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Integrating Indigenous healing practices within collaborative care models in primary healthcare in Canada: a rapid scoping review

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ABSTRACT

Objectives In November 2020, a series of reports, *In Plain Sight*, described widespread Indigenous-specific stereotyping, racism and discrimination limiting access to medical treatment and negatively impacting the health and wellness of Indigenous Peoples in British Columbia, Canada. To address the health inequalities experienced by Indigenous peoples, Indigenous healing practices must be integrated within the delivery of care. This rapid scoping review aimed to identify and synthesise strategies used to integrate Indigenous healing practices within collaborative care models available in community-based primary healthcare, delivered by regulated health professionals in Canada.

Eligibility criteria We included quantitative, qualitative and mixed-methods studies conducted in community-based primary healthcare practices that used strategies to integrate Indigenous healing practices within collaborative care models.

Sources of evidence We searched MEDLINE, Embase, Indigenous Studies Portal, Informit Indigenous Collection and Native Health Database for studies published from 2015 to 2021.

Charting methods Our data extraction used three frameworks to categorise the findings. These frameworks defined elements of integrated healthcare (ie, functional, organisational, normative and professional), culturally appropriate primary healthcare and the extent of community engagement. We narratively summarised the included study characteristics.

Results We identified 2573 citations and included 31 in our review. Thirty-nine per cent of reported strategies used functional integration (n=12), 26% organisational (n=8), 19% normative (n=6) and 16% professional (n=5). Eighteen studies (58%) integrated all characteristics of culturally appropriate Indigenous healing practices into primary healthcare. Twenty-four studies (77%) involved Indigenous leadership or collaboration at each phase of the study and, seven (23%) included consultation only or the level of engagement was unclear.

Conclusions We found that collaborative and Indigenous-led strategies were more likely to facilitate and implement the integration of Indigenous healing practices. Commonalities across strategies included community engagement, elder support or Indigenous ceremony or traditions. However, we did not evaluate the effectiveness of these strategies.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ We searched five databases including Indigenous databases and incorporated three distinct frameworks to guide our synthesis. This unique approach strengthened our review by allowing us to categorise the complexity of the findings from each study.
⇒ Our research team included an Indigenous collaborator who provided substantive guidance related to elements of the research question, interpreting results and identifying key messages.
⇒ We did not conduct manual reviews of the references cited in the studies identified in our literature searches; therefore, it is possible that we have missed relevant studies.
⇒ We recognise the diversity among Indigenous cultures, traditions and beliefs, and acknowledge that community values, priorities and strategies may vary and should not be treated as homogeneous.

INTRODUCTION

In Canada, significant inequalities in health services and health outcomes exist among Indigenous Peoples, and are consistently larger than in other non-Indigenous populations.[1] The consequences of colonialism, racism and discrimination have impacted the health of Indigenous Peoples by producing social, political and economic disparities.[2] Specifically, the displacement of Indigenous Peoples from traditional lands; being restricted or forbidden to hunt, trap or fish; and assimilation into the dominant culture, such as through residential schools, have had extremely devastating consequences.[2] The resulting historical trauma has affected individuals, their families, communities and descendants.[3] Today, the impact of long-term colonialism, racism and discrimination is

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evidenced by lower life expectancy, higher infant mortality, higher rate of mental health problems and higher incidence of conditions such as arthritis, asthma, diabetes and tuberculosis in Indigenous communities than in other minorities.[1 4] Furthermore, the colonial structures embedded within health systems often create a hierarchy between Indigenous and non-Indigenous knowledge systems and practices, excluding or minimising the relevance of Indigenous healing practices in addressing the holistic health needs of Indigenous Peoples.[2]

The persistent discrimination against Indigenous Peoples in Canada continues to profoundly impact the delivery and access of healthcare services. In November 2020, Dr. Mary Ellen Turpel-Lafond released a series of reports entitled *In Plain Sight* summarising the results of an independent investigation into Indigenous-specific discrimination in British Columbia's healthcare system. The report highlighted 11 key messages related to widespread Indigenous-specific stereotyping, racism and discrimination that limit access to medical treatment and negatively impact the health and wellness of Indigenous Peoples in British Columbia.[5] Further, Dr. Turpel-Lafond identified a lack of accountability within the healthcare system for eliminating Indigenous-specific racism, including inadequate education and training programmes and complaints processes, and lack of integration of Indigenous health knowledge and practices in the healthcare system.[5] The report concluded with 24 recommendations aimed at the British Columbia Government to incite meaningful change to the healthcare system.[6] In response, the British Columbia health authorities and the Ministry of Health committed to implementing all recommendations within their direct responsibility and supporting the implementation by others.[6] Specifically, these included: (1) developing education programmes for healthcare providers by health regulators; (2) prioritising strategies to address Indigenous-specific racism in the healthcare systems and (3) providing access to evidence-based resources and training for all healthcare workers.[5]

The barriers to accessing healthcare experienced by Indigenous Peoples are not exclusive to British Columbia and exist throughout Canada. These barriers include stereotyping and discrimination, differences in communication style or a lack of communication, lack of care options, feelings of isolation, lack of privacy, mistrust of the system, not being actively involved in decision-making and concerns over policies.[7–9] Boot *et al* explored how Indigenous knowledge systems and practices are acknowledged and promoted in health literacy-related policy and practice documents in Canada.[8] Compared with Australia and New Zealand, the authors recognised few acknowledgements of Indigenous cultural diversity in Canada and found no strategic plans, policies, frameworks or guidelines that promote Indigenous cultural health knowledges, paradigms and practices.[8] Consequently, the authors concluded that promotion and advocacy for inclusion of Indigenous knowledge and practices were rare, and were mostly found within supportive documents rather than in government strategic plans, policies, frameworks or guidelines.[8]

The publication of *In Plain Sight* was followed by public announcements recounting the atrocities lived and experienced by Indigenous Peoples throughout Canadian colonial history until today. These revelations created outrage, demand for change and a push for true reconciliation for the Indigenous Peoples of Canada. As a first step to actioning the findings of the *In Plain Sight* reports, the College of Chiropractors of British Columbia commissioned an independent rapid scoping review to describe existing strategies used in Canada to integrate Indigenous practices in community-based healthcare. The findings of this review will inform the necessary steps towards connecting and establishing collaborations with Indigenous communities in British Columbia, and to improve the provision of culturally appropriate primary healthcare to Indigenous Peoples and their communities. The aim of our rapid scoping review was to identify and synthesise strategies used to integrate Indigenous healing practices within collaborative care models available in community-based primary healthcare, delivered by regulated health professionals in Canada.

METHODS

We conducted a rapid scoping review guided by the six steps proposed by the Arksey and O'Malley framework to systematically identify and map key concepts and sources of evidence in the peer-reviewed and indexed literature.[10 11] Scoping reviews aim to describe studies without synthesising findings, to understand the extent of the knowledge in a field.[12] We selected a scoping review to understand the available strategies to integrate Indigenous healing practices into collaborative care models in primary healthcare services. Further, we selected a rapid review because the work was commissioned by the College of Chiropractors of British Columbia, which required a summary of the evidence in a timely manner to inform their policies and regulations.

Patient and public involvement

Our research team included eight non-Indigenous researchers (MC, AD, GB, HY, CC, SM, AT-V and PC) with expertise in systematic and scoping reviews, epidemiology, qualitative research, primary healthcare, and public health, and one Indigenous (KM-B) collaborator with extensive experience as a Community Health Representative for a First Nation community, who provided substantive guidance related to elements of the research question, interpretation of results and identification of key messages. The development of the research question was conducted in consultation with the College of Chiropractors of British Columbia. A protocol was prepared a priori but not published. We reported our review according to the Preferred Reporting Items for

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Systematic Reviews and Meta-Analyses Scoping Review (PRISMA-ScR) extension.[13]

Step 1: identifying the research question

Our research question focused on identifying and synthesising strategies used to integrate Indigenous healing practices within collaborative care models in community-based primary healthcare in Canada. We defined a strategy as any activity or process aimed at integrating the planning and delivery of primary healthcare services while taking into consideration the values, beliefs and preferences of Indigenous Peoples and communities. As per the First Nations Health Authority of British Columbia's strategic framework, Indigenous healing practices included health practices, approaches, knowledge and beliefs incorporating First Nations, Inuit and Métis healing and wellness.[13] Collaborative care included professional(s) collaborating with members of the public and/or outside of the healthcare sector, including perspectives beyond distinct disciplines.[14] Primary healthcare was defined as an approach to health policy and services provision which has as a defining characteristic the relationship between patient care and public health functions.[15]

Step 2: identifying relevant studies

An experienced librarian searched two biomedical databases and three Indigenous databases for qualitative, quantitative or mixed-methods studies published in English or French between January 2015 and February 2021. The search strategy was reviewed by a second librarian. This time period coincided with the publication of the Truth and Reconciliation Report by the Honorable Murray Sinclair on June 2015.[16] Databases searched included MEDLINE and Embase (Ovid Technologies), Indigenous Studies Portal (University of Saskatchewan), Informit Indigenous Collection (University of Alberta) and Native Health Database (University of New Mexico). Our search strategy included three concept groups: (1) Indigenous Peoples, (2) health promotion and healthcare, and (3) Canada (online supplemental file 1: search strategies).

Step 3: study selection

We included qualitative, quantitative or mixed-methods studies that had clearly stated aims, defined study population, collected data and analysed or synthesised the collected data. We included studies taking place in a community-based primary healthcare practice of regulated healthcare professionals, using a strategy to integrate Indigenous healing practices, using collaborative care models.

We excluded duplicates, guidelines, letters, editorials, commentaries, unpublished manuscripts, dissertations, books and book chapters, conference proceedings, meeting abstracts, lectures and addresses, consensus development statements, and study designs including scoping and systematic reviews, case reports, case series, clinical practice guidelines, laboratory studies and studies not reporting on methodology.

We exported citations into EPPI-Reviewer[17] for screening and coding purposes. We used a two-phase screening process to identify relevant studies. In phase one, two reviewers (MC and AD) screened a sample of the first 200 titles and abstracts to assess any inconsistencies with the application of the inclusion and exclusion criteria. One reviewer (MC) screened all titles and abstracts to identify possibly relevant studies. In phase two, two reviewers (MC and AD) independently screened all the retrieved full-text articles to assess for relevance. Any screening discrepancies were discussed by the research team and reviewers reached consensus.

Step 4: charting the data

Our data extraction used three frameworks to categorise the unique research findings in each study.[18–20] We used the first framework to capture the complexity of integrated care by combining its dimensions with the functions of primary care.[18] It describes elements of integrated healthcare and defines the level of strategy integration highlighting different organisational planning and implementation approaches.[18] We applied four dimensions of integration which were relevant to our study aim:

1. Normative integration: where the strategy had a common frame of reference or principles between organisations, professions or individuals.
2. Organisational integration: where relationships between and coordination of organisations occurred to deliver comprehensive services.
3. Professional integration: where partnerships and shared competencies, roles and responsibilities between professionals are used to deliver comprehensive services.
4. Functional integration: support functions and activities at the community level to add overall value to the system.[18]

Second, we used the framework proposed by Harfield *et al*,[19] which has culture as the central component to seven characteristics which identify values, principles and components of Indigenous primary healthcare service delivery models (figure 1). This allowed us to capture the unique components of strategies published in the literature as seen through the lens of characteristics deemed important by Indigenous Peoples in providing culturally appropriate healthcare. We selected the Harfield *et al* framework because of its clarity and appropriateness in assessing and categorising strategies that integrate Indigenous practices into community-based healthcare services. Harfield *et al*[19] define seven characteristics:

1. Accessible health services.
2. Community participation.
3. Continuous quality improvement.
4. Culturally appropriate and skilled workforce.
5. Flexible approaches to care.
6. Holistic healthcare.
7. Self-determination and empowerment.

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Figure 1 Harfield *et al* framework diagram.[19] Reproduced with permission.

We used these seven characteristics to highlight key components of the strategies used in our review.

Third, we used the framework proposed by O'Mara-Eves *et al* to classify the extent of community engagement in the design, delivery and evaluation of the strategy developed to define how different types of community engagement might facilitate the impact an intervention has on health outcomes in disadvantaged groups.[20] The extent of community engagement was classified as:

1. Leading: where the responsibility and decision-making authority resides with the Indigenous community members.
2. Collaborating: where Indigenous community members have shared responsibility and authority.
3. Consulting: where researchers ask Indigenous community members about their views but authority and responsibility lies outside the community.
4. Informing: where Indigenous community members are told what is going to happen.[20]

Our assessment of the extent of community engagement with predefined criteria at the design, delivery and evaluation stages allowed us to contrast the involvement of the community in their services and the provision of culturally appropriate healthcare.

One reviewer (MC) extracted data from individual studies including study characteristics, Indigenous community and location, healthcare providers, level of strategy integration, type of strategy, Harfield *et al* framework characteristics and extent of community engagement. Two independent reviewers verified the accuracy (AD and KM-B) and appropriateness of the extracted data (KM-B). Discrepancies or disagreements were discussed and resolved with the entire research team.

Step 5: collating, summarising and reporting results

We narratively synthesised the data. We present details of the study characteristics and each strategy in tabular format according to the Harfield *et al* framework characteristics and extent of community engagement (online supplemental file 2). Studies are organised based on the level at which integration occurred (normative, organisational, professional or functional). We also mapped each study to the Harfield *et al* framework and extent of community engagement, displayed in a summary table (table 1). We present our manuscript according to the PRISMA-ScR extension.[21]

Step 6: consultation

A study report was provided to the College of Chiropractors of British Columbia on completion of the work to allow for feedback and recommendations from a health regulator perspective. This was followed by a presentation of findings and discussion to the College of Chiropractors of British Columbia including an Indigenous representative and consultant from British Columbia. We also collaborated with Mrs. Kathy MacLeod-Beaver throughout the review process to provide an Indigenous view and interpretation to the results.

RESULTS

Our search identified 2557 citations from biomedical databases, and an additional 16 from Indigenous databases. Of those, 232 full-text articles were assessed for eligibility, and 31 included in our review (figure 2). We excluded 70 studies because of ineligible publication type, 52 studies were not conducted in community-based healthcare, 33 did not integrate strategies into Indigenous practice, 22 because of study design, 16 were scoping or systematic reviews, 3 were not collaborative care models, 3 were not Canadian studies, 1 was a duplicate and 1 was not in English or French.

Thirty-nine per cent of reported strategies (n=12) used functional integration at the level of the community[22–33] with the remaining studies using organisational (26%; n=8),[34–41] normative (19%; n=6)[42–47] and professional (16%; n=5)[48–52] integration (online supplemental file 2). Most strategies aimed to improve Indigenous Peoples' access to health services,[26–29 35 36 38 40 42–52] while other strategies focused on health education,[22 25 30 41] fostering social support,[24 33] community-based early identification of health conditions[37] or a combination of these strategies.[23 31 32 34 39] The strategies used in the included studies were for breastfeeding,[22 30] cardiovascular health,[31 32 41] cervical cancer,[25] mental health,[42 43] palliative care programmes,[44–47] a drug programme,[26] tuberculosis,[34] cancer screening programmes,[25 37] oral health,[27–29 50 51] chronic obstructive pulmonary disease (COPD),[23] intimate partner violence support[24 33] and settings included midwifery clinics,[38 40] and multidisciplinary primary health centres.[35 36 39 48 49 52]

Eighteen studies (58%) integrated all characteristics of the Harfield *et al* framework in providing culturally appropriate primary healthcare (table 1).[23 26–29 31 32 36–40 42–46 49] For example, at the normative integration level, the End-of-Life care in First Nations (EOLFN) programme was designed by a First Nations' community advisory committee and was delivered in four First Nations communities by community leaders.[44–47] This EOLFN programme met the Harfield *et al* characteristics of (1) accessible health

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Table 1 Linking of the included studies to the three frameworks*

		Framework 2—Harfield							Framework 3—O'Mara-Eves		
	First athor[Ref]	Accessible health services	Community participation	Continuous quality improvement	Culturally appropriate and skilled workforce	Flexible approaches to care	Holistic healthcare	Self-determination and empowerment	Design	Delivery	Evaluation
Framework 1 – Brown	Normative Integration										
	Etter[42]	X	X	X	X	X	X	X	LEAD	LEAD	LEAD
	Hutt-MacLeod[43]	X	X	X	X	X	X	X	LEAD	LEAD	LEAD
	Kelley[44]	X	X	X	X	X	X	X	COLL	LEAD	LEAD
	Koski[45]	X	X	X	X	X	X	X	COLL	LEAD	COLL
	Nadin[46]	X	X	X	X	X	X	X	LEAD	LEAD	COLL
	Prince[47]		X	X	X	X		X	LEAD	LEAD	COLL
	Organisational integration										
	Alvarez[34]		X	X	X		X	X	COLL	COLL	COLL
	Barnabe[35]	X		X	X	X	X		UNCL	UNCL	UNCL
	Browne[36]	X	X	X	X	X	X	X	COLL	COLL	COLL
	Chow[37]	X	X	X	X	X	X	X	LEAD	LEAD	LEAD
	Churchill[38]	X	X	X	X	X	X	X	LEAD	LEAD	COLL
	Firestone[39]	X	X	X	X	X	X	X	COLL	COLL	COLL
	Monchalin[40]	X	X	X	X	X	X	X	LEAD	LEAD	COLL
	Smylie[41]		X	X	X	X	X	X	COLL	LEAD	COLL
	Professional Integration										
	Drost[48]	X	X		X	X	X		CONS	N/A	N/A
	Hadjipavlou[49]	X	X	X	X	X	X	X	CONS	LEAD	CONS
	Shrivastava[50] Shrivastava[51]	X	X	X	X	X	X	X	LEAD	LEAD	CONS
	Whiting[52]	X	X		X	X	X		COLL	COLL	COLL
	Functional Integration										
	Abbass-Dick[22]		X			X	X		CONS	CONS	N/A
	Bendall[23]	X	X	X	X	X	X	X	COLL	LEAD	COLL
	Mamakwa[26]	X	X	X	X	X	X	X	LEAD	LEAD	COLL

Continued

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Table 1 Continued

	Framework 2—Harfield							Framework 3—O'Mara-Eves		
First athor[Ref]	Accessible health services	Community participation	Continuous quality improvement	Culturally appropriate and skilled workforce	Flexible approaches to care	Holistic healthcare	Self-determination and empowerment	Design	Delivery	Evaluation
Mathu-Muju[27] Mathu-Muju[29] Mathu-Muju[28]	X	X	X	X	X	X	X	LEAD	LEAD	COLL
Moffitt[30]		X			X	X	X	CONS	COLL	UNCL
Prodan-Bhalla[31] Ziabakhsh[32]	X	X	X	X	X	X	X	COLL	LEAD	LEAD
Varcoe[33] Varcoe[24]		X	X	X	X	X	X	LEAD	LEAD	LEAD
Zehbe[25]		X	X			X	X	COLL	LEAD	COLL

*The colours associated with each of the categories presented in the table were informed by the guidance provided by the Tri-Council Policy Statement, TCPS 2 (2018) surrounding Indigenous engagement and research. Further discussions with Mrs. MacLeod-Beaver highlighted the importance of Indigenous-led research as the ideal, with collaboration and consultation following.
LEAD, leading; COLL, collaborating; CONS, consulting; UNCL, unclear; N/A, not applicable.

services by increasing access of palliative care services in the community, (2) community participation as each community implemented their own programme according to their needs and resources, (3) continuous quality improvement by creating a journey map of the implementation process, (4) culturally appropriate and skilled workforce as care was provided by an internal community caregiving network such as extended family, elders and knowledge carriers, (5) flexible approaches to care as each community programme was grounded in their unique social, spiritual and cultural practices and was integrated into their existing health services, (6) holistic healthcare as care was provided by a local aid as well as a palliative care team including a physician, nurse, social worker and cultural knowledge keeper and (7) self-determination and empowerment as each community had the ability to implement their own programme according to their needs.[44] (online supplemental file 2)

Three studies (10%) integrated six of the seven characteristics of the Harfield *et al* framework.[24 33 41] Varcoe *et al* published two studies describing the adaptation, pilot testing and revision of a nurse-led health promotion intervention at a functional level of integration for Indigenous women who have experienced intimate partner violence.[24 33] They integrated (1) community participation, as they used qualitative interviews with Elders from various First Nations to inform the training and adaptation of the programme; (2) continuous quality improvement, as the purpose of the study was to test and revise the intervention and assess its effectiveness; (3) culturally appropriate and skilled workforce, as elders used ceremony and taught cultural and traditional practices; (4) flexible approaches to care, as the reclaiming our spirits (ROS) intervention described was adapted for Indigenous women from a previously designed iHeal intervention; (5) holistic healthcare, as the roles of Elders and nurses were integrated with the concept of a Circle with varying levels of formality and ceremony; and (6) self-determination and empowerment, as the ultimate goal of ROS was to enable and support the healing and agency of women who have experienced intimate partner violence.[24 33] This strategy was missing accessible health services as defined by Harfield *et al*[19] (table 1).

Moreover, eight studies (26%) were missing more than one Harfield *et al* characteristic.[22 25 30 34 35 47 48 52] For example, Abbass-Dick *et al* consulted with Indigenous mothers to create a breastfeeding education resource for Indigenous families.[22] They met (1) community participation, as they consulted with Indigenous mothers and advisory committee members who self-identified as Indigenous; (2) flexible approaches to care, as they modified a generic eHealth resource to make it culturally appropriate for Indigenous families and (3) holistic healthcare, as there was specific information for the role of the father/partner and co-parents to assist mom in meeting breastfeeding goals.[22] However, this strategy was missing accessible health services, continuous quality improvement, culturally appropriate and skilled workforce and

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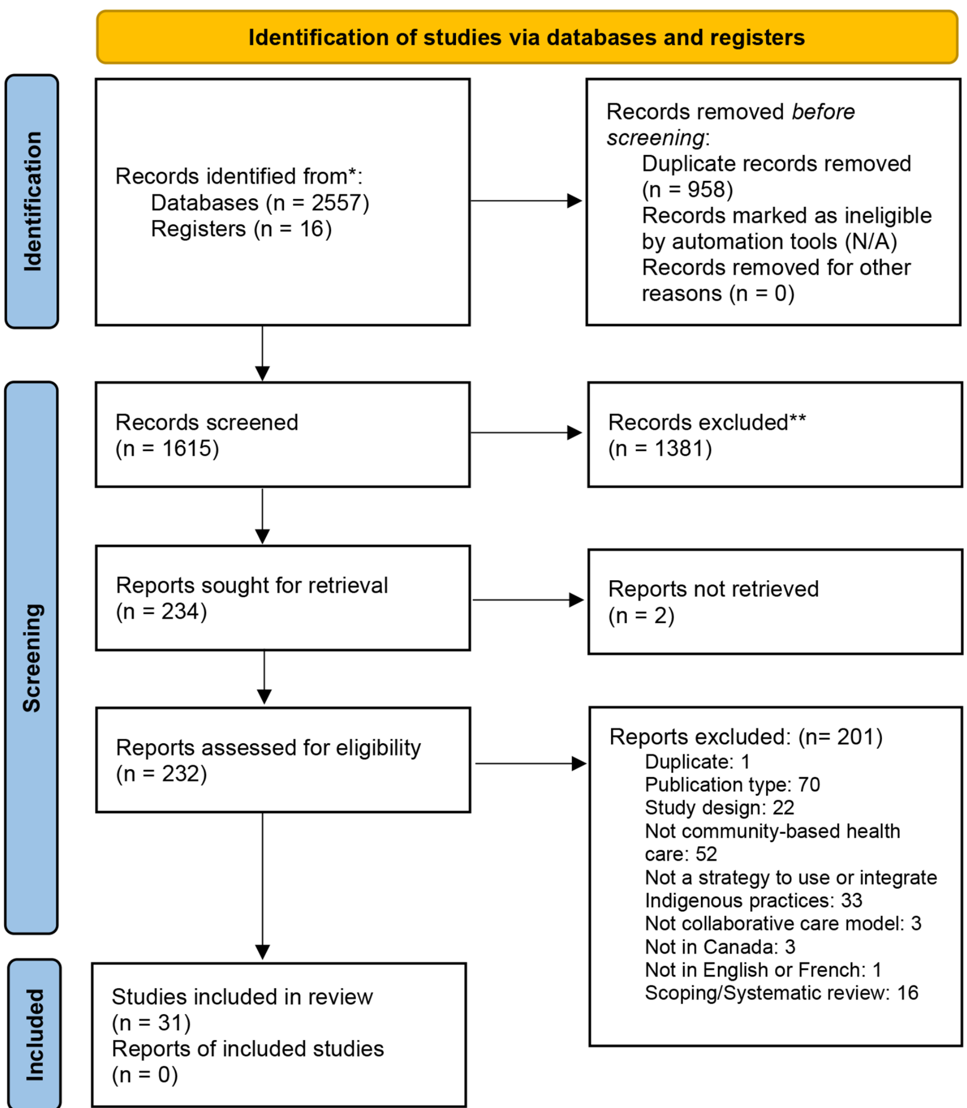

Figure 2 PRISMA flow diagram.

self-determination and empowerment as defined by Harfield *et al* (table 1).

Twenty-four studies (77%) had Indigenous leadership or collaboration at each level of the study (design, delivery and evaluation). Of these, seven were missing at least one Harfield *et al* characteristic.[24 25 33 34 41 47 52] The characteristic most often missing was 'accessible health services', which was not included in five of these studies.[24 25 33 41 47] Seven studies (23%) included consultation with Indigenous Peoples or communities in the design,[22 30 48 49] delivery[22] and evaluation,[49–51] or the level of engagement was unclear.[30 35] Of these, four studies did not include at least one Harfield *et al* characteristic.[22 30 35 48] In contrast, three studies had Indigenous consultation as part of either the design, delivery or evaluation of their strategy, but also had an Indigenous-led part of their strategy. These studies did include all aspects of the Harfield *et al* criteria. Hadjipavlou *et al*[49] was only consultative in the design and evaluation of the study. However, it was Indigenous led in the delivery of the mental health services provided by elders in a primary care clinic. Shrivastava *et al*[50 51] was Indigenous led in the design and delivery of the integration of oral healthcare in the community primary healthcare organisation but was only consultative in the evaluation of the strategy. Table 1 provides a summary of the mapping of the Harfield *et al* framework and extent and level of community engagement for each study.

DISCUSSION

Our rapid scoping review summarises strategies used to integrate Indigenous healing practices in collaborative care models in primary healthcare among regulated healthcare professionals in Canada. Most strategies focus on increasing service access of Indigenous communities to healthcare services at the community level, with the remaining studies split between overarching programme implementation, organisational collaboration and professional collaboration. Further, 58% of studies provide important values, principles and components of Indigenous primary healthcare service delivery models as defined by Harfield *et al*. We also found that strategies

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which are collaborative or Indigenous led were more likely to include the characteristics of the Harfield *et al* framework as being important to providing culturally appropriate healthcare and consistent with the First Nations Ownership, Control, Access and Possession research principles.

Indigenous peoples in Canada have reported that barriers to seeking care include fears of stereotyping and discrimination, differences or lack of communication, lack of options for care, feeling isolated or far from home, mistrust of the system and not being involved in decision making.[7–9] Strategies identified in our scoping review specifically address barriers to seeking care such as creating community-based health clinics or workers,[23 34 42 43 46 47] creating an inclusive environment with cultural helpers,[27–29 37 42 43 45] appropriate décor or open and compassionate staff and healthcare practitioners,[36 38 39 50 51] and providing options for care which include access to Elders or Indigenous healing practices.[24 26 31–33 35 38 40 44 48 49 52] Our review described strategies used to integrate Indigenous healing practices for breast feeding, cardiovascular health, mental health, oral health, COPD, palliative care, tuberculosis, rheumatoid arthritis, cancer, drug programmes, intimate partner violence. These have been identified as health issues which disproportionately affect Indigenous populations.[2 53] Common aspects of these strategies include community engagement such as having local aids, health workers or Indigenous staff,[27–29 37 41–46 50 51] Elder support[23 24 26 30–33] or including Indigenous ceremony or traditions as part of the educational component.[23 24 26 31–34] However, this does not cover all reported health disparities, and some conditions only have one study describing a strategy to improve a health outcome.

We identified various strategies aiming to address the disparity in health service access and culturally appropriate healthcare for Indigenous communities. We found few studies describing higher order integration, such as at the health system or organisational level. We agree with the *In Plain Sight* report, that there is a paucity of evidence for system wide strategies which limits overall and sustainable reform of the health system. It is important to note that our rapid scoping review did not assess the methodological quality of the included studies. Similarly, we did not synthesise the evidence on the effectiveness of the reported strategies on outcomes such as change in health outcomes, health service utilisation, Indigenous community or persons satisfaction or trust in the health services or the Canadian healthcare system. Therefore, we cannot comment on the effectiveness of the strategies included, only on the strategies used or how they engaged the community to integrate Indigenous practices into community-based healthcare services. This is particularly important in the context of the *In Plain Sight* report which emphasises that despite a range of well-intentioned efforts and many devoted leaders to improving health service access for Indigenous populations, little reform is occurring at the front line.[5]

IMPLICATIONS FOR RESEARCH, PRACTICE AND POLICY

Our scoping review identified 31 studies which described strategies used to integrate Indigenous healing practices in collaborative care models in community-based primary healthcare, delivered by regulated health professionals in Canada. The majority of these studies describe strategies to provide culturally appropriate primary healthcare as defined by Indigenous Peoples. We found that strategies which were Indigenous-led or collaborative were more likely to include the Harfield framework characteristics. Therefore, we recommend that strategies should reach a minimum of a collaborative extent of an engagement across intervention design, delivery and evaluation phases which should lead to true engagement. We suggest that future research focus on developing higher level integration strategies such as at the normative and organisational levels, as these strategies can lead to changes in health systems and more sustainable access to culturally appropriate healthcare for Indigenous peoples. Finally, future studies should focus on assessing whether the strategies are acceptable and appropriate to the specific communities that use them, whether the strategies are effective in improving culturally appropriate access to health services for Indigenous peoples and communities or sustainable and useful for Indigenous communities across Canada.

We intended to identify practical examples of strategies used in Canada to integrate Indigenous healing practices in community-based healthcare; however, we found that the true learning experience came from the understanding of the strategies rather than the strategies themselves. We drew on dimensions of three different frameworks to create a foundation from which researchers, clinicians or organisations can build on when approaching Indigenous communities to start forming partnerships, which may develop into true relationships over time. This foundation honours and respects Indigenous cultures, needs and resources to provide the most appropriate care for each individual community.

The addition of Mrs. MacLeod-Beaver to the research team enhanced the experience and importance of this research project. The insight that she provided allowed us to step away from the scientific process, and to better understand and appreciate the importance and relevance of the work. While the content of the scoping review provides a starting point to understanding the current landscape of strategies used to integrate Indigenous healing practices in community-based primary healthcare practices, the experience and the lessons learnt by the research team during the conduct of this scoping review contributed to a greater understanding for the approach to working with Indigenous communities, the connection to Indigenous peoples, and the need for reform. These are the lessons that will allow researchers, clinicians and organisations to move forward in providing a safe and inclusive environment for Indigenous peoples in the healthcare system and healthcare settings.

Our findings and experience mirror those of others conducting Indigenous related research, noting that

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in order to create culturally safe and supportive environments, there must be critical reflection, cultural competencies and a sincere commitment to change.[8] Further, best practices to deliver healthcare to Indigenous communities includes establishing a trusting relationship, working with each community as a unique body, considering culturally congruent communication and collaborate with the community.[4 54] Importantly, the power to define the nature of the care received lies with the patient, no matter what the healthcare provider, organisation or research team may know or intend; in the end, it is up to the patient and community to determine if they feel safe and respected.[9]

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Contributors MC assisted in developing the research question and rapid scoping review methodology, was the main reviewer for article screening and data extraction, drafted the manuscript, and reviewed and revised the manuscript. AD assisted in developing the research question and rapid scoping review methodology, was the second reviewer for the screening protocol, verified data extraction, and reviewed the manuscript. KM-B provided guidance related to elements of the research question, verified article selection, data extraction, advised on the chosen frameworks and how they were applied to the studies, provided insight into the importance of specific aspects of the strategies, interpretation of results, identification of key messages and reviewed the manuscript. CC, GB, HY, SM and PC assisted in developing the research questions and rapid review methodology, verified data extraction, and reviewed and revised the manuscript. AT-V developed the search strategy and conducted the literature searches. AT-V passed away on 8 February 2022. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work. PC is the guarantor of this work.

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