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Indigenous-Led and Culturally Safe Primary Healthcare Interventions for First Nations, Inuit, and Métis Peoples in Canada: A Narrative Literature Review

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Abstract

Background: First Nations, Inuit, and Métis peoples in Canada continue to experience inequities in access to primary healthcare. These inequities occur within diverse historical, geographic, cultural, organizational, and health-system contexts. Researchers have examined Indigenous-led, community-based, culturally safe, and equity-oriented approaches intended to improve healthcare access and delivery in Canada. **Objective:** This narrative literature review aimed to synthesize contemporary evidence on Indigenous-led, community-based, and culturally safe primary healthcare interventions involving First Nations, Inuit, and Métis peoples in Canada. It examined intervention characteristics and reported outcomes, recurring factors influencing implementation and sustainability, and implications for healthcare practice, policy, and future research. **Methods:** A structured literature search of PubMed/MEDLINE, Scopus, CINAHL, Web of Science, and Google Scholar was conducted for literature published between January 2010 and August 2026. Eligible studies reported original empirical research involving First Nations, Inuit, or Métis populations in Canada and examined interventions or models relevant to primary or community healthcare. Findings from eligible studies were synthesized using a narrative thematic approach to identify recurring patterns, differences, reported outcomes, and implementation considerations. **Results:** Five overlapping themes were identified:

1) Indigenous governance, community leadership, and co-design; 2) culturally safe, relational, and Indigenous-informed care; 3) community-based chronic disease prevention and management; 4) navigation, interdisciplinary care, and continuity; and 5) access innovations and conditions influencing implementation. Across the literature, Indigenous participation, culturally responsive relationships and organizational practices, coordination across services, local adaptation, and attention to workforce and infrastructure emerged as recurring considerations. However, substantial heterogeneity in populations, settings, intervention designs, implementation conditions, and outcomes limited direct comparison and generalization across communities. **Conclusion:** The evidence suggests that strengthening Indigenous primary healthcare requires more than increasing the availability of clinical services. Access also involves continuity, navigation, communication, cultural safety, relationships, and the capacity of healthcare systems to respond to local circumstances. First Nations, Inuit, and Métis peoples have distinct histories, cultures, governance structures, geographic circumstances, and relationships with healthcare systems; therefore, interventions should be locally responsive rather than assumed to be universally applicable across Indigenous communities. Future healthcare development and research should emphasize durable partnerships, meaningful Indigenous participation, locally responsive service design, culturally and linguistically appropriate communication, workforce and infrastructure capacity, and evaluation of clinical, access, implementation, sustainability, and patient- and community-centred outcomes.

Subject Areas

Evidence-Based Medicine

Keywords

Indigenous Health, First Nations, Inuit, Métis, Primary Healthcare, Cultural Safety, Indigenous-Led Healthcare, Community-Based Healthcare, Health Equity, Canada

1. Introduction

Indigenous peoples in Canada, including First Nations, Inuit, and Métis communities, continue to experience substantial disparities in health outcomes compared with the non-Indigenous population. These inequities are seen across a wide range of health indicators, including higher rates of diabetes, cardiovascular disease, mental health disorders, substance use disorders, and reduced life expectancy. Indigenous peoples also experience reduced access to timely primary care, particularly in rural, remote, and northern communities [1] [2]. Such patterns occur within broader historical, social, political, and healthcare-system contexts that have shaped Indigenous peoples' experiences of health and healthcare.

The ongoing effects of colonization, residential schools, forced displacement,

the Sixties Scoop, discriminatory policies, and anti-Indigenous racism have influenced social determinants of health and relationships between Indigenous peoples and healthcare institutions [2] [3]. Contemporary experiences of discrimination and racism within healthcare may further contribute to mistrust, delayed care-seeking, avoidance of services, and concerns regarding cultural safety [1] [4]. Accordingly, inequities in Indigenous health cannot be understood solely through individual behaviours or biomedical risk factors but must also be considered in relation to structural conditions and healthcare-system experiences.

Primary healthcare has an important role in prevention, early assessment, chronic disease management, health promotion, and coordination across healthcare services [5]. However, the presence of healthcare services does not necessarily mean that care is accessible, continuous, culturally safe, or responsive to community priorities. Some Indigenous communities encounter geographic isolation, healthcare workforce shortages, transportation barriers, fragmented jurisdictional responsibilities, limited continuity of care, and healthcare environments that may inadequately recognize Indigenous histories, knowledge systems, or experiences of racism [1] [2] [4].

In response to these challenges, Canadian research has increasingly examined approaches intended to make primary healthcare more equitable, culturally safe, and responsive to Indigenous patients and communities. Equity-oriented primary healthcare has emphasized organizational responses to structural inequities, cultural safety, and trauma- and violence-informed care [6]. Research in this area suggests that implementation may depend not only on the practices of individual healthcare professionals but also on supportive organizational structures, leadership, policies, and relationships with communities [7]. Relational approaches have similarly emphasized trust, culturally meaningful relationships, responsiveness to Indigenous ways of knowing, and adaptation of conventional service-delivery practices, including the involvement of Elders and Indigenous knowledge holders where appropriate [8] [9].

Indigenous leadership, governance, and community participation represent related but distinct dimensions of healthcare transformation. Indigenous-governed health services may provide opportunities for communities to shape healthcare delivery according to local priorities, governance structures, and circumstances [10]. Community-engaged initiatives have also used collaborative quality improvement and participatory approaches to identify local priorities and support changes in primary healthcare delivery [11] [12]. Importantly, interventions that are community-based or culturally adapted should not automatically be considered Indigenous-led; the extent of Indigenous governance, decision-making, partnership, and control may differ substantially across interventions.

Canadian research has explored several approaches to improving the accessibility, coordination, and cultural responsiveness of primary healthcare for Indigenous peoples. These approaches include community-based chronic disease pro-

grams, culturally adapted health education, navigation and outreach services, and models that seek to strengthen connections between communities and healthcare providers [13] [14]. More recent work has also considered how Indigenous healing approaches and virtual models of care might be incorporated within primary healthcare delivery [15]. The relevance and feasibility of these approaches may vary across settings according to community priorities, geography, available infrastructure, workforce capacity, governance arrangements, and local models of care.

Interpretation of this literature also requires recognition of the diversity of Indigenous peoples and communities in Canada. First Nations, Inuit, and Métis peoples have distinct histories, cultures, languages, governance structures, geographic circumstances, and relationships with federal, provincial, territorial, and Indigenous health systems [2]. Moreover, the available intervention literature does not necessarily represent First Nations, Inuit, and Métis populations equally. Findings from an intervention evaluated within one population or community, therefore, should not be assumed to apply to others. Attention to local context, Indigenous governance and participation, and the populations represented in the evidence is consequently important when interpreting reported intervention outcomes.

National and international developments provide additional context for these approaches. The TRC's *Calls to Action*, the United Nations Declaration on the Rights of Indigenous Peoples, and the *In Plain Sight* report have drawn attention to Indigenous rights and participation, Indigenous healing practices, cultural safety, and anti-Indigenous racism within healthcare [3] [4] [16]. Together, these developments have contributed to broader attention to Indigenous participation, self-determination, cultural safety, and structural change within Canadian healthcare.

Despite growing research in this area, the evidence is distributed across different Indigenous populations, geographic settings, clinical areas, intervention types, and methodological approaches. Individual studies provide important but context-specific findings, while differences in intervention design, governance, outcome measurement, and implementation environments complicate comparisons across settings. Synthesis is therefore useful for identifying recurring intervention characteristics, reported outcomes, implementation conditions, and areas in which evidence remains limited.

Accordingly, this narrative literature review synthesizes contemporary Canadian evidence concerning Indigenous-led, community-based, and culturally safe primary healthcare interventions involving First Nations, Inuit, and Métis peoples. It examines the characteristics and reported outcomes of these interventions, explores recurring factors associated with their implementation and sustainability, and considers implications for healthcare practice, policy, and future research. Given the heterogeneity of the available literature and the diversity of Indigenous peoples and communities, findings are interpreted in relation to the contexts in which interventions were implemented and evaluated rather than as evidence of

universally applicable effects.

2. Methods

2.1. Review Design

This is a narrative literature review to synthesize and critically examine published evidence on Indigenous-led and culturally safe primary healthcare interventions for First Nations, Inuit, and Métis peoples in Canada. A narrative review methodology was chosen because it permits synthesis across heterogeneous studies without forcing incompatible pooling of effect sizes [17] [18]. A narrative approach was considered the most appropriate method for identifying recurring themes and informing healthcare policy and practice.

2.2. Literature Search Strategy

A comprehensive literature search was conducted to identify peer-reviewed studies evaluating Indigenous-led, community-based, or culturally safe primary healthcare interventions implemented in Canada. The search included PubMed/MEDLINE, Scopus, CINAHL, Web of Science, and Google Scholar. To improve the completeness of the review, the reference lists of eligible articles were manually screened to identify additional relevant publications not retrieved through the electronic database searches [19].

The search strategy combined Medical Subject Headings (MeSH), controlled vocabulary, and free-text keywords related to Indigenous health and primary healthcare. Search terms included *Indigenous*, *First Nations*, *Inuit*, *Métis*, *Aboriginal*, *primary healthcare*, *primary care*, *community health*, *cultural safety*, *Indigenous-led care*, *traditional healing*, *patient navigation*, *chronic disease management*, *quality improvement*, *virtual care*, *telehealth*, *health equity*, and *Canada*. Boolean operators (AND/OR) and database-specific indexing terms were used to optimize the retrieval of relevant studies.

The search focused on literature published between January 2010 and August 2026 to capture contemporary developments in Indigenous primary healthcare, including growing attention to Indigenous governance, cultural safety, community participation, and community-based healthcare models.

2.3. Eligibility Criteria and Study Selection

The following criteria were used to screen studies for eligibility:

- Original empirical studies were conducted in Canada.
- Studies evaluating Indigenous-led, community-based, culturally safe, or equity-oriented primary healthcare interventions involving First Nations, Inuit, or Métis populations.
- Studies reporting healthcare, implementation, organizational, or patient-centred outcomes.
- Peer-reviewed studies published in English.

Quantitative, qualitative, mixed-methods, health-services, implementation, eco-

nomic, and program-evaluation studies were eligible because of the methodological diversity of the literature relevant to the review question.

Reviews, editorials, commentaries, study protocols, dissertations, conference abstracts without full-text publications, and studies conducted outside Canada were excluded from the primary evidence synthesis. Studies focused exclusively on inpatient or specialized tertiary care were also excluded unless the intervention had a clear connection with primary or community-based healthcare.

For the purposes of this review, primary and community healthcare were defined broadly to include interventions delivered in community settings, as well as those supporting first-contact care, prevention, health promotion, chronic disease management, care coordination, patient navigation, continuity of care, or connections between community-based primary care and specialist services. Early-childhood, specialist-linked, and palliative navigation interventions were eligible only when they had an explicit primary or community healthcare function. Interventions delivered exclusively within inpatient, tertiary, or specialist settings without a clear connection to primary or community-based healthcare were excluded from the primary synthesis and, where relevant, considered only as contextual evidence.

The literature search covered publications from January 2010 through August 2026. Following application of the eligibility criteria, 27 original empirical publications were retained for the primary narrative synthesis. The characteristics of the included publications are summarized in the **Appendix**. The included publications represented diverse methodological approaches, including qualitative research, mixed-methods studies, randomized controlled trials, community-based participatory research, health-services research, implementation studies, economic evaluations, and program evaluations.

Background literature, reviews, policy documents, reports, and methodological publications were used to establish context, support the review methodology, and inform interpretation, but were not treated as empirical intervention studies or counted among the publications included in the primary synthesis. This distinction is relevant because the manuscript's reference list contains both empirical studies included in the primary synthesis and contextual or methodological sources.

2.4. Data Extraction

Information was extracted from eligible studies using a structured framework. Extracted information included author and year, geographic setting, Indigenous population or community, study design, participant characteristics, intervention or healthcare model, reported outcomes, and principal findings. Information concerning Indigenous leadership or governance, community participation, cultural safety, Indigenous knowledge or healing practices, interdisciplinary collaboration, healthcare accessibility, organizational capacity, and implementation conditions was also recorded when reported.

The extracted information was reviewed to identify similarities and differences across interventions, implementation approaches, and reported outcomes. This

process facilitated comparison of diverse healthcare models while preserving the contextual information necessary to interpret findings within Indigenous healthcare settings.

2.5. Narrative Thematic Synthesis

Narrative synthesis, a structured methodological framework specifically designed to combine and synthesize studies when statistical pooling is impossible, was used to organize findings across the eligible studies [20]. This approach is rooted in evidence-based medicine and policy evaluation, prioritizing transparency, minimization of bias, and methodological rigor across varied study designs. The synthesis began with a review of the extracted findings to identify recurring concepts relevant to Indigenous primary and community healthcare. Initial concepts included Indigenous governance, community participation, cultural safety, relational care, Indigenous healing, chronic disease management, patient navigation, interdisciplinary collaboration, digital access, organizational capacity, and implementation barriers.

Related concepts were subsequently grouped into preliminary thematic categories. Areas of substantial conceptual overlap were compared and consolidated to reduce duplication. Cross-cutting factors, including workforce capacity, organizational readiness, funding, infrastructure, and geographic barriers, were considered within the intervention contexts in which they were reported rather than being repeatedly presented as independent findings.

The synthesis was organized around five broad themes:

1) Indigenous governance, community leadership, and co-design
2) Culturally safe, relational, and Indigenous-informed care
3) Community-based chronic disease prevention and management
4) Navigation, interdisciplinary care, and continuity
5) Access innovations and conditions influencing implementation

These themes were used as an organizational framework rather than as mutually exclusive categories. Where a study addressed more than one aspect of primary healthcare, its findings could contribute to more than one theme; however, unnecessary repetition of the same findings across themes was avoided.

The synthesis focused on identifying recurring patterns, differences, reported outcomes, and implementation considerations rather than determining pooled intervention effects. Given the variation in study designs, settings, populations, and outcome measures, findings were interpreted within their respective contexts and were not assumed to establish causal relationships or to be universally applicable.

3. Findings

The included studies examined diverse approaches to primary and community healthcare involving First Nations, Inuit, and Métis peoples in Canada. Interventions varied in their degree of Indigenous leadership and governance, community

participation, cultural adaptation, clinical focus, and mode of delivery. They also differed substantially in study design and reported outcomes. Consistent with the thematic framework described in the Methods, findings were organized into five overlapping themes: 1) Indigenous-led governance, community leadership, and co-design; 2) culturally safe, relational, and Indigenous-informed care; 3) community-based chronic disease prevention and management; 4) navigation, interdisciplinary care, and continuity; and 5) access innovations and conditions influencing implementation. Findings are presented within the contexts in which interventions were implemented and evaluated rather than as estimates of comparative effectiveness.

3.1. Indigenous-Led Governance and Quality-Improvement Models

Across Canada, the strongest consensus is that Indigenous primary healthcare works best when communities control governance, culture anchors care delivery, and improvement systems are built around Indigenous data sovereignty and local priorities [21]-[23]. Indigenous leadership and community participation were recurring features of several primary healthcare initiatives, although the extent of community governance and decision-making differed across interventions. Some initiatives involved Indigenous communities in identifying healthcare priorities, adapting services, directing implementation, or participating in quality-improvement activities rather than relying exclusively on externally determined models.

The FORGE AHEAD initiative illustrates this approach within First Nations primary healthcare. The program used community and clinical teams to identify priorities and undertake locally developed quality-improvement activities related to diabetes care and prevention [11] [24]. Organizational readiness was an important component of this work, with leadership, staff engagement, governance, and readiness for change considered in relation to implementation [11]. A subsequent economic evaluation examined the implementation costs and healthcare resource utilization associated with FORGE AHEAD, providing additional evidence on the economic considerations surrounding community-driven quality-improvement initiatives in participating First Nations communities [25].

Other research examined Indigenous governance and community participation more broadly. Indigenous-governed health services have been described as providing opportunities for communities to influence healthcare planning and delivery according to local priorities and circumstances [10]. Community-based participatory work has similarly involved First Nations communities in identifying local strengths, priorities, and opportunities for primary healthcare transformation [12]. For Inuit-governed care, the clearest described model is Nunavut's public government, where an Inuit self-governing and public government structure holds responsibility for health services territory-wide, while broader Canadian typologies show stronger Indigenous governance when decision space includes rules, financing, and accountability [26].

Quality-improvement models in Indigenous primary care emphasize continuous learning, local capacity, and culturally relevant measurement, but the evidence is mostly from First Nations and mixed Indigenous settings rather than Inuit- or Métis-governed primary care specifically [11] [21] [27]. Case-study evidence shows QI depends on relationships, organizational support, and multiple knowledge sources, not just technical tools [27]. Learning-health-system work in Canada finds that current frameworks are not yet tailored to the needs of First Nations, Inuit, and Métis and must incorporate Indigenous ethics, OCAP, Inuit Qaujimajatuqangit, and Métis research principles [28].

The direct evidence for Inuit-governed or Métis-governed primary healthcare is thinner than the broader Indigenous PHC literature. Inuit evidence is stronger on governance in research and system design, while Métis evidence is stronger on data governance and partnership principles than on fully described Métis-governed primary care organizations [26] [29] [30].

Indigenous-led governance and quality improvement in Canadian primary healthcare, therefore, appear most developed as general Indigenous PHC principles and First Nations-focused QI models, with more limited but growing Inuit- and Métis-specific governance frameworks [23] [31] [32].

3.2. Culturally Safe, Relational, and Indigenous-Informed Care

This theme breaks into three linked facets: cultural safety as the condition for trust and access, traditional healing as a core care modality, and Elder involvement as both a clinical and governance strategy.

Cultural safety emerged in the literature as a multidimensional aspect of healthcare delivery involving relationships, organizational practices, community participation, and recognition of Indigenous knowledge and experiences. It is framed less as provider "competence" than as power-sharing, anti-racism, and Indigenous governance in the design and delivery of care [32]-[35]. It is consistently tied to trust, reduced fear of judgment, and better engagement, especially where Indigenous patients have experienced stereotyping, dismissal, or racism in mainstream services [31] [36]-[38]. The studies did not identify a single standardized model of culturally safe primary healthcare.

Other research approached cultural safety through organizational change. Equity-oriented primary healthcare interventions have incorporated attention to structural inequities, cultural safety, and trauma- and violence-informed care, with implementation occurring at both clinical and organizational levels [6]. Related research has indicated that organizational structures, policies, leadership, and implementation environments may influence how equity-oriented practices are incorporated into routine healthcare delivery [7].

Elder Involvement—Relational Approach

Relational approaches emphasized the importance of trust, respectful communication, continuity, and responsiveness to patients, families, and communities. [9]. For example, described the integration of Elders within primary care and high-

lighted relationships and culturally meaningful interactions within healthcare delivery. [8] similarly emphasized relational practices, responsiveness to families, and the importance of addressing mistrust within community-based healthcare. Elder involvement functions as both a healing resource and a structural marker of culturally safe care [31] [39] [40]. Elders appear in these studies as teachers, ceremonial leaders, advisors, interpreters of wellness, and participants in governance and program design, linking care to identity, relationality, and community authority [22] [36] [41]. Reviews identify Elder support as a recurring feature of successful Indigenous healing integration and culturally safe chronic disease and mental health care [31] [34] [39]. Elders support resilience through teachings, language, ceremony, and land-based healing, particularly for youth mental wellness and identity reclamation [22] [40] [41]. A major barrier is that Elders are still poorly recognized and under-resourced in Canadian primary care, especially in urban settings [39].

Traditional Healing

The relationship between Indigenous knowledge systems and biomedical healthcare was another component of this theme. [15] examined approaches to incorporating Traditional Healing Practitioners within primary healthcare teams, emphasizing collaboration, Indigenous knowledge transmission, and the availability of Indigenous healing practices alongside biomedical services. Traditional healing is treated as a foundational health system component, not an optional cultural add-on, especially in Indigenous-led and community-based primary care models [41]. Some papers describe integration strategies that combine biomedical care with ceremonies, medicines, land-based practices, teachings, and access to healers to address conditions from mental health to chronic disease and palliative care [31] [34]. Integrated models include ceremonies, plant medicines, foods, and healing spaces within clinics and hospitals [22]. Traditional healing aligns with a holistic view of wellness spanning spiritual, mental, emotional, and physical domains [39]. Evidence is strongest for acceptability and conceptual importance; direct effectiveness data remain sparse, with some areas supported by only one or two studies [31]. These findings describe possibilities for Indigenous-informed healthcare but do not establish a uniform model for integrating traditional and biomedical approaches across communities.

Collectively, the literature positions cultural safety as extending beyond provider knowledge or cultural-awareness education alone. Relationships, organizational practices, Indigenous participation, and recognition of Indigenous knowledge were recurring components, although their form and relevance differed according to community and healthcare context.

3.3. Community-Based Chronic Disease Prevention and Management

Chronic disease prevention and management represented a substantial component of the intervention literature, particularly in relation to diabetes, hyperten-

sion, medication management, and arthritis. These interventions frequently combined conventional clinical care with community participation, education, cultural adaptation, health literacy, or coordination across healthcare services. The literature consistently frames community-based chronic disease management as strongest when communities define priorities, guide program design, and retain meaningful control over delivery. First Nations studies in Manitoba link better community-based care to responsive leadership, community participation, and self-determined programming grounded in local culture, spirituality, land, and social conditions [12] [41]. Community ownership is repeatedly identified as essential for successful chronic disease interventions [28] [42]. Reported engagement is often shallower than claimed, with few studies involving communities in setting priorities or using Indigenous interview styles [43]. More culturally safe research and care require formal Indigenous governance, partnership, and Indigenous voices throughout design and dissemination [44].

The care delivery model is diverse and not just clinical follow-up; it bundles prevention, screening, self-management, transport, home care, family support, Elders, and links to traditional healing. Reviews of culturally safe chronic disease care identify facilitators such as peer-led education, home visits, transport, community activities, family support, and Elders, while also noting that many interventions still privilege disease management over a more holistic model [39]. FORGE AHEAD shifted from episodic care toward proactive prevention, registries, readiness assessments, and community-led quality improvement for diabetes care [11]. Kidney Check brings single-visit mobile screening for CKD, diabetes, hypertension, and obesity directly into communities with real-time results, coaching, and referrals [45]. Community-delivered programs also extend to nutrition and physical activity, using family-oriented education, social connection, cultural programming, and tailoring by age, gender, and family role [42] [46]. Other work has examined culturally responsive approaches to diabetes care, including interventions intended to strengthen cultural safety and incorporate community perspectives within diabetes prevention and management [23]. Although these approaches shared an emphasis on adapting care to community context, differences in intervention design and outcome measurement limit direct comparison.

Hypertension management was examined in the DREAM-GLOBAL trial, which evaluated a culturally adapted mobile-health intervention in rural and remote First Nations communities [13]. The intervention incorporated mobile health messaging and community-based healthcare resources. Hypertension-specific text messaging did not result in significantly greater blood-pressure reductions than general health messaging, illustrating that the use of a culturally adapted digital intervention did not necessarily translate into superior clinical outcomes for the primary comparison [13]. Medication-related interventions addressed another component of chronic disease care. Culturally adapted, nurse-delivered education has been examined as an approach to strengthening medication-related

health literacy within an Indigenous primary healthcare setting [24]. Such interventions extend beyond medication prescribing by addressing patients' understanding of treatment and communication within healthcare encounters.

Chronic disease care also intersected with navigation and specialist access. [14] described an arthritis liaison model intended to strengthen culturally relevant coordination between Indigenous patients, communities, primary healthcare, and specialist rheumatology services. The model illustrates how management of chronic conditions may depend not only on clinical treatment but also on the ability to navigate relationships between community and specialist services.

Overall, the chronic disease literature demonstrates considerable diversity in both intervention components and reported outcomes. Community participation, culturally responsive education, communication, digital support, and care coordination appeared across different models, but the available evidence does not identify a single chronic disease intervention that can be assumed to produce similar outcomes across Indigenous communities. The main implementation lesson is that community-based models work best when cultural safety is paired with flexible infrastructure, workforce capacity, and sustained funding. Reviews identify barriers in staffing, resources, continuity, and culturally unsafe systems, while emphasizing trusted relationships, community health workers, flexible care pathways, and multidisciplinary support [47] [48]. Community-based chronic disease management, as a theme in Indigenous-led and culturally safe primary healthcare in Canada, is therefore less a single program type than a relational model: community-governed, culturally grounded, and organized around access, continuity, and everyday self-management. The evidence is strongest on design principles and feasibility, while evidence on long-term clinical outcomes remains more limited [42] [45].

3.4. Navigation, Interdisciplinary Care, and Continuity

Several studies examined interventions intended to strengthen connections between Indigenous patients and different components of the healthcare system. These approaches addressed circumstances in which care involved transitions between community services, primary healthcare, specialist care, hospitals, or other healthcare providers.

The arthritis liaison model described by [14] illustrates this function by connecting Indigenous communities with primary and specialist rheumatology services. Rather than treating specialist access as an isolated referral event, the model incorporated culturally relevant liaison and coordination intended to support patients across different parts of the care pathway.

Interdisciplinary outreach represented another approach. The Wellness Wheel Clinics used partnerships between First Nations communities and healthcare providers to deliver primary healthcare, chronic disease management, and connections with specialist services [25]. This model brought multiple services and professional roles into a community-partnered approach rather than requiring all care

to occur through conventional facility-based pathways.

Navigation approaches have also been extended to areas in which patients and families may interact with multiple healthcare settings. [26] evaluated an Indigenous Palliative Care Nurse Navigator as an approach to addressing service gaps and supporting navigation across healthcare settings. Although the clinical context differs from other primary healthcare interventions, the navigation role illustrates a broader emphasis within the literature on facilitating communication and continuity between patients, families, communities, and healthcare services.

Across these studies, navigation, liaison, and interdisciplinary care were implemented in different clinical contexts and should not be interpreted as a single intervention model. Their common feature was an emphasis on relationships and coordination across otherwise fragmented components of healthcare delivery. The evidence describes context-specific applications of these approaches rather than establishing the comparative effectiveness of a standardized Indigenous patient-navigation model.

3.5. Access Innovations and Conditions Influencing Implementation

Geography, healthcare workforce availability, and service distribution influenced the context in which several interventions were developed. Digital and virtual healthcare approaches were examined, particularly in relation to rural and remote communities where travel distance and limited local availability of some healthcare services may affect access. Virtual care for rural and remote First Nations, Inuit, and Métis communities in Canada addresses persistent inequities in healthcare access through telehealth, videoconferencing, and remote monitoring, but evidence consistently cautions that technology alone cannot ensure culturally safe care without Indigenous leadership in design and delivery [49] [50].

The DREAM-GLOBAL study incorporated mobile-health technology into hypertension management within rural and remote First Nations communities, demonstrating one way in which digital communication could be incorporated into community-based chronic disease care [13]. More recent work has examined virtual healthcare networks intended to facilitate connections with primary and specialist healthcare services in rural and remote settings [27]. These models illustrate the potential role of technology in extending aspects of healthcare delivery beyond conventional in-person encounters.

However, digital access was closely connected to broader implementation conditions. Connectivity, technological infrastructure, technical support, workforce capacity, and integration with existing services influenced the circumstances in which virtual approaches could be implemented [13] [27]. Digital healthcare, therefore, represented one approach to particular geographic and service-access barriers rather than a comprehensive response to the broader structural, relational, and cultural dimensions of healthcare access.

Implementation considerations also extended beyond digital interventions. Organizational readiness and local capacity were prominent within community-based quality-improvement initiatives, particularly FORGE AHEAD [11] [24]. Community participation and local adaptation were similarly emphasized within participatory primary healthcare transformation work [12]. These findings indicate that intervention implementation occurred within organizational and community environments that differed in governance, staffing, infrastructure, resources, and readiness for change.

Rural and remote Indigenous communities face longstanding shortages of primary care providers, geographic isolation, and jurisdictional disputes over healthcare responsibility, all of which virtual care aims to mitigate [49]. British Columbia's Real-Time Virtual Support (RTVS) network established seven virtual care pathways serving rural, remote, and First Nations communities, supporting 38,905 patient encounters and 29,544 hours of peer-to-peer support in its first year, with 90% patient satisfaction [51]. In Saskatchewan, telerobotic ultrasonography and remote presence technologies have been deployed for over a decade to bring specialty services to northern Indigenous communities, demonstrating that standardized readiness assessments and community profiling are critical for successful implementation [52] [53]. An Indigenous-focused virtual diabetes clinic serving over 400 individuals in rural and remote communities illustrates how virtual specialty care can reach populations with elevated chronic disease burdens [54]. Telehealth reduces travel time and costs for remote patients and is most acceptable for follow-up and after-hours consultations [55].

Evidence converges on the principle that virtual care must be Indigenous-led or Indigenous-centred to avoid replicating harmful colonial systems within digital health delivery [49]. Collaborative development with Indigenous communities was the most frequently reported strategy for achieving cultural safety in telehealth, yet 40% of studies in a scoping review of 321 articles did not report any Indigenous involvement [50]. The ARQS framework—access, relationships, quality, and safety—grounded in Indigenous patient and provider interviews, demonstrates that high-quality virtual care does not compromise quality of care and can improve patients' experiences of safety when designed with Indigenous worldviews [56].

Establishing trusting therapeutic relationships through virtual modalities remains a significant challenge, particularly for First Nations patients with histories of trauma interacting with the healthcare system [50] [57]. Physical therapists delivering telehealth to First Nations communities in northern British Columbia identified the absence of physical interaction and technological glitches as key barriers to building rapport [57]. A hybrid model combining in-person and telehealth visits is consistently recommended to address these relational gaps, with an initial in-person visit facilitating trust before transitioning to virtual encounters [50] [57].

Infrastructure barriers include unreliable internet, cost of technology, limited

digital literacy, and language barriers, all disproportionately affecting remote Indigenous communities [49] [50] [55] [58]. Healthcare providers serving rural and First Nations communities who use RTVS reported increased clinical confidence and reduced provider anxiety, but noted occasional service disruptions and Wi-Fi limitations [58]. The evidence base remains thin: a rapid review of virtual care experiences among immigrant, refugee, and Indigenous Canadians found only eight studies from 694 screened, signaling an extreme paucity of research on Indigenous perspectives [59]. Few studies have specifically examined telehealth for First Nations people in remote primary care delivery, and evaluation frameworks tailored to these contexts are lacking [55] [60].

Virtual care holds genuine potential to reduce access inequities for First Nations, Inuit, and Métis communities in rural and remote Canada, but realizing this potential requires Indigenous leadership in co-design, investment in digital infrastructure, hybrid care models that preserve therapeutic relationships, and adherence to Indigenous data governance principles.

Across the five themes, implementation conditions frequently intersected with intervention characteristics. Indigenous leadership and community participation influenced how some initiatives were developed; relationships and organizational practices shaped culturally safe care; coordination affected navigation between services; and infrastructure and workforce capacity influenced the feasibility of digital and community-based approaches. Consequently, the findings do not separate intervention design from the contexts in which interventions were implemented. Instead, they demonstrate that Indigenous primary healthcare interventions in Canada have been developed and evaluated across diverse community, organizational, geographic, and healthcare-system settings, with reported outcomes that require interpretation in relation to those contexts.

4. Discussion

This narrative review identified several recurring characteristics across Canadian studies of Indigenous-led, community-based, and culturally safe primary healthcare interventions. Although the interventions differed substantially in population, clinical focus, setting, governance, and evaluation design, the findings indicate that primary healthcare delivery involves more than the availability of clinical services. Across the literature, Indigenous participation in healthcare planning, relationships between patients and providers, culturally responsive organizational practices, coordination across services, and the capacity to adapt interventions to local circumstances emerged as recurring considerations [6] [10] [24].

Importantly, these characteristics should not be interpreted as components of a single preferred model of Indigenous primary healthcare. The reviewed interventions were implemented within different First Nations, Inuit, and Métis contexts and varied considerably in the extent to which they were Indigenous-governed, community-partnered, culturally adapted, or specifically designed to address particular clinical or access needs. The findings are therefore more useful for

identifying recurring principles and implementation considerations than for establishing a universally applicable intervention.

4.1. Indigenous Leadership and Community Participation

One of the clearest patterns across the literature was the role of Indigenous leadership and community participation in the development and implementation of healthcare initiatives. Indigenous-governed services provide one model through which communities may influence healthcare planning and delivery according to their priorities and circumstances [10]. Community-driven quality improvement and participatory approaches have similarly involved First Nations communities in identifying priorities and adapting healthcare initiatives to local settings [11] [12].

These findings are consistent with the broader recognition that Indigenous participation in healthcare should extend beyond consultation alone. However, the literature also demonstrates that community participation, co-design, partnership, and Indigenous governance represent different levels and forms of involvement. A program implemented within an Indigenous community or culturally adapted for Indigenous patients should therefore not automatically be described as Indigenous-led.

This distinction is particularly important when interpreting the reviewed evidence. Greater attention to who initiated an intervention, who participated in decision-making, who controlled implementation, and how communities were involved in evaluation would allow future research to characterize Indigenous leadership more precisely. It would also reduce the risk of treating substantially different governance relationships as equivalent.

4.2. Cultural Safety as a Relational and Organizational Consideration

The findings also indicate that cultural safety extends beyond individual provider knowledge or participation in cultural-awareness education. Relational approaches emphasized trust, respectful communication, continuity, and responsiveness to Indigenous patients, families, and communities [8] [9]. Equity-oriented approaches further situated cultural safety within organizational responses to structural inequities and healthcare environments rather than solely within individual clinical encounters [6] [7].

This distinction has practical implications for how culturally safe healthcare is conceptualized and evaluated. Provider education may represent one component of organizational change, but cultural safety cannot necessarily be inferred from completion of training or implementation of a particular program. Evaluation may need to consider how care is experienced by Indigenous patients and communities, including whether relationships, organizational policies, and service-delivery practices are perceived as respectful and responsive.

The inclusion of Indigenous knowledge and healing practices introduces an-

other dimension. Approaches involving Elders or Traditional Healing Practitioners illustrate possibilities for healthcare models that recognize Indigenous knowledge alongside biomedical services [9] [15]. However, the reviewed literature does not establish a standardized approach to such integration. Decisions regarding Indigenous healing practices are therefore appropriately understood within the authority, preferences, and traditions of individual communities and patients.

4.3. Healthcare Access as a Pathway

A broader interpretation emerging from the findings is that healthcare access is better understood as a pathway than as the simple presence or absence of a healthcare service. A clinic, specialist referral, virtual consultation, medication, or healthcare professional may be available without necessarily ensuring that patients can reach, navigate, and remain connected to appropriate care.

Navigation and liaison interventions illustrate this distinction. The arthritis liaison model addressed connections among Indigenous communities, primary healthcare, and specialist rheumatology services [14], while the Indigenous Palliative Care Nurse Navigator examined navigation across healthcare settings for patients and families with palliative care needs [26]. The Wellness Wheel Clinics similarly incorporated community partnerships and interdisciplinary services within a broader model of care [25].

Together, these interventions suggest that access may involve multiple stages: reaching an appropriate service, establishing relationships with healthcare providers, communicating healthcare needs, obtaining investigations or referrals, moving between services, and maintaining follow-up. Difficulties at any point may affect continuity even when services technically exist.

This interpretation is particularly relevant to primary healthcare because primary care frequently functions as a point of connection with other components of the health system. Interventions that strengthen navigation and coordination may therefore address dimensions of access that are not captured by measures such as service availability or initial healthcare utilization alone.

4.4. Chronic Disease Care Demonstrates the Importance of Context

The chronic disease literature illustrates why outcomes from Indigenous primary healthcare interventions should be interpreted within their implementation contexts. Diabetes, hypertension, medication management, and arthritis were addressed through substantially different approaches, including community-driven quality improvement, culturally responsive education, mobile health, medication-related health literacy, and liaison with specialist services [24].

These interventions frequently incorporated components extending beyond conventional biomedical management. Community participation, education, communication, cultural adaptation, and coordination were integrated to varying degrees. However, because these components were often implemented together, the

available evidence does not readily determine which individual component contributed to a particular outcome.

The DREAM-GLOBAL study is informative in this respect. Although mobile technology provided a mechanism for delivering hypertension-related support within rural and remote First Nations communities, hypertension-specific text messaging did not produce significantly greater blood-pressure reductions than general health messaging [13]. This finding cautions against assuming that cultural adaptation or technological innovation necessarily produces superior clinical outcomes.

At the same time, clinical outcomes represent only one dimension of intervention evaluation. Accessibility, acceptability, feasibility, patient experience, continuity, and organizational outcomes may answer different questions about an intervention. Future evaluations would benefit from distinguishing these outcomes rather than treating them as interchangeable indicators of intervention success.

4.5. Digital Health Addresses Only Some Dimensions of Access

Virtual and mobile healthcare approaches may be particularly relevant in settings where geographic distance and limited availability of healthcare professionals affect access. The reviewed literature demonstrates applications of digital technology to chronic disease management and connections with primary and specialist services [13] [27].

However, virtual care does not eliminate the broader conditions influencing healthcare access. Reliable internet connectivity, technological infrastructure, technical support, workforce capacity, and integration with existing services remain necessary for implementation. Digital access also does not inherently address mistrust, cultural safety, continuity, or the quality of relationships between patients and healthcare institutions.

Digital healthcare may therefore be better understood as a potential complement to locally responsive primary healthcare rather than a substitute for it. Its relevance is likely to differ among communities according to geography, infrastructure, service availability, community priorities, and preferences regarding how healthcare is delivered.

4.6. Implementation Context and Sustainability

Across otherwise different interventions, organizational readiness, leadership, workforce capacity, community participation, infrastructure, and local adaptation repeatedly appeared as implementation considerations. FORGE AHEAD explicitly incorporated organizational readiness and community-level quality improvement into its approach [11] [24], while participatory primary healthcare transformation similarly emphasized locally identified priorities and community context [12].

These findings suggest that intervention design cannot readily be separated from the environment in which implementation occurs. A model requiring stable

staffing, specialist availability, digital infrastructure, sustained funding, or particular organizational relationships may function differently when those conditions are absent or unstable. Consequently, differences in outcomes between settings should not automatically be attributed to the intervention itself.

This has implications for scalability. Replicating the visible components of an intervention without reproducing or adapting the organizational and community conditions that supported its implementation may not result in comparable outcomes. Expansion of promising approaches may therefore require assessment of local readiness, resources, governance relationships, workforce capacity, and community priorities rather than straightforward replication.

4.7. Diversity of Indigenous Peoples and the Limits of Generalization

An important limitation of interpreting this evidence collectively is the diversity of First Nations, Inuit, and Métis peoples and communities. These populations have distinct histories, cultures, languages, governance structures, geographic circumstances, and relationships with healthcare systems. Furthermore, the intervention literature identified in this review does not appear to represent First Nations, Inuit, and Métis populations equally.

Much of the intervention evidence considered in the synthesis was generated within particular First Nations communities or healthcare settings. Findings from these studies should therefore not be generalized automatically to Inuit or Métis populations, other First Nations communities, or Indigenous peoples nationally. Even among interventions involving similar populations, differences in geography, governance, infrastructure, and healthcare delivery may affect transferability.

Future research would benefit from more explicit reporting of the Indigenous populations and communities involved, the nature of community participation and governance, and the contextual conditions surrounding implementation. Such reporting would allow readers to determine more clearly where findings may be relevant and where adaptation or additional evidence is required.

4.8. Evidence Gaps and Future Research

Several gaps limit the conclusions that can be drawn from the available evidence. Studies differed substantially in methodology, intervention design, populations, settings, and reported outcomes, and many evaluated individual programs or communities. This heterogeneity limits direct comparison and makes it difficult to determine whether reported findings would be reproduced elsewhere.

Long-term outcomes and sustainability also require greater attention. Although organizational and economic evaluations have extended understanding of some initiatives, including FORGE AHEAD [11] [25], additional longitudinal research could clarify whether changes observed during implementation are maintained after initial program development or funding periods.

Future evaluations would also benefit from clearer differentiation among clini-

cal outcomes, healthcare utilization, accessibility, patient experience, cultural safety, organizational change, implementation outcomes, sustainability, and economic outcomes. These measures address different dimensions of healthcare quality and should not be combined into broad claims that an intervention was simply "effective" or "successful."

Finally, greater Indigenous leadership in research may strengthen both the relevance and interpretation of future evaluations. Community participation in establishing research questions, selecting meaningful outcomes, interpreting findings, and determining how knowledge is shared may help align evaluation with community priorities and definitions of healthcare quality and wellbeing. Rather than seeking a single model for Indigenous primary healthcare across Canada, future research may therefore be better positioned to examine which approaches are appropriate for particular communities, under what circumstances, and through which implementation processes.

5. Recommendations and Implications for Practice and Policy

The reviewed evidence identified recurring principles relevant to Indigenous primary healthcare, including Indigenous governance and community participation, culturally safe and relational care, community-based service delivery, navigation and continuity, local adaptation, and attention to workforce and infrastructure. The recommendations below translate these findings into potential implications for practice and policy. Where a recommendation is directly supported by included empirical studies, the relevant evidence is cited. Several recommendations, however, extend beyond interventions directly evaluated in the included studies and represent author-derived policy proposals informed by the synthesis. These proposals should be regarded as priorities for consideration, co-development, and future evaluation rather than as evidence-established interventions or universally applicable standards. Their development and implementation should occur in partnership with the First Nations, Inuit, or Métis communities concerned.

5.1. Establish Durable Healthcare Partnership Frameworks

Partnerships between governments, healthcare systems, and Indigenous leadership may be affected by changes in political or community leadership. Although agreements established by current leaders may support collaboration, changes in government or Indigenous leadership could potentially disrupt priorities, funding arrangements, or implementation. Continuity should therefore be considered when establishing long-term healthcare partnerships.

Federal, provincial, and territorial governments and participating Indigenous governments could consider developing durable healthcare partnership frameworks that clearly establish agreed responsibilities, funding principles, accountability mechanisms, and processes for reviewing or modifying agreements. Where appropriate and mutually agreed upon, these arrangements could be supported

through legislation, formal intergovernmental agreements, or other durable policy mechanisms that continue beyond individual political terms.

Such arrangements should not restrict the authority of future Indigenous leadership or impose externally determined healthcare priorities. Rather, their purpose would be to protect continuity while preserving mechanisms through which participating Indigenous governments can review, renegotiate, or adapt healthcare arrangements according to changing community priorities. This recommendation builds on evidence emphasizing the relevance of Indigenous governance and community participation in healthcare planning and implementation [10] [24].

5.2. Bring Preventive Healthcare into Existing Community Gathering Places

Community-based approaches may provide opportunities to improve access to preventive healthcare by bringing selected services closer to where people live. Evidence from the reviewed literature demonstrates that screening can be delivered within Indigenous communities rather than relying exclusively on conventional clinic-based encounters. For example, the Kidney Check program delivered mobile screening for chronic kidney disease, diabetes, hypertension, and obesity directly within participating Indigenous communities, with real-time results, health coaching, and referral pathways for individuals requiring further assessment or management [45].

Building on this evidence, we propose that participating communities and healthcare systems could evaluate whether selected preventive services might also be offered within existing community gathering places or events, where locally appropriate. Potential examples include temporary health stations at community gatherings, cultural events, or other frequently attended locations. Depending on community priorities and available resources, these services could include voluntary blood-pressure measurement, diabetes risk assessment, or other appropriate preventive health checks. This extension into community gathering places represents an author-derived policy proposal and was not directly evaluated by the included studies.

Such initiatives should function as screening and pathways into care rather than as substitutes for comprehensive primary healthcare. Individuals with abnormal screening findings would require appropriate confirmation, clinical assessment, referral, and follow-up. Community-based screening should therefore be linked to established primary healthcare services and designed with sufficient capacity to ensure continuity after the initial encounter.

Decisions regarding whether, where, and how such screening should occur should be made in partnership with the Indigenous communities concerned. Implementation would need to address privacy, informed consent, confidentiality, appropriate clinical protocols, referral mechanisms, availability of follow-up services, and the capacity of local healthcare systems to respond to newly identified health needs. The appropriateness of particular screening activities may also differ

among First Nations, Inuit, and Métis communities and according to local epidemiology, geography, healthcare infrastructure, and community priorities.

Accordingly, community-based preventive screening should not be interpreted as an evidence-established universal model for Indigenous primary healthcare. Rather, the existing evidence demonstrates the feasibility of bringing some screening services directly into Indigenous communities, while the broader use of community gathering places represents a potential extension that requires community co-design and prospective evaluation. Future evaluations should examine not only screening uptake and detection rates but also successful linkage to care, continuity of care, patient and community experiences, cultural safety, resource requirements, and longer-term clinical outcomes.

5.3. Engage Elders and Community Leaders in Preventive Health Initiatives

Where consistent with community preferences, Elders, Knowledge Keepers, and other trusted community members could be engaged during the development of preventive healthcare initiatives, including childhood immunization programs.

Their role should not be reduced to persuading community members to accept healthcare interventions. Instead, engagement should begin with a respectful discussion of community concerns, available evidence, previous healthcare experiences, and the objectives, potential benefits, and risks of the proposed program. Where Elders and community leadership support an initiative after this process, their involvement may help healthcare organizations communicate through established relationships of trust.

This approach is consistent with findings from the reviewed literature emphasizing relationships, Indigenous participation, and culturally meaningful approaches to healthcare [8] [9]. Individual informed consent and the right to decline care must nevertheless remain central regardless of community-level support.

5.4. Expand Indigenous Healthcare Education and Workforce Pathways

A longer-term strategy should be to strengthen opportunities for Indigenous people to become healthcare professionals serving their own and other communities. Dedicated or community-partnered educational pathways could prepare Indigenous learners for roles across primary healthcare while responding to identified workforce needs.

Such initiatives should not be interpreted as restricting Indigenous healthcare professionals to Indigenous communities. Rather, they could expand opportunities for people who possess both healthcare training and knowledge of community languages, relationships, histories, and cultural practices to participate in healthcare delivery where they choose to do so.

Community-based healthcare workers could also perform important bridging functions between patients and the wider healthcare system. Depending on their

training and scope of practice, these roles might include health education, navigation, interpretation, assistance with referrals, communication with healthcare professionals, and helping patients understand diagnoses and treatment options in culturally and linguistically meaningful ways.

This approach is consistent with the navigation and interdisciplinary-care findings identified in this review [14] [25]. It could also strengthen local healthcare capacity while reducing dependence on continuously rotating external personnel.

5.5. Move from General Cultural-Safety Training toward Community-Specific Preparation

The reviewed literature emphasizes that culturally safe healthcare involves more than general cultural-awareness training. Relational approaches highlight trust, respectful communication, continuity, and responsiveness to Indigenous patients, families, and communities, while equity-oriented approaches situate cultural safety within broader organizational practices and healthcare environments [6] [9]. The reviewed evidence also demonstrates that First Nations, Inuit, and Métis communities differ in governance, culture, language, geography, healthcare infrastructure, and relationships with healthcare systems. Accordingly, general preparation for working with Indigenous populations may not fully address the circumstances and priorities of individual communities.

Building on these findings, we propose that healthcare organizations and participating Indigenous communities consider developing community-specific preparation processes for healthcare professionals who will work within particular communities. This represents an author-derived policy proposal; the included studies did not directly evaluate whether a formal community-specific credentialing or certification system improves healthcare access, cultural safety, patient experience, or clinical outcomes.

Community-specific preparation could include locally determined information concerning community history, governance, cultural protocols, available health and social services, referral pathways, communication considerations, local health priorities, and expectations regarding relationships with Elders, Knowledge Keepers, Indigenous healthcare workers, and other community partners. The content and format of such preparation should be determined collaboratively with the community rather than imposed through a standardized external curriculum.

Where communities and healthcare organizations consider a more formal credentialing or certification process appropriate, such an approach should first be co-developed and prospectively evaluated. Credentialing should not be treated as evidence that a clinician is inherently providing culturally safe care, because cultural safety is ultimately reflected in relationships, organizational practices, and the experiences of patients and communities rather than completion of training alone.

Evaluation of community-specific preparation or credentialing should examine outcomes such as clinician preparedness, community acceptability, patient expe-

rience, continuity, cultural safety, workforce retention, implementation burden, and unintended consequences. The purpose would not be to create a single national credential for working with Indigenous peoples, but to explore whether locally developed preparation can better equip healthcare professionals to work respectfully and effectively within the specific communities they serve.

5.6. Build Community Health Information with Indigenous Data Governance

Community-specific healthcare planning requires reliable information. Governments and healthcare systems could work with Indigenous governments and organizations to strengthen longitudinal information concerning healthcare needs, service availability, workforce capacity, chronic disease, preventive healthcare, and barriers to access.

However, the collection of more data should not mean transferring unrestricted control of Indigenous health information to governments or external healthcare organizations. Data collection, access, interpretation, storage, and future use should be determined through appropriate Indigenous data-governance arrangements.

Over time, community-defined health information systems could support more precise planning and evaluation while reducing reliance on generalized assumptions about Indigenous populations. This may also allow healthcare models to evolve as community needs and demographic patterns change.

5.7. Communicate Biomedical Concepts through Existing Knowledge and Language

Communication of diagnoses and treatment should begin with patients' existing knowledge, language, and understanding rather than assuming familiarity with biomedical terminology. When a medical concept does not translate directly into a patient's preferred language or conceptual framework, healthcare professionals and appropriately trained community-based workers could use familiar comparisons, explanations, or locally meaningful concepts developed with the community.

This recommendation does not imply replacing accurate medical terminology or scientific information. Rather, new information should be explained by connecting it to concepts that patients already understand while preserving clinical accuracy.

Indigenous healthcare workers, interpreters, Elders, Knowledge Keepers, and community partners may be particularly valuable in developing appropriate communication strategies. This could strengthen informed decision-making while reducing the possibility that language differences or unfamiliar terminology become additional barriers to care.

An example of this approach can be found in Aboriginal diabetes education in Australia. The *How's Your Sugar*? initiative, developed with Aboriginal health workers, educators, and community members, deliberately connected biomedical

diabetes education with familiar language and ways of communicating. The title itself reflected an expression already used by Aboriginal people when discussing diabetes, while educational materials incorporated storytelling, visual communication, familiar environments, and Aboriginal ways of knowing [28]. This example illustrates how biomedical information can be communicated through existing language and knowledge without abandoning clinical accuracy. Although outside the Canadian evidence base included in this review, an illustrative example of this communication approach has been reported in Aboriginal diabetes education in Australia.

5.8. Develop Rotational Workforce Models for Rural and Remote Communities

Recruitment to rural and remote communities remains challenging, where healthcare professionals must choose between maintaining their established family lives in urban centres and relocating for extended periods. An alternative model could involve predictable rotational employment arrangements in which healthcare professionals work intensive periods within participating communities, followed by scheduled periods away from the community.

For example, appropriately designed two-weeks-on/two-weeks-off or similar rotations could be evaluated for selected professions and communities. Transportation between regional centres and remote communities could form part of employment arrangements where geography makes regular travel difficult.

Rotational models would need to be designed carefully because frequent staff turnover could itself undermine continuity and relationship-building. Wherever possible, the same clinicians or small teams should return repeatedly to the same communities, allowing longitudinal relationships to develop despite rotational schedules.

The model should therefore be evaluated not only according to recruitment numbers but also according to workforce retention, patient experience, continuity, cost, community preference, and clinical outcomes.

5.9. Make Rural and Remote Practice Compatible with Family Life

Financial incentives alone may be insufficient to recruit and retain healthcare professionals in communities where accommodation, childcare, transportation, recreation, or employment opportunities for partners are limited.

Workforce strategies could therefore include high-quality staff accommodation, dependable transportation, childcare, recreational facilities, essential services, and other supports identified locally as barriers to recruitment and retention. Communities and healthcare systems could also explore partner or dual-career employment programs, allowing couples to identify employment opportunities simultaneously when one partner is recruited into healthcare and the other has skills applicable to education, administration, infrastructure, community services, business, or other locally required sectors.

These strategies would require considerable investment and should therefore be evaluated against alternative workforce approaches. However, addressing the practical circumstances of healthcare workers and their families may be important when attempting to establish a stable workforce in geographically isolated communities.

5.10. Combine Virtual Specialist Care with Trusted Community-Based Healthcare Workers

Digital health may increase access to specialists, but a specialist appearing on a screen does not necessarily reproduce the trust, communication, and relationships associated with longitudinal in-person care. Virtual healthcare should therefore be designed around human relationships rather than technology alone.

One approach would be to develop trained Indigenous community healthcare assistants or navigators who can be physically present with patients when they connect virtually with physicians and specialists. Depending on training and the regulated scope of practice, these workers could assist with technology, collect appropriate clinical information, facilitate communication, explain subsequent steps, coordinate referrals, and support continuity after the virtual encounter.

Such personnel would require robust education in privacy, confidentiality, professional boundaries, documentation, communication, and appropriate clinical competencies. They could provide a familiar point of contact between episodic virtual specialist encounters and ongoing community-based care.

This approach builds on the navigation and interdisciplinary-care models identified in the reviewed literature [14] [25] while addressing some limitations of virtual care identified in rural and remote settings [13] [27].

5.11. A Community-Specific Rather than Universal Model

The central recommendation arising from this review is not the creation of another uniform national model for Indigenous healthcare. First Nations, Inuit, and Métis peoples are distinct, and individual communities differ further in language, culture, governance, geography, healthcare infrastructure, priorities, and relationships with healthcare systems.

A more appropriate direction may therefore be to establish durable partnerships and common principles while allowing healthcare delivery to remain locally designed and adaptable. Governments and healthcare systems can provide long-term financing, infrastructure, workforce support, professional standards, and mechanisms for continuity, while participating Indigenous communities retain meaningful roles in determining how these resources are translated into healthcare services.

Under such an approach, preventive care could move into familiar community spaces; Indigenous workforce pathways could strengthen local capacity; healthcare professionals could receive community-specific preparation; rotational employment and family support could address workforce shortages; and virtual special-

ists could work alongside trusted community-based healthcare personnel. These proposals require evaluation and should not be presumed effective before implementation. Their purpose is to shift healthcare planning away from the assumption that a single intervention can adequately address the diversity of Indigenous communities and toward sustained partnerships in which healthcare models are developed, evaluated, and adapted with the people they are intended to serve.

6. Conclusions

This narrative review highlights the diversity of Indigenous-led, community-based, and culturally safe primary healthcare interventions involving First Nations, Inuit, and Métis peoples in Canada. Across the reviewed literature, Indigenous governance and community participation, culturally safe and relational care, chronic disease management, navigation and interdisciplinary approaches, and innovations intended to improve healthcare access emerged as recurring themes. However, considerable variation in populations, settings, intervention designs, implementation conditions, and reported outcomes limits conclusions about whether any single model can be applied consistently across Indigenous communities.

A central finding of this review is that access to primary healthcare extends beyond the availability of services. Geographic proximity, virtual access, or the presence of healthcare professionals does not necessarily ensure continuity, cultural safety, effective communication, navigation between services, or sustained engagement with care. Similarly, cultural safety cannot be reduced to individual provider training alone; relationships, organizational practices, Indigenous participation, and recognition of local knowledge and priorities are also relevant to how healthcare is delivered and experienced [6] [9].

The evidence further emphasizes the importance of context. Community-driven quality improvement, chronic disease interventions, navigation models, interdisciplinary services, and digital health initiatives have been implemented under different organizational, geographic, and community circumstances [13] [14] [24]. Their findings should therefore be interpreted within the settings in which they were evaluated rather than generalized across First Nations, Inuit, and Métis peoples.

Future development of Indigenous primary healthcare should consequently avoid assuming that a uniform model will address the needs of distinct communities. Durable partnerships, meaningful Indigenous participation, locally responsive service design, culturally and linguistically appropriate communication, stronger Indigenous healthcare workforce pathways, and attention to workforce and infrastructure limitations represent important areas for continued development and evaluation. Digital technologies may complement these approaches, but should not be regarded as substitutes for trusted relationships and locally accessible care.

Ultimately, strengthening primary healthcare for Indigenous peoples in Canada is unlikely to depend on a single intervention. The literature instead points toward

healthcare systems capable of sustaining partnerships while adapting to community-specific priorities, governance structures, cultures, geography, and available resources. Future research should evaluate not only whether interventions produce clinical changes, but also how they influence accessibility, continuity, cultural safety, patient and community experience, sustainability, and implementation. Such an approach may provide a more appropriate foundation for understanding which models of primary healthcare are relevant to particular First Nations, Inuit, and Métis communities and under what circumstances they can be sustained.

Author Contributions

Conceptualization: I.C.D.; Methodology: I.C.D., O.A., and E.A.E.; Literature search and investigation: I.C.D., O.A., E.A.E., B.O.S., A.A., and S.O.; Data curation: I.C.D., E.A.E., B.O.S., A.A., and S.O.; Formal analysis and interpretation: I.C.D., O.A., E.A.E., and S.O.; Writing—original draft preparation: I.C.D. and S.O.; Writing—review and editing: I.C.D., O.A., E.A.E., B.O.S., A.A., and S.O.; Visualization: I.C.D.; Supervision: O.A.; Project administration: I.C.D. All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflicts of interest.

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Appendix. Characteristics of Empirical Publications Included in the Primary Narrative Synthesis

#	Study	Design	Population	Setting	Intervention/ Healthcare Category	Reported Outcome Type
1	**Browne *et al.*, 2018**	Mixed-methods intervention evaluation	Patients and staff in clinics serving structurally disadvantaged populations, including Indigenous peoples	Four Canadian primary healthcare clinics	EQUIP equity-oriented primary healthcare	Organizational change; staff knowledge/practice; equity-oriented care
2	**Lavoie *et al.*, 2018**	Mixed-methods multiple-case study/policy analysis	Primary healthcare organizations serving marginalized populations, including Indigenous peoples	Four Canadian community primary healthcare clinics	Equity-oriented primary healthcare (EQUIP)	Organizational; policy; implementation
3	**Gerlach *et al.*, 2017**	Qualitative study	Indigenous families	Community-based Indigenous early-childhood program, British Columbia	Culturally safe community-based care	Family experience; engagement; cultural safety
4	**Hadjipavlou *et al.*, 2018**	Qualitative study	Indigenous patients	Inner-city primary care partnership, Canada	Elder-supported Indigenous mental healthcare	Patient experience; relationships; cultural safety
5	**Hayward *et al.*, 2017**	Validation/implementation study	First Nations healthcare organizations/clinical teams	First Nations communities, Canada	FORGE AHEAD clinical readiness	Organizational readiness; implementation
6	**Kyoon Achan *et al.*, 2022**	Community-based participatory research	First Nations communities	Community-based primary healthcare, Manitoba	First Nations primary healthcare transformation	Community priorities; strengths; implementation
7	**Tobe *et al.*, 2019**	Randomized controlled trial	First Nations adults with hypertension	Rural/remote First Nations communities	DREAM-GLOBAL mobile-health hypertension management	Clinical outcomes; blood pressure; feasibility
8	**Umaefulam *et al.*, 2021**	Community-based program evaluation	First Nations people living with arthritis	First Nations community-based healthcare	Arthritis liaison/patient-care facilitator	Access; navigation; patient-centred outcomes
9	**Mack, 2024**	Indigenous-led framework development using environmental scan, interviews/sharing circles and stakeholder engagement	Traditional Healing Practitioners, Knowledge Keepers, service providers and Indigenous PHC organizations	Ontario Indigenous primary healthcare organizations	Integration/accreditation of Traditional Healing Practitioners	Workforce; organizational; implementation

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10	**Love *et al*., 2022**	Community-engaged implementation/case research	First Nations and Métis partners	Indigenous health programming/research, Canada	Indigenous data-governance agreements	Governance; partnership; implementation
11	**Hayward *et al*., 2020**	Program evaluation	First Nations communities	First Nations primary healthcare settings, Canada	FORGE AHEAD quality-improvement program	Clinical; organizational; quality improvement
12	**Stanimirovic *et al*., 2024**	Economic evaluation	First Nations communities participating in FORGE AHEAD	Canadian First Nations primary healthcare	FORGE AHEAD	Economic; resource use; implementation
13	**Marchildon *et al*., 2021**	Comparative empirical health-system/governance analysis	Indigenous health systems	Multiple Canadian jurisdictions	Indigenous health-system governance	Governance; organizational/ system outcomes
14	**Fournie *et al*., 2023**	Multiple-case study	First Nations communities	First Nations communities in Canada	Diabetes quality improvement	Quality improvement; organizational; implementation
15	**Pilarinos *et al*., 2023**	Qualitative study	Indigenous patients	Canadian healthcare settings	Cultural-safety improvement	Racism; patient experience; cultural safety
16	**Doucette *et al*., 2024**	Qualitative/ community-focused research	Indigenous children/youth and communities	Canadian Indigenous mental-health context	Indigenous Elder support	Mental-health experience; cultural connection; relational outcomes
17	**Achan *et al*., 2021**	Community-based participatory qualitative research	First Nations community members/stakeholders	First Nations healthcare, Canada	Integration of First Nations and Western healing traditions	Community perspectives; integration; cultural safety
18	**Balalio & Robidoux, 2025**	Community-based participatory research	Moose Cree First Nation	Moose Cree First Nation	Community-based health-program delivery	Community needs; implementation; acceptability
19	**Lauscher *et al*., 2023**	Mixed-methods program evaluation	Patients and healthcare providers in rural, remote and First Nations communities	British Columbia	Real-Time Virtual Support (RTVS)	Access; utilization; satisfaction; provider support
20	**Khan *et al*., 2025**	Implementation evaluation	Rural, remote and Indigenous communities	Remote Canadian healthcare settings	Telerobotic ultrasonography/ virtual care	Access; implementation; organizational readiness
21	**Roach *et al*., 2022**	Qualitative study	Indigenous patients and healthcare providers	Canadian virtual healthcare	Indigenous-centred virtual care/ARQS	Access; relationships; quality; safety

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22	**Moecke *et al*., 2024**	Qualitative study	First Nations people receiving physiotherapy	Northern British Columbia	Telehealth physiotherapy	Therapeutic relationship; acceptability; technological barriers
23	**Chopra *et al*., 2026**	Qualitative/ community-based research	First Nations community members	Rural and remote First Nations communities, Northern British Columbia	Community-based health/ physical-activity promotion	Community experience; cultural and contextual determinants
24	**Tungsanga *et al*., 2026**	Program implementation/ evaluation	Indigenous communities participating in Kidney Check	Indigenous communities, Canada	Community-led culturally safe CKD detection	Screening/clinical; access; implementation
25	**Swampy *et al*., 2026**	Qualitative implementation evaluation using CFIR	Indigenous patients/stakeholders involved with virtual diabetes care	Rural and remote Indigenous communities	Indigenous-focused virtual diabetes clinic	Implementation barriers/enablers; access; acceptability
26	**Owens *et al*., 2026**	Qualitative/provider-experience evaluation	Healthcare providers serving rural, remote, First Nations and other Indigenous communities	British Columbia	Real-Time Virtual Support	Provider experience; access; clinical confidence; implementation
27	**Bingham *et al*., 2025**	Qualitative/ community-engaged study	Indigenous women, Two-Spirit, and gender-diverse peoples	Canadian healthcare context	Culturally safe healthcare-system development	Cultural safety; patient/community experience; system recommendations