Indigenous-led health care partnerships in Canada

Lindsay Allen MSc, Andrew Hatala PhD, Sabina Ijaz MD, Elder David Courchene Hon LLD, Elder Burma Bushie

■ Cite as: CMAJ 2020 March 2;192:E208-16. doi: 10.1503/cmaj.190728

oo many First Nations, Inuit and Métis Peoples in Canada face alarming health inequities, subpar access to health care, and culturally discontinuous services — a legacy of the sociohistorical realities of colonialism and racism that included systematic suppression of traditional Indigenous health knowledge and healing practices.¹⁻⁴ The 2015 Calls to Action of the Truth and Reconciliation Commission of Canada underscored an urgent need for full health care rights for Indigenous Peoples, the elimination of health disparities, antiracist decolonization of the health sector, and self-determination in use of and access to traditional knowledge, therapies and healing practices. Indeed, Call to Action 22 states, "We call upon those who can effect change within the Canadian health care system to recognize the value of Aboriginal healing practices and use them in the treatment of Aboriginal patients in collaboration with Aboriginal healers and Elders where requested by Aboriginal patients."1

Indigenous knowledge and healing practices endure today, despite colonial policies and continued systematic oppression. Exemplary Indigenous-led movements that centre on traditional Indigenous knowledge have become an important feature of the Canadian medical landscape, promoting cultural activities, selfdetermination, governance, language, medicine and wellness.5-9 With an aim to foster reconciliation efforts, we analyze unique and innovative Indigenous-led health partnerships in Canada, considering the benefits that such partnerships can hold for physicians, Indigenous communities and Canadian society more broadly.

Why are Indigenous-led partnerships needed in Canada's health systems?

First Nations, Inuit and Métis Peoples in Canada continue to encounter major barriers to accessing and using health services in Canada, be it through racism, aggression, disrespect, differential health care, language discontinuity or lack of traumainformed care. ^{2,3,5,7,8,10} Because of the dominance of a biomedical approach to health care, Indigenous Peoples all too often encounter health care systems that are not reflective of or grounded in cultural worldviews or definitions of health they uphold.^{5,8,10} Mental health services, in particular, are often incongruent and culturally unsafe, which limits peoples' access to sustained mental health support. 5,6,8,10,11 Intergenerational traumas

KEY POINTS

- Indigenous Peoples in Canada benefit from regaining access to and strengthening traditional cultural ways of life, including health and healing practices.
- Many Indigenous communities are working to strengthen cultural healing practices that were marred through colonization and oppressive government policies.
- Indigenous-led health care partnerships provide innovative models of interprofessional collaboration, be it in communitybased healing lodges, remote clinics or urban hospitals.
- Emerging evidence suggests that Indigenous-led health service partnerships improve holistic (inclusive of mind, body, emotion and spirit) health outcomes for Indigenous Peoples, as well as access to care, prevention uptake and adherence to care plans.

stemming from the ongoing legacy of colonization — such as those incurred through the Indian residential school system and subsequent mass waves of child apprehensions, referred to as the "Sixties Scoop" — drastically exacerbate mental illness and addiction experiences, often referred to as "soul wounds" requiring care beyond a solely biomedical or physical approach.^{8,11,12}

Canadian physicians receive minimal training in preventive medicine — including cultural, spiritual, psychological, social, historical, political and community-specific aspects of Indigenous patients' needs. Healing specialists, Knowledge Keepers and Elders who are skilled in understanding and working within Indigenous cultural worldviews and determinants of health are increasingly needed in medical partnerships, decision-making processes and patient care. 5-8,11,12 Elders David Courchene and Burma Bushie hold that a predominantly biomedical approach to health simply fails to address an Indigenous patient's myriad needs in an integrated and holistic manner.9 Courchene is founder of the Turtle Lodge Central House of Knowledge in Sagkeeng First Nation, and cofounder and member of the Elders' council, along with Elder Bushie and other community leaders, of the Giigewigamig Traditional Healing Centre at the Pine Falls Hospital in Manitoba. Indigenous-led approaches to health care as exemplified by Turtle Lodge and the Giigewigamig Traditional Healing Centre are needed because they effectively address the health inequities that have arisen from complex historical and contemporary traumas faced by many Indigenous communities.² They are also more responsive and culturally appropriate to revive, support and strengthen the worldviews and lifestyles underlying diverse conceptions of health and wellness, particularly in terms of nurturing the spirit.^{5-8,11,12}

Beyond Indigenous communities and Elders, there are many in Canada desiring more capacity for interprofessional partnerships with Indigenous communities. Ninety percent of physicians surveyed in northwestern Ontario some years ago, for example, felt Indigenous healing played an important role in psychosocial health.¹³ In fact, most physicians interviewed as part of studies in Ontario and British Columbia welcomed opportunities to learn more about traditional healing, to work with Indigenous healers and to have healing in hospitals.^{12,13} A more recent environmental scan in BC, and studies in Manitoba, Ontario and on the east coast suggest that Indigenous Peoples want more access to traditional healing and Indigenous-led health services.^{5,8,12-14}

What are Indigenous-led health partnerships?

There are several unique and innovative examples of Indigenousled health service partnerships in Canada (see Box 1 for an example). Interprofessional models of health care are frequently conceptualized along a spectrum of varying degrees of collaboration, often focused on the levels of integration of diverse healing practices into existing biomedical systems and structures.^{5,6,15} In these models of understanding, Western medicine and knowledge systems often remain the standard for comparison, for ethical guidelines and for making claims of efficacy, and therefore retain power. Indigenous-led health partnerships, however, are autonomously grounded in traditional Indigenous knowledge maintained and upheld by local Elders, healers and Knowledge Keepers — rather than being grounded in Western medicine, structures and knowledge. These partnerships bring in or are supported by biomedical knowledge and expertise as desired. Some challenge assertions that Indigenous medicine can be appropriately integrated into biomedical practices because of the cultural frameworks and limitations of biomedicine — including assumptions and biases about mind-body dualism; rigid power hierarchies; and forms of reductionism, individualism or materialism that, regardless of diversity, are entirely absent from traditional Indigenous knowledge. 16 Martin Hill and several Elders, healers and Knowledge Keepers assert that biomedicine

Box 1: Turtle Lodge — an example of an Indigenous-led model for wellness

In restoring traditional Indigenous knowledge and practising self-determination in community health, the Turtle Lodge has built a network of partnerships with health care providers, administrators, Elders, healers, Knowledge Keepers, political leaders, youth, community members and international visitors. Turtle Lodge hosts frequent events (e.g., round tables, ceremonies, conferences and gatherings) to address health issues in a traditional way as an autonomous, sustainable Centre of Excellence. — Elder Dr. David Courchene, Turtle Lodge Central House of Knowledge, Sagkeeng First Nation

can be integrated more appropriately into Indigenous healing practices and knowledge systems, which are by nature more inclusive of the physical, emotional, mental and spiritual aspects of health and health care. 5,6,8,11,16

Do Indigenous-led partnerships improve health outcomes?

As unique Canadian examples of health care integration, Indigenous-led health partnerships can improve access to care, adherence to care plans and many health outcomes. Table 1 outlines several models (e.g., coordinated, multidisciplinary, interdisciplinary and integrated), geographies (e.g., urban, rural and remote) and settings (e.g., clinic, hospital and health centre) that highlight leading innovative examples and evidence of improved health outcomes for Indigenous-led health partnerships in Canada. A recurrent theme in the Canadian Indigenous health literature is one of "culture as cure," which holds that, when health interventions in Indigenous communities are holistic and informed by cultural knowledge or local spiritual worldviews, they are more likely to achieve success and advance wellness. 5,7,8,11,13

International examples of Indigenous-led health partnerships have also incorporated traditional Indigenous knowledge and culture. The Nuka System of Care, for example, respectfully designed in response to the desires of Indigenous Peoples who use and own it, has incorporated traditional Indigenous knowledge and cultural services over the past 30 years in Southcentral Alaska.30 A 2013 review of the Nuka system partnerships over a 10-year period highlighted improvements in various health indicators, including reduced emergency department use by 42%, reduced hospital days by 36%, reduced staff turnover by 75%, increased childhood vaccinations by 25%, and increased patient and client reports of satisfaction in cultural safety at 94%.30 Similarly, there is evidence of improved health outcomes where Indigenous-led partnerships were developed in Japan, China, South Korea, India, Vietnam, Nicaragua and Australia. 31-33 Table 2 highlights several international partnerships and health outcomes that can inform Canadian practice.

How do we measure evidence among Indigenous-led partnerships?

Western-trained, epidemiologically minded physicians tend to emphasize numerical evidence to justify efficacy and new medical research.⁴⁰ As Walter and Andersen asserted, "There is a belief in the veracity of statistical evidence within the political and policy realms of our nation-state institutions only infrequently extended to qualitative research and, we argue, to Indigenous qualitative work in particular."⁴⁰ Whereas Walter and Andersen argued the need for Indigenous statisticians to fill a methodological gap in this area, many Indigenous scholars and Elders maintain that it is problematic, either quantitatively or qualitatively, to have to "prove" traditional Indigenous knowledge in terms of the dominant Western research paradigm and culture.^{5,8,12,16,40} As Elders Courchene and Bushie remind us, using

Western tools and frameworks to evaluate or validate traditional Indigenous knowledge is a problematic colonial approach that assumes superiority of one cultural worldview, knowledge system, or paradigm over another, and negates the many treaty relationships that exist between sovereign nations. Indeed, seeing traditional Indigenous knowledge and cultural practices only through the eyes of evidence-based Western medical science may limit an ability to appreciate the potential benefits of those

Services offered					
Location; year of publication; model	Type of site	Year established	(beyond the biomedical)	Types of evidence	Health outcomes
Whitehorse General Hospital, Yukon; 2018; ¹⁷ fully integrated and inter- disciplinary	Northern urban hospital	1993	Traditional foods, plant medicines, healing room, Elder's suite, cultural programs, liaison workers	Quality and cultural safety patient surveys, annual reports, website	Quality and cultural safety improvement unspecified
Haida Gwaii, BC; 1999; ¹⁸ integrated	Diabetes clinic	1994	Traditional diet, plant medicines, exercise program	Chart review, biomedical measurements, focus groups, community- based participatory action	Significant decrease in total cholesterol (0.45, $p = 0.005$). Increase in high-density lipoproteins or "good cholesterol" (-0.097 , $p = 0.05$).
Six First Nations communities in northwestern Ontario; 2017; ¹⁹ integrated	Drug treatment centres	2012	Traditional healing, traditional counselling, land-based aftercare (e.g., fishing, hunting, memorial walks, community gardening), Elder-run healing sessions (individual and groups)	Retrospective cohort study, <i>n</i> = 526	Retention rate = 84%. High rates of negative urine drug screening result. Dramatic reduction in suicides in all 6 communities after onset of program (<i>p</i> = 0.035). At 1 year after onset of buprenorphine–naloxone program, criminal charges decreased by 61.1%, child protection cases decreased by 58.3% and school attendance rates increased by 33.3%. Drug-related medical evacuations to hospital decreased by 30.0%.
Two cities in western Canada; 2019; ²⁰ inte- grated	Centres for women who have experienced violence	2018	Elder-led health promotion circles partnered with nursing	Longitudinal study, pre–post and at 6 months, $n=152$. Indigenous women self-report on quality of life and trauma symptoms. Depressive symptoms, social support, personal and interpersonal agency, chronic pain disability.	Quality of life and trauma symptoms improved significantly both immediately postintervention and at 6 months. Improvements in 5 of 6 secondary psychological outcomes.
Vancouver, BC; 2016; ²¹ integrated	In community	2012	Women's heart health group (2 h/wk for 8 wk), Sacred Blanket ceremony, Talking Circle, partnered with nursing	Mixed-methods pre- post program evaluation	Most improved diet. Some improved activity level and emotional health. Women reported program as a success because it was both women-centred and appropriate to Indigenous culture.
Puvirnituq Hospital and surrounding birth centres in Inukjuak and Salluit, Nunavut; 2004 ²² and 2007; ²³ fully integrated and interdisciplinary	Northern remote hospital maternity ward and birth centres	1990	Prenatal, birth and postpartum services by Inuit midwives (with medical and traditional training) supported by doctors and nurses both on-site and through remote service technology; specialists available by phone, electronic communication and transport	Five-year retrospective study including review of birth registrations, antenatal records in Inukjuak and records of evacuations. External evaluation of maternity data with regional cohorts.	Since the midwifery program started, evacuations, inductions, cesarean deliveries and episiotomies are drastically reduced. Perinatal mortality equal to Canadian average (0.9%), better than comparable populations, e.g., Northwest Territories (1.9%) and Nunavut (1.1%).

practices on their own terms, including their modes of efficacy, goals of the therapeutic encounter, unique holistic forms of cultural evidence, and aspects of spirituality that are typically outside the realms of what is easily observable and quantifiable. Indeed, as Waldram argued, "The use of biomedical concepts and the English language in examining traditional medicine tends to obscure the form and function of the latter" and that "even the basic concepts of *traditional* and *medicine* are fraught with Euro-

centrism and English-language biases" that may be "very crude approximations, at best, of complex Indigenous thought."⁴¹

Given that the available evidence of improved health outcomes of Indigenous-led medical partnerships remains limited, future research, such as scoping or systematic reviews informed by holistic (inclusive of mind, body, emotion and spirit) frameworks, are needed to better measure and assess partnership efficacy in Canada and globally. Being mandated by the

Location; year of publication; model	Type of site	Year established	Services offered (beyond the biomedical)	Types of evidence	Health outcomes
Noojmowin Teg Health Centre, Manitoulin Island, Ontario; 2009 ¹³ and 2013; ²⁴ interdisciplinary and multidisciplinary	Community health access centres on northern reserves	1998	Traditional healers, Elders and coordinator, home visits, land-based medicines, plant medicines, ceremonies, lifestyle teachings, counselling, chronic illness care, psychiatry	Retrospective case study on 10 years of contextualized experience: in-depth interviews and focus groups with 17 providers and 23 clients, and document reviews (e.g., policies and program descriptions). Community-initiated study including 43 semistructured interviews with clients from 7 communities.	Faster, better coordinated response times in urgent care and crisis. Integrated care positive for providers and clients. Clinical mental health and traditional services successfully integrated.
Meno Ya Win Health Centre, Sioux Lookout, Ontario; 2010 ⁷ and 2010; ²⁵ interdisciplinary and multidisciplinary	Rural hospital	2002	Traditional practitioners, foods, plant medicines, ceremonial room, 24/7 language interpreters with expanded roles as advocates, navigators and cultural translators, Elders-in-residence, all staff trained in cultural sensitivity	Patient surveys, needs assessments via 4 community consultations, including First Nations Chiefs, spiritual leaders and 50 Elders, site visits to 16 organizations including document reviews and key informant interviews, phenomenological study on end-of-life care	Confirmed Elders advisory council is essential in governance and decision-making. Succeeding in providing culturally safe treatment options and advancing integrated care. Significant improvements to end-of-life care and culturally responsive care.
Unnamed clinic, Vancouver Native Health Society, BC; 2016; ²⁶ multidisciplinary	Urban primary health care clinic	1993	Indigenous-friendly space, culturally appropriate chronic care model	Retrospective cohort pre–post evaluation for intervention data from 2007 to 2012	All-cause mortality rates were significantly reduced from 10.00 per 100 person years in exposed group to 5.00 per 100 person years ($p = 0.023$). HIV-cause mortality rates were significantly reduced from 5.56 per 100 person years to 1.80 per person years ($p = 0.005$) between 2007 and 2012.
Sheway, Vancouver Native Health Society, Vancouver Downtown Eastside, BC; 2003; ¹⁴ multidisciplinary	Urban clinic and drop-in centre	1993	Emergency services, hot lunches, baby supplies, counselling, partnerships with Elders, access to ceremonies and cultural teaching circles for substance- using pregnant women	Case study with participatory observation, 3 focus groups (46 people total) and 25 semistructured interviews with staff, providers, government and community leaders	Improved access to prenatal care, maternal nutrition and infant birth weights (from 33% to 24% low birth weight in first 5 yr). Reduced isolation, substance use, fetal alcohol syndrome, neonatal abstinence syndrome and child apprehensions (from 100% to 42% in first 5 yr). Improved interpersonal and problem-solving skills.

Table 1 (part 3 of 3): Examples of Canadian Indigenous-led partnerships and health outcomes*

Services offered

Location; year of publication; model	Type of site	Year established	Services offered (beyond the biomedical)	Types of evidence	Health outcomes
Anishnawbe Mushkiki Aboriginal Health Centre, Thunder Bay, Ontario; 2019; ²⁷ multidisciplinary	Primary care clinic	1990	Traditional healing program includes ceremonies (e.g., feasts, sweat lodge, naming and grieving), cultural teachings (e.g., medicine wheel, seven grandfathers, clan, parenting, women's, sacred medicines), traditional wellness coordinator, access to Elders and traditional healers	Annual reports, website, staff reports	Quality and cultural safety improvements unspecified
Anishnawbe Health Toronto, Ontario; 2006 ²⁸ and 2013; ¹¹ multidisciplinary and coordinated	Urban clinic	1989	Traditional family services, Elders, healers, counsellors, teaching circles and ceremonies (e.g., naming, shake tent, pipe, full moon, clan feasts and vision quests)	Mixed methods using 42 intake questionnaires, 12 interviews participatory observation and narrative inquiry	Quality and cultural safety improvements unspecified. Thematic analysis summary: identity reclamation is crucial step in healing Indigenous psyche, and mental health services must be culturally relevant and trauma-informed.
Unnamed inner-city clinic, western Canada; 2019; ²⁹ coordinated and co- located	Primary care clinic	1991	Mental health patients had regular contact with an Elder over 6 months	Mixed-methods study designed with Elders advisory council, including quantitative prospective cohort	Patients who at study onset reported moderate to severe depression (Patient Health Questionnaire score of 10 or greater) and high risk for suicide (Revised Suicide Behaviours Questionnaire score of 7 or greater) improved by 5 points ($p = 0.001$) and 2 points ($p = 0.005$), respectively. Emergency department mental health visits decreased by 56% for the total sample population, for a year on either side of the intervention.
Turtle Lodge and Giigewigamig Traditional Healing Center, Sagkeeng First Nation, Manitoba; 2019; ⁹ autonomous	Healing lodge	2002	Traditional healers, Elders, cultural teachings, ceremonies, round tables, land- based activities, sacred gathering place. "Medicine Mondays" held at the sacred fire and sweat lodge onsite at hospital. Referrals from doctors to	Descriptive, analysis, dialogical	Early evidence emerging from conversations with patients, families and Elders show improved access to culturally safe care and holistic health outcomes. Elders at Giigewigamig also take the lead at building partnerships with doctors and hospital staff through regular invitations to learn about local medicines and experience traditional healing ceremonies.

*In this analysis, we reviewed qualitative, quantitative and mixed-methods research. Although Indigenous-led statistics is an emerging area, literature on traditional Indigenous knowledge is largely qualitative to date; thus, we included studies involving interviews, focus groups and community-based participatory processes alongside quantitative studies. Literature searches through medical and social science databases, academic journal articles, published theses and relevant grey literature (e.g., websites, annual reports, organizational statements) from Indigenous organizations, health care facilities and health research institutions were conducted. About 150 articles were reviewed by selecting for relevancy, analyzing for themes and synthesizing for succinctness. These 14 examples were chosen for the strength of the partnerships outlined, the clarity of evidence presented, and the degree to which Indigenous communities or traditional Indigenous knowledge was central to or leading the research and clinical process. We worked together as a team inclusive of Indigenous Elders, a physician and scholars in discussion, in ceremony and in the writing process.

traditional healers.

Canadian Institutes of Health Research as a standard for Indigenous health research and ethics since 2011, 42,43 Etuaptmumk, or a "two-eyed seeing" framework, in which health practitioners and researchers are called to operate through both Western (one eye) and traditional Indigenous knowledge (another eye),

could be a useful approach for future practice, partnership and evidence-based research that aims to re-adjust power imbalances and involve traditional Indigenous knowledge, including its holistic values and frameworks, modes of operation and standards of efficacy.

Location; year of Services offered					
publication; model	Type of site	Year established	(beyond the biomedical)	Types of evidence	Health outcomes
New South Wales, Australia; 2017; ³⁴ integrated	Reproductive and sexual health program	2010	Strong Family Program includes access to Elders and Indigenous health professionals, yarning circles over 2–3 days	Community engagement, focus groups, pre–post surveys. Indigenous youth and adults (<i>n</i> = 76).	Knowledge and attitude scores improved 5% points on average. Participants aged 13–20 years had greatest increase in knowledge ($p = 0.034$); participants aged 20–78 had greatest increase in positive attitudes ($p = 0.001$).
Unnamed, US; 2015; ³⁵ interdisciplinary and multidisciplinary	Residential treatment centre for substance use and mental health disorders	Unknown	Cultural, spiritual, traditional healing practices (e.g., sweat lodge, talking circle, smudging), access to healers and spiritual counsellors	Native American and Alaskan Native youth (<i>n</i> = 229). Youth Outcome Questionnaire Self Report. Pre–post group matched.	96% improved or recovered (using clinically significant change criteria). None deteriorated (compare with the 15%–24% standard in similar settings). Large effect size found with the Cohen criteria.
Rural Oklahoma, US; 2015; ³⁶ multidisciplinary	School-based youth clinic	2010	Talking circle intervention, 30-minute sessions 2–3 times per week for 8.5 weeks (10 hr)	Native American Indian Plains at-risk youth (n = 44). Pre–post questionnaires (Native Self-Reliance, Global Appraisal of Individual Needs — Quick)	One-tailed, paired sample t tests showed significant increase in self-reliance, from 86.227 to 92.204 ($t^{43} = -2.580$, $p = 0.007$) and decrease in substance abuse and use, from 2.265 to 1.265 ($t^{33} = 1.844$, $p = 0.007$).
Perth, Western Australia; 2018; ³⁷ multidisciplinary	Youth clinic for severe mental disorders	2014	Indigenous mental health practitioners provide clinical care, cultural care, information to non-Indigenous providers and coordinate community support in YouthLinks framework	Mixed methods. Aboriginal youth (<i>n</i> = 40). Outcome Rating Scale and Session Rating Scale over 2 years.	65% improved (35% achieved clinical recovery, 30% achieved clinical cut-off by last session), 25% showed no change and 10% deteriorated. Therapeutic bond with practitioner had stronger effect compared with non-Indigenous populations.
Five Mam and 3 K'iche' communities near Quetzaltenango City, Guatemala; 2019; ³⁸ coordinated	Women's centre	2018	Ten 6-hour sessions co-designed and facilitated by Indigenous health workers using traditional teachings, art, therapies and skill development for women at risk for perinatal mental disorders	Mixed methods. Randomized parallel groups, women (n = 84) (12 per community in 7 communities) in intervention group, plus 71 in control group. Measured maternal psychosocial distress, well-being (Mental Health Continuum — Short Form), self-efficacy, and engagement in early infant stimulation activities. In-depth interviews to gauge feasibility and acceptance.	Postintervention (1 mo), compared with control group, treatment group experienced increased well-being ($p = 0.008$) and self-care self-efficacy ($p = 0.049$). Attending more sessions led to improved well-being ($p = 0.007$), self-care ($p = 0.014$), infant-care self-efficacy ($p = 0.043$) and early infant stimulation ($p = 0.019$) scores.
Two Yup'ik communities in Southwest Alaska; 2018; ³⁹ autonomous	Suicide and addictions prevention program	Unknown	Cultural interventions at 2 doses (high and low); modules from Yup'ik Qungasvik Toolbox, Elders' guidance	54 youth participated through analysis stage in community 1 (treatment arm); 74 youth participated in community 2 (comparison arm). Measurement tools: Multicultural Mastery Scale, Brief Family Relationship Scale, Youth Community Protective Factors, American Drug and Alcohol Survey, Reflective Process and Reasons for Life	High-dose intervention produced greater impact on Reasons for Life $(d=0.28, p<0.05)$, increasing suicide protection in the treatment arm. Analyses found significant growth over time within community 1, but not community 2, on Reasons for Life $(d=0.43, p<0.05)$.

^{*}This analysis involved literature searches through medical and social science databases, academic journal articles, published theses, and relevant grey literature (e.g., websites, annual reports, organizational statements) from Indigenous organizations, health care facilities, and health research institutions were conducted. These 6 key examples were chosen due to the strength of the partnerships outlined, the clarity of quantitative evidence presented, the recency, and the degree to which Indigenous communities or traditional Indigenous knowledge was central to or leading the research and clinical process to demonstrate the spectrum of models.

Table 3: Suggestions for health care providers, managers and researchers						
In personal practice	In public forums and systems	In research				
Reflect on your own biases. Commit to professional development for yourself and your team in cultural safety, awareness of the Truth and Reconciliation Commission of Canada's Calls to Action, and antioppressive, antiracist training.	Go to ceremonies and community events to connect with Indigenous Peoples, communities and organizations	Survey current knowledge and attitudes of health care providers, traditional practitioners and patients across the country				
Greet people in their traditional language at the start of appointments	Build a sense that you belong to the community and care about continuity with your patient base over the years	Advance and use Indigenous statistical research methodologies				
Prioritize getting to know your patients, their families, their stories, their preferences and their beliefs	Promote community-based participatory action, authentic engagement and relationship-building between people and organizations	Promote and build competence in the use of Indigenous research methodologies				
In appointments, acknowledge socio-historic injustices (e.g., colonization, residential schools and ongoing racism) affecting health, while celebrating strengths and resilience	Speak out in solidarity during professional meetings and public forums to honour and appreciate the medicines of Indigenous Peoples	Conduct systematic or scoping reviews of traditional–Western medicine partnerships in Canada and internationally				
Inquire about (and be open-minded to) patient disclosure of traditional medicine use or consultations with healers and Elders	Post and refer to the <i>United Nations</i> Declaration on the Rights of Indigenous People in terms of health and health care	Study how to protect Indigenous medicines, healing practices and knowledge in their full integrity				
Initiate a personal relationship with an Elder and be open to other ways of knowing and forms of "evidence"	Use the Truth and Reconciliation Commission of Canada's Calls to Action, the Calls to Justice of the Missing and Murdered Indigenous Women and Girls Report, and any provincial acts (e.g., Manitoba's <i>The Path to Reconciliation Act</i>) to promote system changes on all levels of policy	Develop a better understanding of health care and practice across mixed and integrated Indigenous identities				
Hire Indigenous personnel	Make Indigenous-friendly spaces with visual indications of welcome (e.g., plaques, art-work and Truth and Reconciliation Commission of Canada commemorations)	Work alongside and train Indigenous community members as researchers				
Get to know your local traditional practitioners and their specialties	Ensure safe spaces (e.g., ceremony rooms and smudge-friendly spaces) in hospitals and clinics. Seek partnerships with local Indigenous Knowledge Keepers to provide cultural education for staff.	Build knowledge of how different models of Indigenous-led health partnerships can respond to context-specific service needs				
Treat patients by connecting them with local resources and traditional cultural events	Create partnerships with Indigenous Elder-led organizations. Develop Elder advisory committees in organizations that do not have them already. Consult in organizations that do.	Consult with Indigenous Knowledge Keepers on using the Medicine Wheel framework in health services and systems				
Consult with Elders, refer patients to traditional practitioners, support the work they do in communities	Work with Elder advisory committees to discern culturally appropriate systems (e.g., fair compensation, patient safety standards, scope of practice, role profiles, record keeping and record sharing)	Learn about and advance a "two-eyed seeing" framework for practice and evidence-based research				
Respect various Medicine Wheel teachings as holistic conceptual models of health and wellness	Cocreate bicultural policy and procedures manuals	Understand proper cultural protocols, engagement practices and self-determination in health policy research and development				
Value traditional medicine equally with	"Get out of the box and back into the circle" —	Build knowledge of Indigenous forms of				

What are key concerns and recommendations for future partnerships?

In considering the troubling history between Indigenous Peoples and European-settler Canadians, problems of unequal and oppressive power relationships between Indigenous and non-Indigenous health practices cannot be ignored.^{3,6,8,13,16} In Asia, Australia and Nic-

aragua, for example, where traditional medicines were integrated with Western medicines beginning in the 1950s (in Asia) and 1970s (in Australia and Nicaragua), there were issues with domination, extraction and loss of crucial aspects of the medicinal systems of minority groups. ^{31–33} Having experienced similar conditions in Canada, Indigenous healers and Elders are sometimes reluctant to build partnerships with physicians out of concern about the potential

overharvesting of plant medicines, disrespectful treatment, cultural appropriation, commercialization, unbalanced funding schemes, tokenism and loss of autonomy. 5,6,8,11 Furthermore, from the patient's perspective, a survey conducted in eastern Canada reported that 92% of the Indigenous respondents who use traditional medicine feared disclosing this information to health professionals. 6 Better understanding is needed on how to protect Indigenous medicines, healing practices and knowledge in their full integrity while developing and promoting self-determination in Indigenous-led health care services and systems that foster culturally safe spaces for patients, Elders and healers. 5,6,8,11,12

To further advance future health systems partnerships in Canada, the Indigenous Physicians Association of Canada recommends placing value on Indigenous medicines equal to that placed on biomedicine, being open to patients' disclosures of use of traditional medicines, building relationships with Indigenous healing practitioners, Knowledge Keepers and Elders, supporting the work Elders and healers do in the community, consulting, making referrals, recognizing Indigenous holistic health definitions and indicators, learning local languages when working in Indigenous communities, engaging in antioppressive training and cultural humility professional development, and taking opportunities to experience and support local ceremonies, such as sweat lodges or sundances.^{5,44} Beyond simply working with Elders as members of care teams, several authors argue for the leadership of Elders in guiding health care systems and practice, hiring Indigenous health personnel, respecting various Medicine Wheel teachings as holistic conceptual models of health, efficacy and wellness, and, ultimately, strengthening community ownership, autonomy and self-determination toward fully Indigenousled health services. 5,8,11,12 Jaworsky, writing from a settlerphysician's perspective, also argued that non-Indigenous physicians need to examine how they benefit from colonialism, to see and understand colonialism as a determinant of health, and to challenge the pervasive paternalism, racism and power imbalances that colonialism and biomedicine have propagated. 45 Further recommendations and suggestions for future practice and research in these areas are summarized in Table 3.

Conclusion

Indigenous-led healing movements reflect concrete steps in the efforts to advance health equity for Indigenous Peoples in Canada. Yet as the Truth and Reconciliation Commission of Canada reminds us,¹ more work in these areas demand continued attention. As the recognition of Indigenous knowledge and healing practices in Canada continues to grow, biomedical settler-physicians will likewise benefit from increased consulting, engaging and collaborating.^{5,8} It is also important to note that Indigenous Peoples can embody culturally complicated, mixed and integrated identities with critical insight into what collaborative health and healing services partnerships can mean.^{1,2,4,5} Addressing health inequities requires a deeper understanding of the diversity within and across First Nations, Inuit and Métis communities, as well as how different models of Indigenous-led health partnerships can respond to context-specific service needs.^{5,8}

If the swell of efforts of Elders, Knowledge Keepers and healers can be supported by the larger medical community, and if barriers to full health care rights for Indigenous Peoples can be lessened or removed, then systemic racism can be overpowered and health equity can more easily be approached. 5,11,12,14 In the context of a global society, we view these Indigenous-led partnerships as opportunities for people from different cultures, health systems and worldviews to benefit from learning about and accepting each other. The challenge of Canadian medical practice and health care for the years to come will involve learning from Indigenous-led movements and building partnerships to improve health outcomes and equity for Indigenous Peoples, and for all.

References

- Truth and Reconciliation Commission of Canada (TRC). Honouring the truth, reconciling for the future: summary of the final report of the Truth and Reconciliation Commission of Canada. Montréal: McGill-Queen's University Press; 2015.
- 2. King M, Smith A, Gracey M. Indigenous health part 2: the underlying causes of the health gap. *Lancet* 2009;374:76-85.
- 3. Allan B, Smylie J. First Peoples, second class treatment: the role of racism in the health and well-being of Indigenous peoples in Canada. Toronto: Wellesley Institute: 2015:1-64.
- Katz A, Kinew KA, Star L, et al. The health status of and access to healthcare by Registered First Nation Peoples in Manitoba. Winnipeg: Manitoba Centre for Health Policy; 2019.
- Pakula B, Anderson JF. Sts'ailes primary health care project: report. Sts'ailes (BC): 2013.
- Maar MA, Shawande M. Traditional Anishinabe healing in a clinical setting: the development of an Aboriginal interdisciplinary approach to community-based Aboriginal mental health care. *J Aborig Health* 2010;6:18-27.
- Walker R, Cromarty H, Linkewich B, et al. Achieving cultural integration in health services: design of comprehensive hospital model for traditional healing, medicines, foods and supports. *J Aborig Health* 2010;6:58-69.
- 8. Waldram JB. Aboriginal healing in Canada: studies in therapeutic meaning and practice. Ottawa: Aboriginal Healing Foundation; 2008.
- 9. Cameron L, Courchene D, Ijaz S, et al. The Turtle Lodge: sustainable self-determination in practice. *Alternative* 2019;15:13-21.
- Moodley R, Sutherland P, Oulanova O. Traditional healing, the body and mind in psychotherapy. Couns Psychol Q 2008;21:153-65.
- Reeves AJ. Biskanewin Ishkode (The Fire That is Beginning to Stand): exploring Indigenous mental health and healing concepts and practices for addressing sexual traumas. Toronto: University of Toronto; 2013.
- 12. Traditional Wellness strategic framework. Vancouver: First Nations Health Authority; 2014:1-54.
- Manitowabi D. Assessing the institutionalization of traditional Aboriginal medicine. Sudbury (ON) University of Sudbury; 2009.
- Benoit C, Carroll D, Chaudhry M. In search of a Healing Place: Aboriginal women in Vancouver's Downtown Eastside. Soc Sci Med 2003;56:821-33.
- 15. Boon H, Verhoef M, O'Hara D, et al. From parallel practice to integrative health care: a conceptual framework. *BMC Health Serv Res* 2004;4:15.
- 16. Martin Hill D. Traditional medicine and restoration of wellness strategies. *J Aborig Health* 2009;5:26-42.
- First Nations health cultural programs. Whitehorse (YT): Yukon Hospitals; 2018.
 Available: https://yukonhospitals.ca/whitehorse-general-hospital/programs -and-services/first-nations-health-cultural-programs (accessed 2019 Sept. 27).
- Heffernan C, Herbert C, Grams GD, et al. The Haida Gwaii Diabetes Project: planned response activity outcomes. Health Soc Care Community 1999;7: 379-86
- Mamakwa S, Kahan M, Kanate D, et al. Evaluation of 6 remote First Nations community-based buprenorphine programs in northwestern Ontario: retrospective study. Can Fam Physician 2017;63:137-45.
- Varcoe C, Ford-Gilboe M, Browne AJ, et al. The efficacy of a health promotion intervention for Indigenous women: reclaiming our spirits. *J Interpers Violence* 2019;Jan 15:886260518820818.

- 21. Ziabakhsh S, Pederson A, Prodan-Bhalla N, et al. Women-centered and culturally responsive heart health promotion among Indigenous women in Canada. *Health Promot Pract* 2016;17:814-26.
- 22. Houd S, Qinuajuak J, Epoo B. The outcome of perinatal care in Inukjuak, Nunavik, Canada 1998-2002. *Int J Circumpolar Health* 2004;63(Suppl 2):239-41.
- Van Wagner V, Epoo B, Nastapoka J, et al. Reclaiming birth, health, and community: midwifery in the Inuit villages of Nunavik, Canada. *J Midwifery Womens Health* 2007;52:384-91.
- Manitowabi D, Shawande M. Negotiating the clinical integration of traditional Aboriginal medicine at Noojmowin Teg. Can J Native Stud 2013;33:97-124.
- St Pierre-Hansen N, Kelly L, Linkewich B, et al. Translating research into practice: developing cross-cultural First Nations palliative care. J Palliat Care 2010; 26:41-6.
- Klakowicz P, Colley G, Moore D, et al. Declining mortality among HIV-positive Indigenous People at a Vancouver Indigenous-focused urban-core health care centre. Can Fam Physician 2016;62:e319-e25.
- Traditional Wellness Program. Thunder Bay (ON): Anishnawbe Mushkiki Community Health and Wellness; 2019. Available: https://mushkiki.com/program/traditional-wellness-program (accessed 2019 Sept. 27).
- Skye J. An orchid in the swamp: traditional medicine, healing, and identity at an urban Aboriginal community health center. Hamilton (ON): McMaster University; 2006.
- 29. Tu D, Hadjipavlou G, Dehoney J, et al. Partnering with Indigenous Elders in primary care improves mental health outcomes of inner-city indigenous patients. *Can Fam Physician* 2019;65:274-81.
- 30. Gottlieb K. The Nuka system of care: improving health through ownership and relationships. *Int J Circumpolar Health* 2013;72(Suppl1):1-6.
- Arai YCP, Yasui H, Isai H, et al. The review of innovative integration of Kampo medicine and Western medicine as personalized medicine at the first multidisciplinary pain center in Japan. EPMA J 2014;5:10.
- Carrie H, Mackey TK, Laird SN. Integrating traditional indigenous medicine and western biomedicine into health systems: a review of Nicaraguan health policies and Miskitu health services. Int J Equity Health 2015;14:129.
- 33. Dockery AM. Culture and wellbeing: the case of Indigenous Australians. Soc Indic Res 2010;99:315-32.
- Duley P, Botfield JR, Ritter T, et al. The Strong Family Program: an innovative model to engage Aboriginal and Torres Strait Islander youth and Elders with repro ductive and sexual health community education. *Health Promo J Austr* 2017;28:132-8.
- Beckstead DJ, Lambert MJ, DuBose AP, et al. Dialectical behavior therapy with American Indian/Alaska Native adolescents diagnosed with substance use disorders: combining an evidence-based treatment with cultural, traditional, and spiritual beliefs. Addict Behav 2015;51:84-7.
- Patchell BA, Robbins LK, Lowe JA. The effect of a culturally tailored substance abuse prevention intervention with Plains Indian adolescents. J Cult Divers 2015;22:3-8.
- Sabbioni D, Feehan S, Nicholls C, et al. Providing culturally informed mental health services to Aboriginal youth: the YouthLink model in Western Australia. Early Interv Psychiatry 2018;12:987-94.

- Chomat AM, Menchu AI, Andersson N, et al. Women's circles as a culturally safe psychosocial intervention in Guatemalan indigenous communities: a community-led pilot randomised trial. BMC Womens Health 2019;19:53.
- Allen J, Rasmus SM, Fok CCT, et al. Multi-level cultural intervention for the prevention of suicide and alcohol use risk with Alaska Native Youth: a nonrandomized comparison of treatment intensity. Prev Sci 2018;19:174-85.
- 40. Walter M, Andersen C. *Indigenous statistics: a quantitative research methodology.* Vol. 51. London (UK): Routledge; 2014.
- 41. Waldram JB. The efficacy of traditional medicine: current theoretical and methodological issues. *Med Anthropol Q* 2000;14:603-25.
- 42. Wright AL, Gabel C, Ballantyne M, et al. Using two-eyed seeing in research with Indigenous People. *Int J Qual Methods* 2019;18:1-19.
- 43. Sylliboy JR, Hovey RB. Humanizing Indigenous Peoples' engagement in health care. CMAJ 2020;192:E70-2.
- 44. Indigenous Western and traditional doctors forum final report, September 2009. Vancouver: Indigenous Physicians Association of Canada; 2010.
- 45. Jaworsky D. A settler physician perspective on Indigenous health, truth, and reconciliation. *Can Med Educ J* 2018;9:e101-e6.

Competing interests: Sabina Ijaz is a board member for and volunteer at Turtle Lodge Central House of Knowledge, and is a volunteer medical consultant at Giigewigamig First Nation Health Authority and Giigewigamig Traditional Healing Centre. David Courchene is the founder and executive director of Turtle Lodge Central House of Knowledge and a member of the Elder Council of Giigewigamig First Nation Health Authority. No other competing interests were declared.

This article has been peer reviewed.

Affiliations: Community Health Sciences (Allen, Hatala), Faculty of Health Sciences, University of Manitoba, Winnipeg, Man.; Turtle Lodge Central House of Knowledge, Sagkeeng First Nations (Ijaz, Courchene), Fort Alexander, Man.; Giigewigamig First Nation Health Authority (Ijaz, Bushie), Pine Falls, Man.

Contributors: All authors made substantial contributions to the conception of the work, the drafting, editing and critical review of the manuscript, approved the final version to be published, and agree to be accountable for all aspects of the work. Lindsay Allen and Andrew Hatala took the lead at drafting the first version of the manuscript. Sabina Ijaz, David Courchene and Burma Bushie provided important conceptual contributions and substantial work at editing and reviewing subsequent drafts. David Courchene and Burma Bushie ensured cultural protocol was followed during the consultations involving and work regarding the manuscript.

Correspondence to: Andrew Hatala, andrew.hatala@umanitoba.ca