on Indigenous history, culture, medical practices, and local Indigenous groups
Training students on cultural safety and trauma-based care in preparation for clinical placements
Mandatory rural placements in Indigenous communities with appropriate orientation
Increase awareness about local Indigenous health services
Increase Indigenous and rural mentorship opportunities

We acknowledge that our study has several limitations. First, our study focused on the experiences of practicing physicians only, and thus the perspectives of community members were not included. Second, we recognize that selection bias may have impacted our sample population. Given that our participants were physicians attending a rural and remote medicine conference who volunteered to complete the questionnaire, our sample group was more likely to consist of individuals with a pre-existing interest and knowledge in rural medicine and Indigenous health. As such, it may not be representative of all rural physicians. Third, French-speaking physicians were excluded from the study as the questionnaire was only available in English; there were no participants from the territories (i.e. Yukon, the Northwest Territories, Nunavut); and none of the participants recruited were from Manitoba, Nova Scotia, New Brunswick, Newfoundland and Labrador, or Prince Edward Island. Consequently, rural medicine practices from Francophone communities and from the missing provinces and territories were not represented. Finally, we recognize that the definition of "rurality" is complex with great variation across sources. We selected our definition of rural based on the definition provided by the Ontario Ministry of Agriculture, Food and Agribusiness's definition [11]. However, we acknowledge that our definition does not address proximity to larger metropolitan centers nor does it account for urban centers located in relatively more remote regions of Canada; for instance, while certain cities in Northern Ontario would be classified as urban based on population size, the population density as well as healthcare experiences in these regions differ from those seen in the urban centers of Southern Ontario [22].

Conclusion

One of the well-documented shortcomings of Canadian healthcare is unfortunately the inequities that exist in healthcare accessibility for Indigenous peoples, particularly those living in rural and remote regions of the country. Our study surveying rural physicians demonstrates that challenges arise from a combination of various systemic and personal factors, including but not limited to geographic isolation, the legacy of colonialism, and discriminatory practices perpetuated by healthcare providers. As such, using the areas of improvement raised by rural physicians, we have proposed suggestions to the medical school curriculum to increase training in rural medicine and Indigenous health,

along with the intersection of these two fields. It is our hope that measures such as these will help train future rural physicians to be better equipped to serve the Indigenous population.

Acknowledgements

We thank the 2023 Rural and Remote Medicine Course organizers for allowing us to distribute our questionnaire at their conference.

Declarations of Interest: none

Funding: This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

Author Biographies

Dr. Dani Lee is currently a rural family medicine resident at the Michael G. DeGroote School of Medicine, McMaster University. She is dedicated to comprehensive family practice with additional interests in women's health, low-risk obstetrics, and emergency medicine. Her research and advocacy interests include promoting accessible healthcare services for marginalized and underserved populations in Canada. She is a first-generation settler and strives to be an ally to and advocate for Indigenous peoples.

Dr. Jade Chow (MD) is a first-year emergency medicine resident at the University of Calgary in Calgary, AB. Her research interests include equitable access to healthcare for rural populations and the patient experience within the healthcare system. She is a proud ally of Indigenous peoples as a second-generation settler of Chinese descent.

Dr. Alexis Baker (née Karasiuk; MD, BEd, BA & Sc) is a first-year anesthesiology resident at McMaster University in Hamilton, Ontario. She has experience working in rural Canada through her previous profession as a high school teacher and is interested in improving healthcare in rural and underserved areas of Canada. She does not identify as Indigenous, although she does have very distant Indigenous heritage with a great-great-grandmother from the Mi'kmaq people group.

Dr. Patricia Farrugia is an Anishinaabe Scholar from Chippewas of Nawash Unceded First Nation, Saugeen Ojibway Territory in Ontario, Canada. She is an Indigenous Orthopedic Surgeon, Associate Dean, Indigenous Health, academic scholar, and researcher in Indigenous Health at McMaster University, Hamilton, Ontario, Canada.

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