

From the community to the classroom: the Aboriginal health curriculum at the Northern Ontario School of Medicine

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More undergraduate medical education programs are including curricula concerning the health, culture and history of Aboriginal people. This is in response to growing international recognition of the large divide in health status between Aboriginal and non-Aboriginal people, and the role medical education may play in achieving health equity. In this paper, we describe the development and delivery of the Aboriginal health curriculum at the Northern Ontario School of Medicine (NOSM). We describe a process for curriculum development and delivery, which includes ongoing engagement with Aboriginal communities as well as faculty expertise.

Aboriginal health is delivered as a core curriculum, and learning is evaluated in summative assessments. Aboriginal health objectives are present in 4 of 5 required courses, primarily in years 1 and 2. Students attend a required 4-week Aboriginal cultural immersion placement at the end of year 1. Resources of Aboriginal knowledge are integrated into learning.

In this paper, we reflect on the key challenges encountered in the development and delivery of the Aboriginal health curriculum. These include differences in Aboriginal and non-Aboriginal knowledge; risk of reinforcing stereotypes in case presentations; negotiation of curricular time; and faculty readiness and development. An organizational commitment to social accountability and the resulting community engagement model have been instrumental in creating a robust, sustainable program in Aboriginal health at NOSM.

Un plus grand nombre de programmes d'études de premier cycle en médecine comportent des cours sur la santé, la culture et l'histoire des peuples autochtones. En effet, on reconnaît de plus en plus, à l'échelle internationale, l'existence d'un important écart entre l'état de santé des peuples autochtones et celui des peuples non autochtones et le rôle que pourrait jouer la formation en médecine dans l'atteinte d'une équité en matière de santé. Dans le présent article, nous expliquons l'élaboration et la mise en œuvre du programme de formation en santé autochtone de l'École de médecine du Nord de l'Ontario (ÉMNO). Nous décrivons un processus d'élaboration et de mise en œuvre qui fait intervenir un engagement soutenu avec les communautés autochtones de même que le savoir-faire du corps professoral.

La santé autochtone fait partie du tronc commun du programme d'études et l'apprentissage est mesuré par des évaluations récapitulatives. Des objectifs liés à la santé autochtone sont à atteindre dans 4 des 5 cours obligatoires, principalement au cours des première et deuxième années du programme. À la fin de la première année, les étudiants font un séjour d'immersion obligatoire de 4 semaines dans la culture autochtone. Les ressources du savoir-faire autochtone font partie de l'apprentissage.

Dans cet article, nous réfléchissons aux importants défis que posent l'élaboration et la mise en œuvre d'un programme de formation en santé autochtone. Nous examinons aussi les différences entre les savoirs autochtone et non autochtone, le risque de renforcement des stéréotypes dans les présentations de cas, la négociation du temps à accorder à cette formation dans le programme d'études, la préparation et le perfectionnement du corps professoral. Un modèle d'engagement de l'organisation envers la responsabilité sociale et d'engagement de la communauté qui en résulte joue un rôle de premier plan dans la création d'un programme de formation robuste et durable en santé autochtone à l'ÉMNO.

INTRODUCTION

The Northern Ontario School of Medicine (NOSM) was the first new medical school established in Canada in more than 30 years. The school was created in 2005, in the decade of “social accountability.”¹ Administrators have been in a unique position to design a medical school with the ongoing ability to respond to the needs of people living in northern Ontario. With a large rural population and large land mass, northern Ontario has smaller and more geographically distant and dispersed urban centres, and overall poorer socioeconomic and health indicators² than southern Ontario. A number of resources concerning the school’s development are available.²⁻⁶

In this paper, we document the development of the undergraduate Aboriginal health curriculum. In

recognition of the dearth of information available concerning Aboriginal health curricula for medical learners globally, our goal is to provide a resource for other medical schools and health science faculties working on the development of a similar curriculum.

Rural health and medicine cannot be comprehensively understood without the explicit inclusion of knowledge and training concerning Aboriginal populations.⁷ Aboriginal people represent about 4.4% of the Canadian population.⁸ Ontario is home to 21.5% of all Aboriginal people in Canada, who make up about 2% of the province’s overall population. In northern Ontario, Aboriginal people make up 12% of the overall population, 23% of the population in the Northwestern Health District and 11% in the Northeastern Health District (Fig. 1). Of the reserves in Ontario, 83% are located in northern Ontario. Of

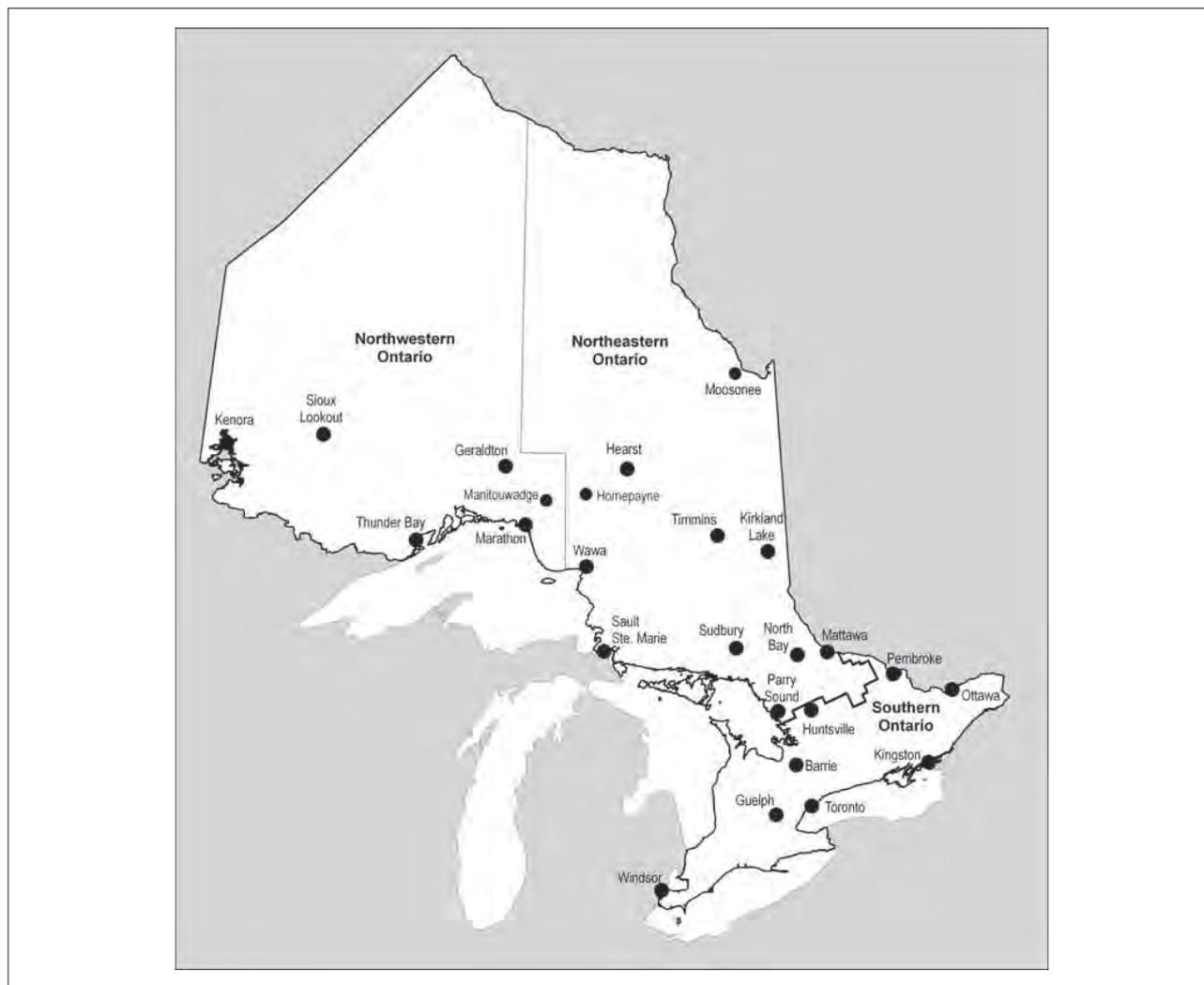


Fig. 1. Map of the geographic boundaries of northwestern and northeastern Ontario. (Used with permission: Centre for Rural and Northern Health Research [2011]. Map of northern Ontario. Using Local Health Integration Networks [boundary file, Ministry of Health and Long-term Care, 2006, distributed by Land Information Ontario, Ministry of Natural Resources, through the Ontario Geospatial Data Exchange], and Populated Place Names [PPN], [Ontario point file, DMTI Spatial, Inc., 2010-08-15]; accessed through Scholars GeoPortal, Ontario Council of University Libraries. Produced [J. Sherman] using ArcGIS 9.3 [ESRI, Inc., Redlands, California]. Laurentian University, Sudbury, Ontario.)

these, 35% are remote (i.e., accessible by air or winter roads only), 51% are rural, and 14% are urban or periurban (i.e., small towns or First Nations communities in close proximity to urban centres).

Aboriginal people in Canada are overrepresented in their rates of virtually all infectious, chronic and mental illnesses, and they continue to have higher infant mortality and lower life expectancy than non-Aboriginal people.¹⁰ Poor health is attributed to a unique and complex set of Aboriginal determinants of health, including historical relationships with the federal government and access to adequate income, resources, education and health care.¹¹ Addressing health inequity through medical education is one way to begin to work toward improved health outcomes for marginalized populations such as Aboriginal people.¹²

Over the past decade, medical schools in countries with colonial legacies, such as Australia, Canada and the United States, initiated programs and practices aimed at increasing the number of Aboriginal physicians in the workforce and improving physician training concerning Aboriginal health. There are now 2 countries with national frameworks for Aboriginal health curricula for medical education: Australia (The Committee of Deans of Australian Medical Schools Indigenous Health Curriculum Framework¹³) and Canada (the First Nations, Inuit, Métis Health Core Competencies developed by the Indigenous Physicians Association of Canada and the Association of Faculties of Medicine of Canada¹⁴). The First Nations, Inuit, Métis Health Core Competencies¹⁴ outline an Aboriginal health curriculum framework for undergraduate medical education in Canada that is organized around the CanMEDS (Canadian Medical Education Directions for Specialists) Physician Competency Framework.¹⁵ In addition, some medical schools in Canada have independently developed Aboriginal health curricula as well as recruitment and retention programs.^{16–18} There is no national strategy in the United States, but several medical schools, such as the University of Washington School of Medicine¹⁹ and the University of North Dakota School of Medicine and Health Sciences,²⁰ have undertaken specific programs aimed at increasing the number of Native American physicians in the workforce and providing optional elective experiences in Aboriginal health programs.

ABORIGINAL INVOLVEMENT IN THE CURRICULUM DEVELOPMENT

The NOSM was established with a social accountability mandate to be responsive to the needs of the

people and communities of northern Ontario. Among the important populations of special interest in northern Ontario are Aboriginal people. The Aboriginal health curriculum for the NOSM undergraduate medical program was developed by faculty experts alongside an ongoing process of community engagement.⁴ The school's community engagement model is defined by the active participation of communities in shaping and delivering medical education. The NOSM began this process in 2003 when it hosted the "Follow Your Dreams" planning workshop with Aboriginal partners.²¹ The recommendations from this session helped to shape an organizational structure designed to facilitate perpetual community engagement. Since then, participation has been supported through direct involvement of Aboriginal people in the day-to-day activities of the school. This includes Aboriginal representation on the school's board of directors and academic council; the establishment of the Aboriginal Reference Group (advisors to the dean); the establishment of the office of Aboriginal Affairs; the hiring of Aboriginal staff; the involvement of Aboriginal faculty members, students and elders;²² and opportunities for Aboriginal community involvement in the development and delivery of the medical degree program curriculum. Two subsequent workshops, "Keeping the Vision" (2006) and "Living the Vision" (2011), have been held to review NOSM's progress from the perspective of the Aboriginal community (Table 1). Satisfaction with what had been implemented to date was noted at these workshops; however, ideas continue to be suggested to keep strengthening the curriculum and community engagement activities.^{23,24}

ABORIGINAL HEALTH CURRICULUM

The undergraduate curriculum is organized around 5 core courses delivered over 4 years: Northern and Rural Health, Personal and Professional Aspects of Medical Practice, Social and Population Health, Foundations of Medicine, and Clinical and Communication Skills in Health Care. Years 1 and 2 primarily involve classroom learning, combined with community and clinical learning experiences. In year 3, all students participate in an immersive experience of community-based medical education in a rural community, known as the Comprehensive Community Clerkship. Year 4 is a traditional clerkship at a tertiary care regional hospital. The Aboriginal health learning objectives are delivered in 4 of the 5 courses (excludes Foundations of Medicine), with the greatest emphasis in Northern and Rural Health (Table 2).

Table 1: Summary of recommendations for the Northern Ontario School of Medicine Aboriginal health curriculum from community engagement sessions

Category	Follow Your Dreams (2003)	Keeping the Vision (2006)	Living the Vision (2011)
Content	<ul style="list-style-type: none"> Aboriginal curriculum content should include the following: culture, history, health status, social issues, traditional medicine, colonization, residential schools 	<ul style="list-style-type: none"> Move focus away from cultural competency to awareness and sensitivity Provide instruction on using traditional medicine alongside Western medicine 	<ul style="list-style-type: none"> Revise curriculum to better prepare students for the 106 Integrated Community Experience Include teaching about traditional medicines in all years Expand opportunities for NOSM staff, faculty and learners to learn “culturally safe” behaviour
Process	<ul style="list-style-type: none"> Include teachings by Aboriginal healers Ensure curriculum is developed in consultation with Aboriginal advisors, healers and elders Include student placements in Aboriginal communities to facilitate experiential learning early in the medical degree program Ensure a mechanism for continuing consultation on the curriculum with elders, youth and communities 	<ul style="list-style-type: none"> Provide opportunities for longer-term student placements in Aboriginal communities (electives) Increase elder involvement in the curriculum 	<ul style="list-style-type: none"> Provide greater and more meaningful opportunities for Aboriginal communities to engage with the curriculum Facilitate greater involvement of nonacademic Aboriginal knowledge holders in the delivery of curriculum (e.g., elders and Aboriginal health professionals) Include more opportunities for students and staff to spend time in the Aboriginal communities Increase feedback opportunities from students and NOSM to community partners after placement
Structure	<ul style="list-style-type: none"> Ensure content is delivered throughout the curriculum 	<ul style="list-style-type: none"> Increase the number of Aboriginal faculty through active recruitment 	<ul style="list-style-type: none"> Ensure active involvement of the Aboriginal Reference Group members in all areas of NOSM

NOSM = Northern Ontario School of Medicine.

Table 2: Northern and Rural Health course: summary of undergraduate Aboriginal health curriculum, years 1 and 2

Learning topic	Summary of content
Aboriginal people in Canada	<ul style="list-style-type: none"> Terminology Treaties and political structures Cultural diversity
Aboriginal culture and history	<ul style="list-style-type: none"> Colonialism Historical and intergenerational trauma Resilience Empowerment Social determinants, social justice and health equity
Aboriginal health services	<ul style="list-style-type: none"> Policy and jurisdiction Models of care Indigenous healers Self-determination
Aboriginal culture and medicine	<ul style="list-style-type: none"> Indigenous health models The role of culture in health and healing
Disease trends in Aboriginal populations	<ul style="list-style-type: none"> Rates of chronic, infectious and mental illness Factors contributing to health outcomes
Aboriginal patient care	<ul style="list-style-type: none"> Explanatory models of illness Communication, interpreters Cultural safety Traditional medicine Bioethics
The role of the student in Aboriginal relationship development	<ul style="list-style-type: none"> Reflection Advocacy
Aboriginal health research	<ul style="list-style-type: none"> Aboriginal research ethics

Table 3: Content of undergraduate Aboriginal health curriculum, years 1 and 2

Module	System	Aboriginal content*	Aboriginal focus†
Year 1			
CBM 101	Introduction	X	
CBM 102	Gastrointestinal	X	
CBM 103	Cardiovascular/ respiratory	X	
CBM 104	Central and peripheral nervous	X	
CBM 105	Musculoskeletal		
CBM 106‡	Endocrine	X	X
Year 2			
CBM 107	Reproductive system	X	
CBM 108‡	Renal	X	
CBM 109	Hematology/ immunology	X	X
CBM 110‡	Neurological/ behavioural	X	
CBM 111	End of life issues	X	

CBM = case-based module.
 *Module contains objectives/content concerning Aboriginal health, but it is not the focus of the entire module.
 †Aboriginal health is the overall theme for human sciences content in the module.
 ‡Integrated Community Experience (4-week community placements during module).

Aboriginal health topics are interwoven through various curricular activities and are delivered in 10 of 11 case-based modules in years 1 and 2 (Table 3). Most of the Aboriginal health objectives are covered during case-based learning sessions. Aboriginal health objectives are also covered lightly in weekly topic-oriented sessions, in a whole-group session and a structured clinical skills session (Table 4). The Aboriginal health curriculum is “core” curriculum for all students and the objectives are assessed in formal summative assessments, including an Objective Structured Clinical Examination station.

Cultural immersion: the Integrated Community Experience

Through a process of partnership and consultation with Aboriginal communities in northern Ontario, NOSM implemented a mandatory 4-week Aboriginal cultural immersion experience for all students, beginning with its charter class. The school currently has long-term memorandums of understanding with 32 Aboriginal communities and organizations to facilitate the placement.⁶ The placement, known as the 106 Integrated Community Experience module, occurs during the final 6 weeks in year 1. The first 2 weeks include on-campus instruction on Aboriginal communities, culture, history and health, including sessions with elders, Aboriginal staff and faculty experts.

Once in the host community, students continue their medical education sessions using distributed learning technologies. The curriculum is adjusted to allow time to focus on cultural activities and community learning, as determined by the community partners. Students keep a personal reflective journal throughout the experience. Students track their community learning and prepare a reflective presentation on their experience that is presented to the community before they depart and again to their peers and faculty for summative evaluation upon returning to campus. Students must pass this assessment to progress to year 2 of the undergraduate program. At the end of the placement, partnering communities are provided with an opportunity to evaluate the experience from the communities’ perspective.

DISCUSSION

The NOSM’s development and integration of the Aboriginal health curriculum, using a community engagement approach, is consistent with calls for “decolonizing Aboriginal health.”⁷ It has required a sustained financial and time commitment, a support-

ive organizational culture and the trust of Aboriginal partners across northern Ontario. Our involvement with the development of the curriculum allows for reflection on the substantive challenges encountered and what we observe as possible signs of success in our early years.

First is our observation of conflict between Aboriginal and non-Aboriginal knowledge systems, with a bias toward Western medicine. Particular issues we have encountered include the need to advocate for the involvement of elders in teaching and the use of Aboriginal knowledge resources normally considered unconventional. The need for such an approach was identified during the first workshop consultation, with subsequent workshops reinforcing the need for this approach.^{21,23,24} This tension is representative of Willie Ermine’s discussions of an “ethical space” where power imbalances need to be addressed so that Aboriginal and non-Aboriginal ways of knowing can come together and be equally valued.²⁵ The immersion experience is one example of how NOSM was able to place value on Aboriginal knowledge.

The second significant challenge was the need to be sensitive to misconceptions and stereotypes associated with Aboriginal people and communities in Canada and to ensure our curriculum did not reinforce these in any way. The HIV case presented in Table 4 is an example of this challenge. Faculty, Aboriginal staff and community representatives created a carefully constructed case representing a likely scenario of HIV infection faced by many urban Aboriginal people; yet, at the same time, we recognized that the case presentation could reinforce stereotypes. In an attempt to highlight cultural strength and resilience and to balance the presentation of any negative stereotypes, we included a story of the process of this man’s spiritual, physical, mental and emotional healing as he and his partner embraced cultural teachings and practices to help cope with his HIV diagnosis. Despite this, the case has always been controversial and serves to remind us of our need for high-level oversight and vigilance when developing case presentations involving Aboriginal case participants.

Negotiating space in the curriculum was less of an issue at NOSM, where our social accountability mandate and curricular structure supports learning in 3 courses primarily concerned with human sciences content: Northern and Rural Health, Personal and Professional Aspects of Medical Practice, and Social and Population Health. The notion that something must be dropped from the curriculum every time something new is added is a common concern in traditional medical school curricula,

Table 4: A snapshot of the delivery of the Aboriginal health curriculum

Curricular session	Description	Session structure	Example
Case-based learning	Weekly small-group, facilitated sessions primarily covering course objectives from the following: Northern and Rural Health; Personal and Professional Aspects of Medicine; Social and Population Health	<ul style="list-style-type: none"> • Small group • Nonexpert facilitated • Objective driven • Case presentation • Structured discussion • Required resources 	<p>Session title: “Preparing for the Journey”</p> <p>An exploration of local Aboriginal beliefs and practices surrounding death and dying</p> <p>Topics: Aboriginal palliative care; Diversity and cultural beliefs; Spirituality; Bioethics, noninterference and truth-telling; Cultural safety; The use of technology in Aboriginal patient care</p> <p>The case: A First Nations man is diagnosed with colon cancer. He prefers to return to his First Nation community to die.</p> <p>Structured discussion:</p> <ol style="list-style-type: none"> 1) Consideration of Aboriginal peoples’ views on death and dying in northern Ontario, including the role of the family, diversity of Aboriginal beliefs, and how culture may influence the patient’s choices at end of life. 2) Consideration of the physician’s role in facilitating choices Aboriginal patients may make about their end-of-life care. <p>Resources: Commissioned article on Anishinaabe views on death and dying by a local Anishinaabe elder, and national Aboriginal palliative care resources (print and video)</p>
Topic-oriented session	Weekly small-group, facilitated sessions primarily covering course objectives from Foundations of Medicine	<ul style="list-style-type: none"> • Small group • Nonexpert facilitated • Objective driven • Case presentation • Semistructured discussion • Required resources 	<p>Session Title: “Patient Encounter: Steve and Maggie”</p> <p>An exploration of issues concerning HIV/AIDS in Aboriginal people</p> <p>Topics: Culturally safe health promotion; Ethics — risk and disclosure; Incidence and prevalence; Stigma; Transmission; Life-cycle and clinical course of HIV</p> <ul style="list-style-type: none"> • Clinical management of HIV <p>The case: The case features an Aboriginal physician and describes at length how her Aboriginal client became infected with HIV by injection drug abuse and overcame a drug addiction through an Aboriginal Restorative Justice Program in Toronto. It describes how the man turned back to the Aboriginal community, traditions and medicines to heal from his addiction. The case description is much longer to accommodate detailed information students must understand about the life history of the Aboriginal case participants.</p> <p>Semistructured learning: Within this context students explore</p> <ol style="list-style-type: none"> 1) biomedical aspects of HIV transmission; 2) clinical management of HIV; 3) exploration of how health care is experienced by Aboriginal people, the role of culture in healing, and the need for culturally sensitive approaches and care. <p>Linkages: The case participants reappear in a case-based learning session where students more thoroughly examine population health data on HIV/AIDS in Aboriginal people and Aboriginal-specific messages about risk, health promotion and prevention.</p> <p>Resources: Journal articles, medical texts and literature published by Aboriginal organizations.</p>
Whole-group sessions	Weekly 3-hour didactic sessions, which primarily cover objectives from the Foundations of Medicine course	<ul style="list-style-type: none"> • Large group • Objective driven • Lecture • Required resources 	<p>Session title: “Medicine, Health and the History of Relations Between Aboriginal and non-Aboriginal Peoples”</p> <p>Topics: Colonization and its impacts; Historical and contemporary government policy; Policy as a determinant of health; Treaties; Indigenous self-determination in health; The importance of culture in healing; Relevant developments in international, national, and provincial indigenous health policies; Contemporary Aboriginal health programs and health services; Recent challenges and advances in Aboriginal health; Resilience; Terminology</p> <p>Resources: Journal articles, books, media reports, materials published by Aboriginal and federal health organizations, and relevant websites</p>
Structured clinical skills	Weekly 3-hour instruction and practice sessions, which primarily cover objectives from the Clinical Skills course	<ul style="list-style-type: none"> • Small group • Clinical instructor • Standardized patients • Required resources 	<p>Students currently have 1 structured clinical skills session focused on Aboriginal cross-cultural communication in their first year. In the encounter students must elicit an Aboriginal patient’s health beliefs and negotiate a culturally sensitive treatment plan. During this session students are also introduced to techniques when working through an interpreter.</p>

which are constrained by discipline and lecture-based courses. The NOSM curriculum includes the same learning objectives of other medical school curricula (primarily in the Foundations of Medicine, and Clinical and Communication Skills in Health Care courses), as well as covering human sciences learning objectives, which generally are not well covered in traditional curricula. However, despite this emphasis, it has been our experience that curriculum committees are still primarily concerned with accreditation standards and licensing examinations, and are largely controlled by those coming from medical/Western epistemologies. This creates an environment where space and resources for Aboriginal health must be continually justified. This struggle is most obviously reflected at NOSM in the drop off in Aboriginal health learning objectives in years 3 and 4, in which students are on clinical placements. We suggest that negotiation of space will continue to be a problem for Aboriginal health curricula at all medical schools until there is greater acceptance of Aboriginal ways of knowing and Aboriginal health is given more prominence in the Medical Council of Canada Qualifying Examination and accreditation standards.

Finally, an equally important challenge has been faculty readiness. With our emphasis on self-directed learning, the skills of tutors, facilitators and preceptors are crucial. Many of NOSM's faculty members have never benefited from the same education concerning Aboriginal health that our students receive and may not be able to provide appropriate mentorship on this topic. The school does not require faculty who are facilitating Aboriginal health sessions to have expertise in a subject or participate in any training on the topic. This sometimes results in contradictory messages being relayed in the "hidden curriculum," especially during clinical teaching. Although NOSM has provided numerous faculty development sessions on Aboriginal health, participation remains low.

Measuring the impact of such a curricular program is challenging, and efforts are underway to begin to track specific outcomes. We can gauge success at this point in history only in relation to 1) the thoroughness and robustness of the resulting curriculum (Table 2); 2) our ability to respond to ongoing guidance from Aboriginal community partners, which is possible through sustained organizational commitments ensuring retention of faculty expertise, Aboriginal staff and programs, and Aboriginal participation in the school; 3) the establishment of 32 long-term formalized relationships with Aboriginal communities across northern

Ontario; and 4) the degree of satisfaction reported by community partners to date.^{23,24} Our success in meeting our long-term goal of contributing to health equity for Aboriginal populations in northern Ontario will take many years to be realized.

SUMMARY

Social accountability is the mandate that guides the development of the Aboriginal health curriculum at NOSM. Community engagement is the mechanism that has allowed us to fulfill this mandate in a way that is responsive to, and respectful of, Aboriginal communities. This model ensures that Aboriginal people in northern Ontario have influence over the development and delivery of the curriculum. Their vision, shared with us, includes a school that welcomes inclusion, representation and participation of Aboriginal people in all aspects of the school, as well as a curriculum that is reflective of their culture and health care beliefs and requires students to step out of the classroom and experience life in an Aboriginal community.

What we have reported on represents a moment in time of a grassroots model of medical education. It encompasses all of the elements of community-based participatory approaches and community–university partnerships. It is our contention that this strong commitment to community has resulted in an ethical space for the development and delivery of Aboriginal health in undergraduate medical education at NOSM.

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REFERENCES

1. Boelen C, Heck JE. *Defining and measuring the social accountability of medical schools*. Geneva: World Health Organization; 2005.
2. Strasser R, Lanphear J. The Northern Ontario School of Medicine: responding to the needs of the people and communities of northern Ontario. *Educ Health* 2008;21:212.
3. Strasser RP. Community engagement: a key to successful rural clinical education. *Rural Remote Health* 2010;10:1543.
4. Strasser RP, Lanphear JH, McCreedy WG, et al. Canada's new medical school: the Northern Ontario School of Medicine: social accountability through distributed community engaged learning. *Acad Med* 2009;84:1459-64.

5. Tesson G, Hudson G, Strasser R, et al. *The making of the Northern Ontario School of Medicine: a case study in the history of medical education*. Quebec: McGill-Queen's University Press; 2009.
6. Strasser R, Hogenbirk JC, Minore B, et al. Transforming health professional education through social accountability: Canada's Northern Ontario School of Medicine. *Med Teach* 2013;35:490-6.
7. Jacklin K, Warry W. Decolonizing First Nations health. In: Kulig JC, Williams AM, editors. *Health in rural Canada*. Vancouver: University of British Columbia Press; 2012. p. 373-89.
8. Statistics Canada. Aboriginal peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 census. Available: www12.statcan.ca/census-recensement/2006/as-sa/97-558/pdf/97-558-XIE2006001.pdf (accessed 2014 Feb 22).
10. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *Lancet* 2009;374:65-75.
11. King M, Smith A, Gracey M. Indigenous health part 2: the underlying causes of the health gap. *Lancet* 2009;374:76-85.
12. Cooper LA, Beach MC, Johnson RL, et al. Delving below the surface: understanding how race and ethnicity influence relationships in health care. *J Gen Intern Med* 2006;21(Suppl 1):S21-7.
13. Phillips G. CDAMS Indigenous Health Curriculum Framework, C.o.D.o.A.M. Schools, 2004; VicHealth Koori Health Research and Community Development Unit. Available: www.medicaldeans.org.au/wp-content/uploads/CDAMS-Indigenous-Health-Curriculum-Framework.pdf (accessed 2014 Feb. 18).
14. IPAC-AFMC (Indigenous Physicians Association of Canada and the Association of Faculties of Medicine of Canada). First Nations, Inuit, Métis Health core competencies: a curriculum framework for undergraduate medical education. 2008. Available: www.afmc.ca/pdf/CoreCompetenciesEng.pdf (accessed 2014 Feb. 18).
15. Royal College of Physicians and Surgeons Canada. CanMEDS: 2005 framework. Available: www.royalcollege.ca/portal/page/portal/rc/common/documents/canmeds/framework/the_7_canmeds_roles_e.pdf (accessed 2014 Feb. 18).
16. Crowshoe L, Bickford J, Decottingnes M. Interactive drama: teaching Aboriginal health medical education. *Med Educ* 2005;39:521-2.
17. Kilpatrick K. New Aboriginal health course increases awareness. *CMAJ* 2004;170:1780.
18. Spencer A, Young T, Williams S, et al. Survey on Aboriginal issues within Canadian medical programmes. *Med Educ* 2005;39:1101-9.
19. Acosta D, Olsen P. Meeting the needs of regional minority groups: the University of Washington's programs to increase the American Indian and Alaskan native physician workforce. *Acad Med* 2006;81:863-70.
20. University of North Dakota School of Medicine and Health Sciences Indians into Medicine Program. Available: www.med.und.edu/inmed (accessed 2014 Feb. 18).
21. Northern Ontario School of Medicine. Report of the NOMS Aboriginal workshop "Follow Your Dreams." Available: www.nosm.ca/uploadedFiles/About_Us/Media_Room/Publications_and_Reports/2003_06_03_FollowYourDreams_en.pdf (accessed 2014 Feb. 18).
22. Northern Ontario School of Medicine. Elders handbook: how the medical school engages and works with Aboriginal elders, 2011. Available: www.nosm.ca/uploadedFiles/Communities/Aboriginal_Affairs_Unit/Publications/Elders_Handbook_-_for_web.pdf (accessed 2014 Feb. 18).
23. Northern Ontario School of Medicine. Mii Kwen Daan Keeping the Vision, 2006. Available: www.nosm.ca/aboriginalreports (accessed 2014 Feb. 18).
24. Northern Ontario School of Medicine. Keeping the Vision, 2011. Available: www.nosm.ca/aboriginalreports (accessed 2014 Feb. 22).
25. Ermine W. The ethical space of engagement. *Indigenous Law Journal* 2007;6(1). Available: <https://tspace.library.utoronto.ca/bitstream/1807/17129/1/ILJ-6.1-Ermine.pdf> (accessed 2014 Feb. 18).

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