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# Health Planning for Indigenous Populations: A Rapid Evidence Review

David Loutfi
*McGill University*, david.loutfi@mail.mcgill.ca

Susan Law
*Trillium Health Partners*, susan.law@thp.ca

Chris McCutcheon
mccutcheonc@gmail.com

Robert Carlin
*Cree Board of Health and Social Services of James Bay*, robert.carlin@ssss.gouv.qc.ca

Jill Torrie
*Cree Board of Health and Social Services of James Bay*, torrie.jill@ssss.gouv.qc.ca

*See next page for additional authors*

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**Abstract**

Addressing health inequalities for Indigenous Peoples and communities is an urgent priority in Canada. The aim of this evidence review was to better understand the challenges and best practices of health planning for Indigenous populations. In total, 29 articles met our inclusion criteria, from which we distilled four main themes: (a) Managing health care in organizations serving Indigenous clientele; (b) Assessing Indigenous health needs and their related costs; (c) Toward cultural safety in health planning; and (d) Stakeholder participation in health planning. Our review indicates that while little has been published about challenges and best practices of health planning for Indigenous populations, there are important lessons to be learned from this literature, including promising practices for decision makers.

**Authors**

David Loutfi, Susan Law, Chris McCutcheon, Robert Carlin, Jill Torrie, and Mary Ellen Macdonald

## Health Planning for Indigenous Populations: A Rapid Evidence Review

Addressing the health inequalities experienced by Indigenous populations in Canada is an urgent priority. Compared to the country's non-Indigenous population, Indigenous Peoples generally experience a greater burden of illness, though there are variations between regions (Gracey & King, 2009; Reading, 2009; Statistics Canada, 2011). Further, Indigenous Peoples often experience stigma, stereotyping, and discrimination when accessing health services (Cameron, Carmargo Plazas, Salas, Bourque Bearskin, & Hungler, 2014). Planning health services that are accessible and culturally safe is essential to ensuring good health. How to accomplish this goal is not always obvious, however, especially in the face of the multiple challenges. These challenges include:

- A lack of baseline data about the services received by Indigenous people (particularly in urban areas),
- Poor linkages between health databases (Minore, Katt, & Hill, 2009; Smylie & Anderson, 2006)
- Jurisdictional complexities,
- A lack of infrastructure and human resource capacity,
- A need for culturally-relevant health measures, and
- Challenges of disseminating information to health planners and policy makers (Smylie, 2010).

In order to improve the health of the communities it serves, the Cree Board of Health and Social Services of James Bay (CBHSSJB) has supported a large-scale grassroots health planning process across its territory in the province of Québec, Canada, with local ownership of community-based initiatives. To inform this process, the CBHSSJB partnered with an academic research team to examine existing research on Indigenous health planning processes. Finding no published synthesis of current knowledge about health planning processes for Indigenous populations, together we developed a protocol for a review of the relevant literature to help inform the CBHSSJB's planning process and evaluation. In doing so, we sought to provide similar organizations with a basis from which to plan health services in their own communities. The results, which are described below, present an overview of the current literature on challenges and best practices in health planning for Indigenous populations. In our findings, we use the term "Indigenous" to refer to First Peoples generally. This includes but is not limited to First Nations, Métis, Inuit, Australian Aboriginals, and Torres Straight Islanders. When referring to particular communities, nations, or tribes, we use the names included in the original sources or studies.

### Methods

With engagement from key stakeholders, we conducted a rapid evidence review. A rapid evidence review is a literature review designed to quickly (typically in about 6 months), yet systematically, gather and synthesize evidence on a focused topic (Khangura, Konnyu, Cushman, Grimshaw, & Moher, 2012; McCutcheon, 2013; Thomas, Newman, & Oliver, 2013). Our intersectoral team included academic researchers (from medicine, anthropology, natural resources, health services, and education) and public health knowledge users from the CBHSSJB. CBHSSJB participants included directors and assistant directors of public health and program staff responsible for implementing a health planning process.

The participatory process we employed helped ensure the research question and results were relevant to the knowledge users and grounded in their underlying contexts; generally, such participatory processes improve the likelihood that results of research can usefully inform local health planning processes (Cargo & Mercer, 2008; Jagosh et al., 2012).

## Research Question Development

In order to define the research question, our team worked through a series of queries (see Figure 1) designed to develop a rich understanding of CBHSSJB's needs. This process included soliciting a general description of the problem, key terms in the local vernacular for the literature search, an understanding of how the resultant review would be used, and relevant contextual information. The final research question, achieved through team consensus, was: What are the challenges and best practices in health planning for Indigenous populations?

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**Rapid Evidence Brief Consultation Form**
**Health Planning for Indigenous Populations**
*Completed in discussion with CBHSSJB decision-maker leads at project initiation.*

1. Provide a brief but detailed description of the topic.

2. Are there specific questions you wish to have answered?

3. How is this evidence brief relevant to your organization and how might the results be used?

4. Is there any other contextual information that could be relevant to this evidence brief (i.e., known barriers or facilitators, recent changes to policy, populations affected)?

5. Please list keywords or search terms that you think would be relevant to the search.

6. Do you know of any key articles, documents and/or reports that should be included in the review?

7. Is there anything else you would like to add?

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*Figure 1.* **Rapid evidence brief consultation form.** This form was completed in discussion with the CBHSSJB to guide this review.

## Search Strategy

The overall search process, including the number of records identified, included, and excluded, is depicted in Figure 2. The literature search was conducted between March and August 2014 and updated between March and August 2017 by four members of the academic team (C. M., D. L., S. L., & M. E. M.) with the help of an academic health librarian with experience conducting systematic reviews. A preliminary search used keywords (e.g., *planning, health, Indigenous, Aboriginal*) drawn from both the research question and the aforementioned discussion among members of the intersectoral team. Titles and abstracts of retrieved articles were reviewed by the academic team, who retained any that were relevant to the research question. The academic health librarian then created a formal search strategy using the retained articles; the librarian limited this search to publications from 2000 onwards. The following electronic databases were searched per this strategy: Medline (Ovid), PubMed, Embase, CINAHL, Scopus, Web of Science, Biosis Previews, Cochrane, and Trip. The combined electronic search (original and updated search) yielded 9,584 articles in total.

## Screening of Search Results

Two team members (C. M., D. L.) screened all titles and abstracts using the inclusion and exclusion criteria specified in Table 1. This process reduced the yield to 690 articles; however, the majority of those articles were still not directly relevant to the research question. Upon reflection, it became clear to the team that there was lack of precision in operationalizing the term "health planning." To address this problem, we used Google and Google Scholar to search for a relevant definition; the best fit came from the World Health Organization (World Health Organisation, n. d.), which we have simplified thusly:

Health planning is the process of selecting policies and services to meet the health needs of a population. It requires at least two components:

> a. A method for identifying health needs, and
> b. A process for developing a policy or service that considers resources and evidence.

With this definition, the academic team reviewed a subset of 100 titles and abstracts, labelling each as "in," "out," or "maybe." After this calibration, C. M. and D. L. screened the remaining 590 articles; 143 of these 590 articles were retained. The four researchers ranked them according to relevance. *Highly relevant* scored 8-10, *relevant* scored 4-7, and or *not relevant* scored 1-3. Only the highly relevant articles ($n = 29$) were included in the synthesis. Articles that scored 7 were scanned for possible inclusion, but none were included.

We then conducted a thematic analysis (Silverman, 2009) of the articles to determine shared themes regarding best practices and challenges related to planning for the health of Indigenous populations. Given that this review is being used to inform a grassroots planning process in 10 communities, the analytic lens we applied to our thematic analysis followed developmental evaluation (Patton, 2011) to ensure that our analysis was relevant to the specific Indigenous context and their planning process. A draft of this paper was written by the academic team and then reviewed and revised with input from members of the CBHSSJB team, ensuring cultural and organizational relevance (J. T., R. C.).

| | |
|---|---|
| **Identification** | Records identified through database searching ($n = 9{,}584$) |

Records for initial screening (Titles and abstracts by one reviewer) ($n = 9{,}584$)

Records excluded ($n = 8{,}894$)

Records for secondary screening (titles and abstract by multiple reviewers) ($n = 690$)

Records excluded for lack of relevance ($n = 528$) and unavailability of publication ($n = 19$) Total ($n = 547$)

Full-text articles assessed for eligibility ($n = 143$)

Full-text articles excluded (see exclusion criteria) ($n = 114$)

Studies included in qualitative synthesis ($N = 29$)

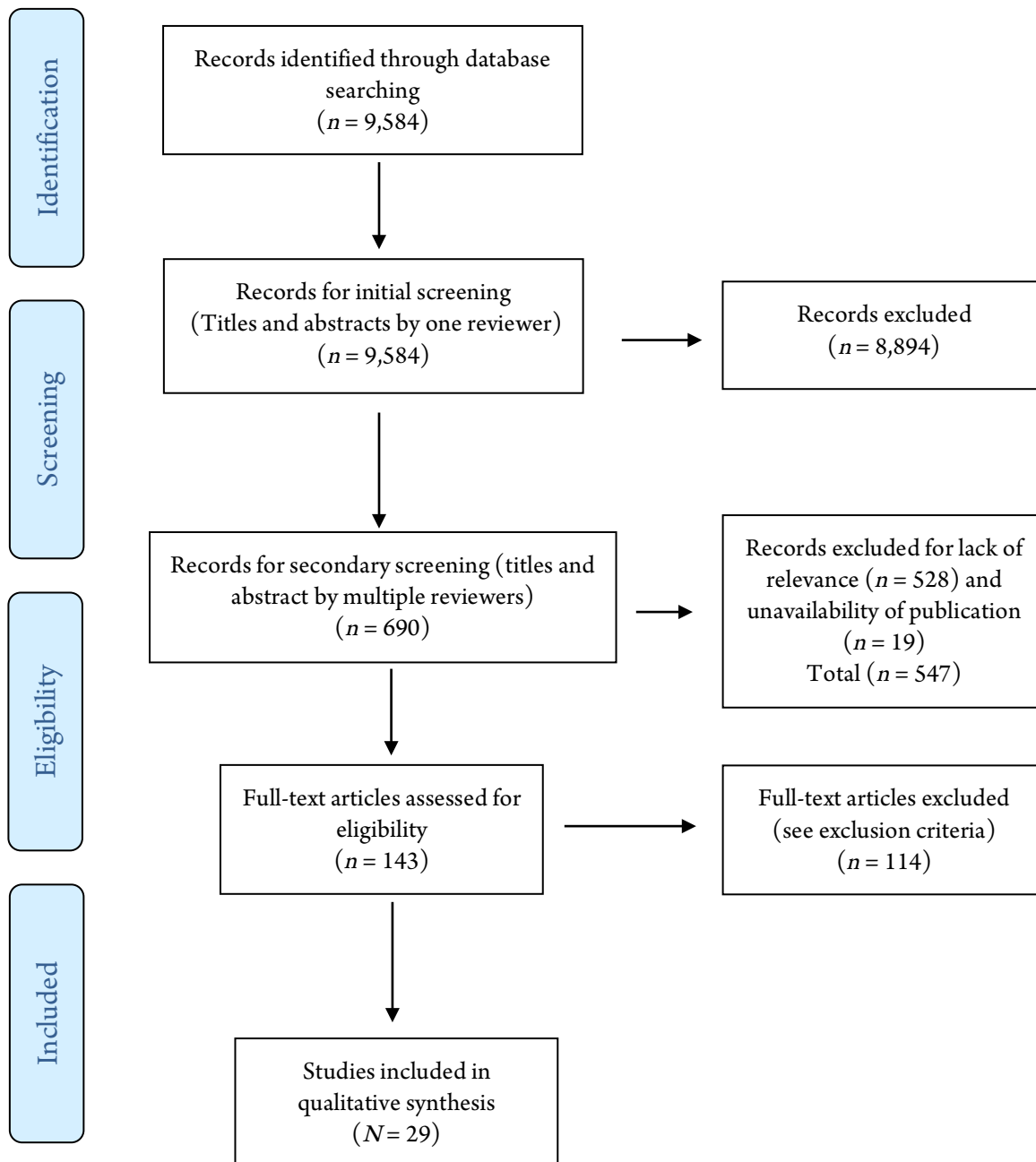**Screening**

**Eligibility**

**Included**

*Figure 2.* PRISMA diagram of rapid evidence review.

## Table 1.  Inclusion and Exclusion Criteria for Screening Search Results

### Inclusion criteria

All research methodologies, including case studies

Interventions studies that describe the design and implementation of the intervention (i.e., must have a planning component)

Tools or methodologies that could be useful to managers or policy makers who conduct health planning for Indigenous people (if the article describes their use in the planning process)

Articles looking at the health system or population level (e.g., not simply one community)

### Exclusion criteria

Opinion pieces or editorials

Theoretical articles

Interventions that only include health outcomes (i.e., they do not describe the design or implementation of the intervention)

Articles that do not focus on policy or services for Indigenous people

Studies of health status or prevalence of disease

Studies on the training of new health professionals

Articles on how to ethically conduct research with or for Indigenous people

Small-scale interventions that do not look beyond a single community

Articles describing sources of information or techniques for acquiring information that would be useful inputs to health planning but do not describe how they have been used or could be used in health planning

Articles published before 2000

# Results

Our final synthesis included 29 articles that were deemed highly relevant to our research question. The majority of these articles used case study methodologies and included descriptions of their planning approaches. Few articles provided evaluation data (see Table 2 for a summary of the articles). Our analysis identified four broad domains related to Indigenous health planning:

1. Managing health care in organizations serving Indigenous clientele: Challenges and considerations;
2. Approaches to assessing Indigenous health needs and service delivery costs;
3. Toward cultural safety in health planning; and
4. Stakeholder participation in health planning.

Table 2 outlines the key findings of each article, and Table 3 summarizes key messages for decision makers from across the thematic analysis. The articles often touch upon more than one of the domains as identified in the last column of Table 2. It is worth noting that the four domains are complementary—for example, stakeholder participation is connected to culturally safe planning.

## Managing Health Care in Organizations Serving Indigenous Clientele: Challenges and Considerations

Members of the CBHSSJB were interested in both the role of Indigenous culture in health planning and the effects of Indigenous management styles and staff members on organizations and their health plans. These issues were addressed in several articles discussing Aboriginal Community Controlled Health Services (ACCHS),[1] implemented in Australia (Coombe, 2008; Fuller et al., 2005; Taylor, Dollard, Weetra, & Wilkinson, 2001). Additionally, these themes were addressed in articles discussing the restructuring of Indigenous health services in British Columbia, Canada (Anderson & Hansson, 2016), workforce planning (Panzera et al., 2016), priority setting (Otim, Asante, Kelaher, Anderson, & Jan, 2016; Otim, Kelaher, Anderson, & Doran, 2014), and how to ensure Indigenous control of health services (Lavoie & Dwyer, 2016).

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[1] An Aboriginal Community Controlled Health Service is "a primary health care service initiated and operated by

## Table 2. Summary of Articles

| First Author/Date /Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Allen/2004/USA/ American Indian and Alaskan Native | Mapping pathways to services: Description of local service systems for American Indian and Alaska native children by Circles of Care | Description of health services | This description of health services used focus groups, interviews, internal reports, agency statistics, and GIS mapping. It found that community member interviews were important to identify gaps in services, and using GIS was an effective way to display and understand the health system. | 2, 4 |
| Anderson/2016/Canada/ First Nations, Urban Aboriginal peoples, Métis (including Dakelh, Dené, Ktunaxa, Nlaka'pamux, Secwepemc, St'at'imc, Syilx, and Tsilhqot'in) | Engagement in system redesign | Case study | Describes Interior Health, a regional health authority in British Columbia, Canada. Interior Health collaborated with communities to create Interim Regional Health and Wellness Plans. These were then used to create one Aboriginal Health and Wellness Strategy. The four key priorities were (a) advancing cultural competency and safety, (b) ensuring meaningful participation, (c) improving health equity, and (d) improving mental wellness. | 1 |
| Andrews/2002/Australia/ Aboriginal in New South Wales | Identifying and overcoming the barriers to Aboriginal access to general practitioner services in rural New South Wales | Case study | Consultation with Indigenous communities is key for planning. General practitioners and Aboriginal health workers working in silos is a barrier to good care. | 4 |

## Table 2. Summary of Articles (continued)

| First Author/Date /Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Chatwood/2015/Canada/ Indigenous groups in circumpolar settings | Approaching *Etuaptmumk* – Introducing a consensus-based mixed method for health services research | Methods paper | Examines how the nominal group technique was a good method that allowed the integration of Indigenous ways of knowing. | 2, 4 |
| Coombe/2008/Australia/ Aboriginals and Torres Strait Islanders | The challenges of change management in Aboriginal community-controlled health organisations. Are there learnings for Cape York health reform? | Literature review (non-systematic) | Participatory approaches are essential when working with Aboriginal populations in Australia. Those populations tend to favor consensus building and so using an authoritarian approach is counterproductive in light of historical injustices. | 1 |
| Durey/2016/Australia/ Aboriginal peoples in Perth | Improving healthcare for Aboriginal Australians through effective engagement between community and health services | Qualitative evaluation | District Aboriginal Health Action Groups were created in 5 districts, consisting of Aboriginal community members nominated by their communities and health service providers. The chairpersons were Aboriginal people. The process was broad enough to capture a range of perspectives and met expectations. Their views were heard and translated into action; explanations were given if they were not. Participants felt empowered and trust built between mainstream health services and the Aboriginal communities. | 4 |

## Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Edgerly/2009/USA/ Anishinaabe | Steps to a healthier Anishinaabe, Michigan: Strategies for implementing health promotion programs in multiple American Indian communities | Case study | Used 5 steps to implement health promotion programs: 1) use a tribal coordinator in each community, 2) develop a community action plan in each tribe, 3) adapt best practice interventions to be culturally appropriate and tribe specific, 4) provide ongoing technical assistance, and 5) respect tribal sovereignty. | 3 |
| English/2004/USA/ Navajo | Intermediate outcomes of a tribal community public health infrastructure assessment | Case study | It was possible to adapt a health system assessment tool by providing simple (lay) descriptions of the tool to Navajo partners and then adapting it for their context. | 3 |
| Fricke/2004/Canada/ Inuit | Development of a community-based medical rehabilitation programme in the Kivalliq region of Nunavut, Canada | Case study | To develop a needs assessment for rehabilitation services, they (a) conducted surveys to people in health, social services, and education; (b) conducted surveys with those who would have benefited from services in the last 5 years; (c) conducted radio call-in shows; and (d) conducted key informant interviews with patients, service providers, and administrators. | 2 |

### Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Fuller/2005/Australia/ Pika Wiya (Aboriginal controlled health service provider) | Sustaining an Aboriginal mental health service partnership | Case study | Both interpersonal and formal relationships between stakeholders were necessary, though not sufficient, for developing and sustaining the program.  Sustainability would be improved by: (a) providing training in cross-cultural mental health care management, and (b) using data to communicate the value of the partnership. | 1 |
| Gibson/2007/Canada/ Tåîchô | Setting our minds to it: Community-centered research for health policy development in Northern Canada | Content analysis | Analyzing Tåîchô stories and songs provided an understanding of Tåîchô values, which were then incorporated into frameworks for planning health policy. | 1, 3, 4 |
| Kerr/2010/New Zealand/ Māori | Kaupapa Māori action research to improve heart disease services in Aotearoa, New Zealand | Action research/case study | Separate consultation of health professionals and Māori led to improved cross-cultural communication and changed practitioners' views of the Māori. | 4 |
| Lavoie/2016/Canada/ Indigenous Peoples in Canada | Implementing Indigenous community control in health care: Lessons from Canada | Review | Implementing community control is long, requires sustained funding, and needs appropriate indicators for accountability. | 1 |

## Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| LoGiudice/2012/ Australia/ Indigenous Australians in Looma | Lungurra Ngoora—a pilot model of care for aged and disabled in a remote Aboriginal community—can it work? | Case study | The development of a steering committee consisting of representatives from the community council, government services, and non-governmental organizations was essential for monitoring, decision-making, and governance. | 4 |
| Look/2012/USA/ Native Hawaiian and other Pacific People | Developing a culturally based cardiac rehabilitation program: The HELA study | Community-based participatory research | Consultation with the community and researchers led to the development of a hula-based rehabilitation program that was culturally appropriate and consistent with current scientific evidence. | 4 |
| McCalman/2016/ Australia/ Aboriginals and Torres Strait Islanders | The effectiveness of implementation in Indigenous Australia healthcare: An overview of literature reviews | Review | Effective implementation requires cultural adaptation, Indigenous leadership, and decentralized implementation. | 4 |
| McDonald/2017/ Australia/ Aboriginal communities in Northern Territory | Participatory systems approach to health improvement in Australian Aboriginal children | Indicator development | This study described how indicators for child health in Aboriginal communities were developed by combining frameworks from relevant literature with extensive Aboriginal involvement. | 2 |

Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| O'Kane/2004/Australia/ N/A | Towards needs-based mental health resource allocation and service development in rural and remote Australia | Development of planning process | Proposal for a five-step process that involves sociodemographic mapping, estimating service usage and adjusting cost based on demographic features (remoteness and Aboriginal status). | 2 |
| O'Neil/2016/Canada/ First Nations in British Columbia | Transforming First Nations' health governance in British Columbia | Description of health services | This article describes how First Nations health governance in British Columbia has changed since the creation of the First Nations Health Authority.  Interviews and group discussions with executives at organizations involved in providing health services in B.C. explored how the transformation of governance has occurred. Key themes include partnerships, relationships, reciprocal accountability, First Nations perspectives on health and wellness, and cultural safety. | 1 |

## Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Ong/2012/Australia/ Indigenous Australians | Differences in primary health care delivery to Australia's Indigenous population: A template for use in economic evaluations | Mixed methods (literature review, stakeholder decisions, and key informant interviews) | Costs of health services for Indigenous populations can be estimated using a framework that accounts for: basic health intervention delivery characteristics; population health, social, and community activities; management and government structures; patient transport services; provision of services to a large remote population; and differences in the rates of Indigenous utilization of services and adherence to treatments. | 1, 2 |
| Otim/2014/Australia/ Decision makers in Indigenous health in Victoria, Australia | Priority setting in Indigenous health: Assessing priority setting process and criteria that should guide the health system to improve Indigenous Australian health | Cross-sectional survey | Discusses priority setting and states that better economic data will help ensure resources are spent appropriately. | 2 |
| Otim/2016/Australia/ Decision makers in Indigenous health in Victoria, Australia | Acceptability of programme budgeting and marginal analysis as a tool for routine priority setting in Indigenous health | Mixed method survey | Program budgeting and marginal analysis is potentially acceptable as a priority setting mechanism for decision-makers. | 2 |

Table 2. Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Panzera/2016/Australia/ Indigenous groups in Queensland | Regional health workforce planning through action research: Lessons for commissioning health services from a case study in Far North Queensland | Case study | Offers an example of how participatory health workforce planning could be carried out by involving stakeholders in 4 steps: 1) needs assessment, 2) remodeling the health system, 3) workforce redesign, and innovation, 4) training plan. | 1 |
| Parter/2012/Australia/ Aboriginal people in New South Wales | Developing an Aboriginal health plan for NSW: The consultation process | Case study | Stakeholder participation in developing a health plan is key, particularly to countermand the history of ignoring Indigenous voices. | 3, 4 |
| Polus/2012/Australia/ Indigenous Australians | Embedding chiropractic in Indigenous health care organisations: Applying the normalisation process model | Case study | Engaging Elders is key to adapting and implementing chiropractic services in Indigenous communities. | 4 |
| Santos/2008/USA/ Native Hawaiian | Institutionalizing a comprehensive tobacco cessation protocol in an Indigenous health system | Case study | Long-term commitment to consultation with partners is key, both to support local champions and to ensure partners have appropriate supervisor support. | 3 |
| Taylor/2001/Australia/ Aboriginals and Torres Strait Islanders | Contemporary management issues for Aboriginal Community Controlled Health Services | Literature review (non-systematic) | The participatory style of ACCHS allows them to provide integrated and holistic care. However, maintaining participation may be difficult as health service management is increasingly complex. | 1 |

### Table 2.  Summary of Articles (continued)

| First Author/Date/ Country/Indigenous Group | Title | Method | Key Findings or Processes | Domain* |
|---|---|---|---|---|
| Walker/2010/Canada/ Anishinabe (primarily) | Achieving cultural integration in health services: Design of comprehensive hospital model for traditional healing, medicines, foods and supports | Case study | Consultations with Elders and creation of an Elders council to inform the development of the traditional medicine and healing program were considered central to ensuring culturally appropriate care. | 1, 3, 4 |
| Walker/2015/USA/ Indigenous communities in Washington state | American Indian perspectives on evidence-based practice implementation: Results from a statewide tribal mental health gathering | Case study | Cultural adaptation of evidence-based interventions should be considered at the outset of implementation.  Consortiums that allow tribes to share costs and knowledge can be an alternative to carrying out an adaptation of the evidence in each community. | 3 |

*Note.* *Domains: 1.  Managing health care in organizations serving Indigenous clientele: challenges and considerations, 2. Approaches to assessing Indigenous health needs and service delivery costs, 3. Toward cultural safety in health planning, 4. Stakeholder participation in health planning.

**Table 3.  Key Messages for Health Planners**

| Key Messages for Health Planners |
|---|
| • Indigenous communities have adapted non-Indigenous health planning tools to improve their cultural relevance and safety.  They have also developed health-planning frameworks based entirely on traditional values and beliefs. |
| • Participatory approaches, in which the views of both community members and health practitioners are brought together, is a potential best practice for improving health planning. |
| • Some authors have suggested that priority be given to Elders when seeking advice or information from Indigenous communities. |
| • It can be difficult to develop indicators that are useful for health planning, fulfill accountability requirements, and reflect Indigenous values and understandings of what it means to live well. |
| • Empirical data about health status and health services is often scant when it comes to specific Indigenous populations.  In this case, one can estimate health need, the appropriate level and mix of services, gaps, and cost-effectiveness through modeling.  In one example, the costs of delivering rural health services were estimated by multiplying the cost of urban care by 1.5; to estimate the cost of treating Indigenous people, $50 per capita was added for specialist care and an additional $150 per capita for health programs delivered by Indigenous organizations (O'Kane & Tsey, 2004).  Qualitative methods (interviews, focus groups, etc.) are also promising for determining use of health systems, informal support systems, and traditional healing. |
| • There is little quality research in the health literature that looks directly at health planning with and/or for Indigenous populations.  It would be worthwhile to conduct targeted searches on the domains identified in this review.  It is also important to seek evidence in other literatures (e.g., management, built environment). |

The ACCHS model was of particular interest for this review, as ACCHS are autonomous grassroots organizations that are mandated to deliver healthcare. An important challenge these organizations face is bridging unique cultural approaches with differing, sometimes conflicting, approaches to management, planning, and health (Coombe, 2008; Taylor et al., 2001) as they partner with other organizations for funding and integrated service provision. These other organizations often have their own priorities, processes, and accountability requirements that are more directive or "top–down" than community organizations (Coombe, 2008).

Thus, compatibility with other organizations can be a significant challenge. For example, ACCHS is committed to providing an integrative model of primary care so as to address social determinants of health. This commitment has proven challenging since direct funding is not available for an integrated model and instead must be sought for individual services (Taylor et al., 2001). One case study showed that Indigenous health service providers sometimes have to refer patients to providers who do not share the ACCHS' commitment to culturally appropriate care (Fuller et al., 2005). Such experiences can fuel concerns that non-Indigenous approaches to governance will supplant Indigenous values and ACCHS organizations will perform less like extensions of Indigenous communities and more like mainstream services (Coombe, 2008).

Similar concerns were raised in an article focused on an Indigenous community in North America (Gibson, Martin, Zoe, Edwards, & Gibson, 2007). In 2005, the Tåîchô Community Service Agency in Canada's Northwest Territories tried to develop policies and principles of service delivery that were based directly on Tåîchô traditions, thereby bypassing non-Indigenous practices of priority-setting and governance (Gibson et al., 2007). An example was the Service Agency's development of indicators of health and well-being. During two workshops, academics, Elders (the term for respected knowledge keepers within the community), chiefs, and senior Tåîchô government staff worked to develop indicators that were useful for health planning, fulfilled accountability requirements, and reflected Indigenous values and understandings of what it means to live well (Gibson et al., 2007).

Indigenous populations in British Columbia, Canada, have also re-structured health services delivery. In this context, the First Nations Health Authority (FNHA) is responsible for planning, delivering, and funding health services for Indigenous populations in British Columbia. A national body, Health Canada, previously carried out this work. FNHA has worked closely with regional health authorities, such as Interior Health, to align priorities among agencies. For example, Interior Health held meetings with stakeholders to create an Aboriginal Health and Wellness Plan with Indigenous partners, and then attempted to align its priorities with the FNHA (Anderson & Hansson, 2016). A qualitative description of the FNHA (based on interviews with stakeholders from the provincial ministry of health, the FNHA, and First Nations communities) has outlined how its creation has led to relationship building, reciprocal accountability, and increased Indigenous representation in health services planning and governance, with the goal of improving quality of care and cultural safety (O'Neil et al., 2016). As the FNHA is relatively new (at least compared with ACCHS), more time is necessary in order to evaluate its impact on the health of Indigenous populations.

Returning to the Australian context, a notable characteristic of ACCHS for this review was its horizontal, participatory management style (Coombe, 2008; Taylor et al., 2001). This style is not surprising, considering that the ACCHS was formed out of and represents community interests and health

priorities. This participatory style is advantageous insofar as the organization involves a diverse group of stakeholders and thus can acknowledge and adapt to their needs. Coombe (2008) has argued that a participatory management style derives from and is generally amenable to Indigenous culture in Australia. In contrast to non-Indigenous approaches to governance, Coombe has suggested that management styles in ACCHS value an egalitarian approach, consensus decision-making, collective responsibility, and an approach to communication that is informal and built upon personal relationships and face-to-face interactions. Coombe has also argued that authoritative management styles can be detrimental because they can trigger resentment related to historical injustices experienced by Indigenous populations and the trauma of colonialism.

Yet, there may be limitations to participatory management styles. Take, for example, the membership of the ACCHS boards. According to Taylor et al. (2001), a high value is placed on board members elected from the community who have rich knowledge of the culture and a high standing in the community. However, these elected members do not always possess the specialized health knowledge (e.g., clinical or policy-related expertise) that is important for making informed decisions. Thus, it can take time to build the capacity of the board and find appropriate roles for all board members. Further, given that a participatory approach to management requires substantial time, resources, and ongoing commitment, organizations may find it difficult to maintain a participatory management style when faced with short timeframes for making decisions and addressing complex issues (Taylor et al., 2001). Finally, as Taylor et al. have pointed out, there is not always an "exact fit between community need and service provision" (p. 129). In this sense, community-identified priorities can be supplanted by funding issues and the terms of service arrangements with other organizations, which can lead to community discontent. Feelings of resentment can also arise when it appears that the priorities of some community members are taking precedent over others (Taylor et al., 2001).

In addition to the structure and management style of health services, workforce planning is an important dimension of health planning for (often remote) Indigenous communities. Panzera et al. (2016) have outlined four steps for workforce planning. First, a needs assessment was carried out by identifying local and regional stakeholders, discussing needs and available services, and the gaps between them. Second, health service delivery models were drawn to illustrate both the current system and the desired system, and priorities were chosen. Third, the workforce required to achieve these priorities was discussed— with a focus on physicians, nurses, midwives, allied health personnel, and Indigenous health workers— while emphasizing the need for multi-skilled staff. Fourth, a costed workforce and training plan was created to support development opportunities for rural and remote regions as compared with urban counterparts.

Ensuring Indigenous involvement in health planning can be challenging, as Lavoie and Dwyer (2016) have pointed out in their article comparing how community control of health services is being implemented in Canada. The authors noted that, as of 2008, it had taken 20 years for 89% of 610 eligible First Nations communities in Canada to reach a funding arrangement with the federal government about how to manage their community health services. As part of the arrangement, every 5 years these communities receive funding to evaluate their health services in order to adjust their community health plans. However, managing accountability when handing over control was challenging. Onerous reporting requirement for these communities were first partially ignored, then implemented, and then dropped due to the large administrative burden and small benefits. Lavoie and

Dwyer (2016) concluded that ensuring indicators are relevant to the communities and to the federal government is essential to ensuring good partnerships.

## Approaches to Assessing Indigenous Health Needs and Service Delivery Costs

Setting health priorities is not always straightforward and can be challenging without good data on the health status and needs of local populations. This is particularly problematic for Indigenous populations (Milne, Lafontaine, & Konkin, 2016). For example, Otim et al. (2014) have written of a study with an Indigenous group in Australia that adopted an approach to planning and priority setting known as program budgeting and marginal analysis (PBMA). PBMA exposed the need for both better data and evidence as well as long-term perspectives when allocating resources; the approach also involved the consideration of a notional fixed budget and varying how funds are distributed among various programs so as to identify priorities and thereby maximize health. The process included an advisory panel made up of stakeholders and community members. Despite the limitations in data, almost 80% of respondents from the ACCHS thought this method had potential (Otim et al., 2016).

Regardless of approach, a key component of health planning is information. In order to know which services to provide and in what quantities, planners need to know the particular health problems and needs of communities, communities' patterns of health service utilization, what resources are available to communities, and the costs associated with health services. One difficulty attendant to planning health services for Indigenous populations is that accurate data for each of these components is often incomplete and/or unavailable—whether it has been collected and is difficult to obtain or has not yet been collected at all.

The Indigenous Health Service Delivery Template (IHSDT), a tool described by Ong, Carter, Kelaher, and Anderson (2012), has worked to account for the unique needs of Indigenous populations in the health planning process. The template was created in response to the perception that Indigenous health services in Australia were underfunded. In the absence of Indigenous-specific cost-effectiveness data, resource-allocation decisions were being made based on mainstream cost-effectiveness evidence; these calculations did not consider differences in "demographics, the target disease burden, the prevalence and distribution of harmful exposures, the way health interventions are delivered, and their effectiveness" (Ong et al., 2012, p. 2). As such, Ong et al. sought to account for not only the unique health needs of the Indigenous population, but also the different approaches to primary healthcare that have been adopted to meet these health needs.

At the heart of the IHSDT is a framework that compares how a health service would be delivered in a mainstream, general practitioner setting, and how the same service would be delivered through an Australian ACCHS. The framework includes six categories:

1. Basic health intervention delivery characteristics;
2. Population health, social and community activities;
3. Management and government structures;
4. Patient transport services;
5. Provision of services to a large remote population; and
6. Differences in the rates of Indigenous utilization of services and adherence to treatments (Ong et al., 2012).

These categories break down the aspects of an intervention that would lead to cost differences between mainstream delivery and ACCHS delivery.

Ong et al. (2012) claimed that data on mainstream interventions could be adapted via the IHSDT to reflect the cost of delivery to Indigenous populations. Notably, the ACCHS approach to delivery involves multiple supplementary services in addition to those accompanying standard interventions; as such, the cost of delivery under the ACCHS approach (as opposed to under a mainstream, general practitioner setting) can be high. However, this delivery generally leads to improved health benefits, as it is associated with higher treatment adherence rates. Ong et al. (2012) have argued that cost-effectiveness should not be the only metric by which to evaluate the success of health services delivery; rather, one should also consider the value of health equity when determining the allocation of funds for various services. That is, they have suggested that it may be worth spending more on Indigenous health services in order to achieve health equity.

Similarly, O'Kane and Tsey (2004) have addressed the types of services and levels of funding that are required to meet the mental health needs of people in rural and remote communities in Australia. They found that much of the information necessary to plan for local needs did not exist, and thus they developed a framework to allow extrapolation from available data. While their estimates used proxy sources of information, they argued that their modelling is more accurate than common ad hoc and anecdotal approaches to funding and service delivery.

Building their framework involved five steps. First, they created a regional socio-demographic profile capturing both the remoteness of the region and the proportion of the population that is Indigenous (O'Kane & Tsey, 2004). Next, they estimated the types and levels of mental illnesses in the region based on local and related epidemiological data (when such data was available). The third step estimated how often potential services would be used, and they found sufficient evidence to reasonably predict what proportion of the mentally ill population would require specialist services. Fourth, they determined what types of specialist care were needed, adjusting data on the resource requirements of urban populations to reflect the local population addressed by their framework. Finally, to estimate cost, they used calculations for remoteness and for Indigenous status from other studies. For remote care, they multiplied the cost of urban care by 1.5; for the cost of treating Indigenous populations, they added $50 per capita for specialist care and an additional $150 per capita for the provision of "social and emotional well-being programmes delivered by Aboriginal organizations" (p. 393). Applying their method to the region of Central Australia, they showed that there is inadequate specialist care capacity and that funding levels were approximately half of what was required to meet mental health needs.

Allen, LeMaster, and Deters (2004), writing about Native American communities in the United States, have described a different approach to identify health-planning priorities. Per the Circles of Care initiative, the federal government provided grants to Native American communities to build comprehensive descriptions of the services available for children with serious emotional disturbance. This initiative was considered a first step in the health planning process. In order to participate, each organization filled in templates with information on numerous health and social services (e.g., education, mental health, general health, recreational services, juvenile justice, traditional healing). The information collected included the components of the system, characteristics, interactions among components, accessibility of services, and gaps in service. Most of the data were collected through

interviews with workers in the healthcare system and community members. The interviews with community members were especially valuable when it came to identifying the informal systems of support and care that were bridging the gaps in the formal healthcare system. Additional data were collected through focus groups and surveys that were targeted to a broader range of stakeholders, including traditional healers.

The data were used in two ways. First, they were used to create descriptions of the healthcare system that depicted the many ways in which families attempted to access services, were provided services, or were denied services and had to find alternative approaches to treatments. Second, many of the grantees used GIS mapping technology to create visual representations of the health services available for children who were seriously emotionally disturbed. These maps simplified the complex interactions among different provider organizations, and made apparent how areas of strength and weakness were distributed geographically. The maps showed:

> (a) Provider characteristics such as training and ethnicity; (b) agency characteristics such as physical location of agencies, distances involved, and catchment area served; (c) cross-service sector characteristics such as differences in staffing levels, training, and turnover across sectors, and (d) congruencies and incongruities in organization of services across sectors and regions. (Allen et al., 2004, Mapping section, para. 2)

A surprising outcome of the service descriptions was the discovery of the many ways in which providers were innovating to make their services culturally safe. Furthermore, the service descriptions highlighted that there were already viable, and often-used, traditional healing resources in communities (Allen et al., 2004). The authors emphasized the importance of drawing on community members and leaders in addition to health system experts in order to arrive at a true description of how the system functions for the people using it (Allen et al., 2004).

Likewise, an article by McDonald, Bailie, and Morris (2017) from Australia has described how to develop indicators for child health in remote Indigenous populations. After initial consultations and workshops with Indigenous stakeholders in two communities—which emphasized social determinants of health as important upstream factors of child health—a framework was developed that was informed by the literature. The framework was then brought back to the communities to ensure that it reflected what had been discussed. Indicators were then identified in the literature and, after extensive consultations, two frameworks were combined to include both environmental factors (such as air, water, and food), and social factors (such as influences of family and institutions). Finally, two tools were developed that reflected the adaptation of existing frameworks to fit Indigenous knowledge: the Health Community Assessment Tool, and the Household Assessment Tool.

Finally, Fricke et al. (2004) used qualitative methods to conduct a community needs assessment. Focusing on the planning of rehabilitation services in Nunavut, Canada, they used surveys and key informant interviews with health workers and patients to arrive at estimates of the number of people who would benefit from rehabilitation services and the areas of greatest priority (Fricke et al., 2004).

## Toward Cultural Safety in Health Planning

Health planning for Indigenous populations often requires bridging Indigenous and non-Indigenous cultures of health and management. One of the challenges Indigenous communities often face when managing their own health services is finding ways to incorporate best practices from non-Indigenous healthcare systems—whether health interventions, models and frameworks for system design, or approaches to governance and management—in ways that reflect Indigenous worldviews and values. Non-Indigenous tools for health planning risk being culturally incongruous with their built-in assumptions about resources and infrastructures. Notwithstanding this caution, many of the articles reviewed for this article have suggested how non-Indigenous tools for health planning can be successfully adapted for use by Indigenous communities (Edgerly et al., 2009; English et al., 2004; Parter, Gassner, Atkinson, & McKendrick, 2012; Santos, Braun, Ae`a, & Shearer, 2008).

For example, English et al. (2004) have written about a partnership between the Ramah Band of Navajo Indians, the Albuquerque Area Indian Health Board, the University of New Mexico, and the University of Nevada that attempted to adapt one non-Indigenous tool for use by Indigenous communities. The partnership's attempt to implement the Centre for Disease Control's Public Health System Performance Assessment Instrument was delayed because community stakeholders found the language of the instrument foreign to daily tribal living. As such, a process for interpreting and modifying the instrument was developed. This process included giving stakeholders both plain language summaries of the main sections of the planning instrument and definitions of the key terms prior to implementation. The project partners then received recommendations from community stakeholders and created a revised instrument along with a *Tribal Users' Guide* to assist with implementation.

The team leading the implementation used their "lessons learned" from the implementation to create guidelines for improving the applicability of non-Indigenous assessment instruments for use with tribes. The guidelines include removing unnecessarily complex and bureaucratic language; explaining new terminology with examples that are relevant to tribal communities; ensuring that community members and researchers who have experience working with Indigenous populations review materials before implementation; and respecting sovereignty issues, including issues regarding data ownership (English et al., 2004). In addition to arriving at a more culturally safe public health assessment instrument, the adaptation and implementation process yielded several other benefits. These benefits included:

- Community members and health-related staff had a better understanding of the public health concepts and how they apply to services;
- Collaboration between tribal health programs increased; and
- New relationships and partnerships were formed between tribal organizations and researchers (English et al., 2004).

In contrast, the State of Michigan's Steps to a Healthier Anishinaabe program tailored its resources from the outset and was thus able to build-in steps for community-specific implementation of its public health initiatives (Edgerly et al., 2009). According to Edgerly et al. (2009), all the communities served by the program shared the same culture and demographics, including similar risk factors and disease burden; however, the communities differed in terms of their priorities, resources, and infrastructures. The Steps program asked all participating communities to pursue standardized goals and objectives, but how this

would be achieved was left up to the communities themselves.  To balance best practices and applicability, they followed five steps when working with each community:

a.  Employed a tribal coordinator;
b.  Developed a community action plan;
c.  Adapted best practice interventions to be culturally sensitive and tribe specific;
d.  Provided ongoing technical assistance; and
e.  Respected tribal sovereignty (Edgerly et al., 2009).

It was recommended that the tribal coordinator be an individual with some health expertise who could facilitate a connection between health knowledge and cultural knowledge for each community.  The coordinator also maintained the link between the community and the Inter-Tribal Council of Michigan, which managed the Steps program (Edgerly et al., 2009).  The resultant Community Action Plan (CAP) was built through a standardized template provided by the program, but local healthcare professionals and community members put it together.  Central staff provided technical assistance and guidance on completing the action plan, data collection, progress reporting, and facilitating partnerships with other health promotion organizations (Edgerly et al., 2009).

In order to understand how mainstream health services can work better with Indigenous communities, Walker, Whitener, Trupin, and Migliarini (2015) examined Indigenous perspectives on evidence-based practice implementation.  In this context, there had been hesitation in some Indigenous communities to enact non-Indigenous policies due to both the history and legacy of colonialism, and to fears that evidence-based practices were not been tested in Indigenous communities.  At a statewide tribal gathering on behavioural interventions for youth, the perspectives of participants on the strengths and weaknesses of five programs for youth delinquency were sought.  Findings from the meetings indicated that cultural issues should be considered at the outset of implementation.  Second, it was suggested that the existing model of cross-tribal collaboration be adopted to share costs and act as a learning community to share best practices related to implementation.

Walker et al. (2010) have noted, by moving away from mainstream modes and constructing planning frameworks based entirely on traditional beliefs and values, culturally appropriate health planning can also be achieved.  For example, the Sioux Lookout Meno Ya Win Health Centre in Northern Ontario, Canada, used this approach when developing the Traditional Healing, Medicines, Foods and Supports (THMFS) program, which guided their health planning (Walker et al., 2010).  Their tool incorporated principles of service delivery that are based on traditional values and community preferences.  The framework has five categories:

a.  Governance and leadership;
b.  Patient, resident, and client supports;
c.  Traditional healing practices;
d.  Traditional medicines; and
e.  Traditional foods (Walker et al., 2010).

This approach was constructed after extensive consultations with community members and site visits to other organizations across Canada that had been recognized for delivering culturally safe care.

The views of Elders formed an important component of these consultations. Over 50 Elders were consulted, and the Elders interpreted the results of the entire consultation process. Moreover, the priorities that emerged through this process included language, comfort, escorts, and spirituality (Walker et al., 2010). The prioritization of language involved having interpreters available who could speak all three of the local Indigenous languages. Comfort covered access to traditional foods and cultural activities to make treatment experiences less foreign. Escorts refer to professionals who assist with the transition into and through the health centre. The spirituality priority prioritized the availability of traditional healers and affording traditional forms of spiritual healing the same stature as non-Indigenous forms of healing (Walker et al., 2010).

Gibson et al. (2007) have noted how the Tåîchô First Nation in British Columbia, Canada, has also taken an innovative approach to planning across their public services. With a land claim settlement on the horizon, the Tåîchô First Nation sought a way to plan governance structures and public policies that met contemporary standards of accountability, transparency, and effective management, but were built first and foremost on their own traditions. The Tåîchô First Nation used their traditional songs and stories as a starting point for this planning, and with the assistance of researchers from the University of British Columbia, a group of 20 community leaders analyzed Tåîchô songs and stories to draw out key ideas, themes, and core values. The results were validated with members of the community and enhanced through discussions of what it means to live well in Tåîchô culture (Gibson et al., 2007).

The results were used in multiple ways. First, the participants (Elders, chiefs, senior Tåîchô government staff, and researchers) developed a framework representing what it means to live in the Tåîchô way: first as a mind map and then as a visual representation more in line with Tåîchô tradition (Gibson et al., 2007). A definition of Tåîchô wellness complemented the framework: "daily relationships with others, as achieved through speaking the language, eating food together, practicing skills, and learning through observation" (Gibson et al., 2007, p. 44). From this foundation, participants endeavored to build policy frameworks that connected Tåîchô values to mainstream notions of policy and governance. For example, for the policy area "child protection, community standards and social workers" (p. 48), the participants identified values such as "identity and cultural identity," "recognition of what was there before," and "control over our lives (independence and uniqueness)" (Gibson et al., 2007, p. 49) as important components of potential policies. Policy and program ideas emerging from these values included having Elders teach traditional values to families, bringing children and family members out on the land, and training social workers from within the community (Gibson et al., 2007).

## Stakeholder Participation in Health Planning

The final domain common to articles included in this review was the need to involve stakeholders when planning health services for Indigenous populations. While the extent of involvement or participation may vary from simple consultation to empowering partners to make their own decisions, the underlying purpose has been affirmed as ensuring that Indigenous Peoples have a say in how they receive healthcare. An example of prioritizing a participatory process is the Australian government's development of their Aboriginal Health Plan, as has been discussed by Parter et al. (2012). Parter et al. (2012) have noted that the majority of participants in each consultation meeting were purposely Indigenous, and that this inclusion was a gesture intended to counter Australia's history of silencing Indigenous voices.

Consultation has also been employed as a method to determine health needs and to identify the strengths and weaknesses of extant health services; it has been especially useful for ensuring that resultant services are designed in culturally safe ways. Look, Kaholokula, Carvahlo, Seto, and de Silva (2012) have discussed an example of this practice in their assessment of Indigenous community members and health practitioners integrating their views when creating a cardiac rehabilitation program for Native Hawaiians. Researchers consulted with Native Hawaiian Elders and experts in the cultural practice of hula to assess the acceptability of basing a rehabilitation program on hula. Parallel meetings were held with cardiac rehabilitation experts to ensure that the hula-based therapy was clinically safe and consistent with the latest scientific evidence. The researchers then formally integrated the clinical and cultural recommendations into the intervention design, and they found that adherence to treatment improved (Look et al., 2012).

Andrews, Simmons, Long, and Wilson (2002) have demonstrated how bringing together the views of Indigenous community members and the clinicians who work in their communities can both uncover entrenched viewpoints, and barriers to care and create opportunities for collaborative problem-solving. Andrews et al. (2002) discussed a project in which 15 consultation meetings brought together general practitioners, Indigenous health workers, and community members to discuss how to improve access to general practitioner services in Australia. Among the several practical outcomes, the most transformative involved a change in how general practitioners worked with the Indigenous health workers and Indigenous healthcare organizations. To this end, the authors recognized that one of the major barriers to Indigenous populations accessing health services was the tendency of general practitioners and Indigenous health workers to work in silos.

Similarly, Kerr, Penney, Barnes, and McCreanor (2010) have detailed a New Zealand project, in which both Māori communities and practitioner communities were consulted. The project aimed to improve care for Māori with ischemic heart disease. The consultations with Māori populations focused on local knowledge of ischemic heart disease and the ways in which people accessed the health system, and they revealed many negative interactions between Māori and healthcare professionals. Consultations with healthcare professionals uncovered their negative views towards Māori populations, including views that tended to blame Māori populations' poor health on lifestyle choices instead of recognizing systemic factors that are deleterious to Māori health. Following these consultations, separate meetings were held with each group to discuss the findings and then meetings with all stakeholders were held to discuss strategies for improving heart disease services. Kerr et al. (2010) argued that the integrative approach to consultation led to improved cross-cultural communication and significantly changed practitioners' views of their Māori patients.

A similar study, addressing an Australian context, has described how Indigenous populations were involved in decisions around health service provision (Durey et al., 2016). District Aboriginal Health Action Groups, consisting of both Indigenous community members nominated by their communities and health service providers, were created in five districts to practically address Indigenous health needs (e.g., by identifying local solutions and avoiding tokenism). Durey et al. (2016) used a qualitative evaluation to examine whether Indigenous populations found this method of engagement to be effective. Results showed that the process was broad enough to include diverse perspectives, their views were heard and acted upon, and explanations were given when their views were not acted upon.

Participants felt empowered, and the authors noted that this process built trust between mainstream and Indigenous health services.

Chatwood et al. (2015), writing from a Canadian context, have given a practical example of a method that is well suited to balancing Indigenous and non-Indigenous views. The nominal group technique they presented involves identifying lists of priorities, ranking them, and then choosing a way forward. Indigenous participants were involved in selecting the research question, deciding who the participants would be, co-facilitating the discussion, and deciding how the results should be disseminated. The article highlighted how this method of engagement (e.g., co-facilitating discussions) allowed Indigenous knowledge to be shared in films, photos, and stories alongside non-Indigenous methods (e.g., workshops and cue cards).

A review of the effectiveness of implementation strategies in Australian Indigenous populations found that programs were not effective when cultural differences were ignored. Typically, we found that Indigenous leadership was essential, and that programs that were centrally developed and then implemented in a decentralized manner allowed for community participation and adaptation of the interventions (McCalman, Bainbridge, Percival, & Tsey, 2016).

In many Indigenous communities, Elders hold an eminent status that should be prioritized in consultation processes. In their attempt to implement chiropractic services in an Indigenous community in Australia, Polus, van Rotterdam, and Vindigni (2012) proposed a protocol for introducing new health programs in Indigenous communities. This protocol listed consulting with Elders and presenting them with implementation plans as its first step. Similarly, as mentioned above, in developing the hula-based cardiac rehabilitation program, Look et al. (2012) held focus groups with Native Hawaiian Elders to ensure that their study was congruent with cultural protocols. The Traditional Health, Medicines, Foods and Supports (THMFS) program, also discussed above, went even further by implementing an Elders Council that sits alongside the Medical Advisory Committee and advises on both health planning and the management of the THMFS program (Walker et al., 2010). The Council is made up of eight Elders from the communities served by the program.

## Discussion

Our goal with this review was to summarize the published evidence on health planning for Indigenous populations so as to identify best practices to inform local planning processes. We also sought to contribute to the existing body of literature that has been published on Indigenous health services development and planning. While our review was rapid, it was systematic and showed that the current evidence base is not extensive. No review articles were available on this topic, and the level of evidence was weak. In fact, few articles extended beyond a local, descriptive case study approach to the topic. As a result, we were unable to conduct a quality assessment of the articles.

These limitations notwithstanding, the results of our review nonetheless help map the existing literature, provide a guide regarding how health planning is discussed in relation to Indigenous health, and offer lessons and promising practices for communities and planners alike who seek to improve health and health services in Indigenous communities. From our review, four salient areas requiring further development and research in relation to health planning emerged. These areas are:

   a. Understanding the gap between written and oral knowledge,
   b. Building culturally-safe management,
   c. Advancing the data base, and
   d. Understanding the importance of Elders in health planning processes.

## A Gap in the Literature or a Gap in Our Search Strategy?

As mentioned above, it was challenging to find articles that directly addressed our topic: the challenges and best practices for health planning for Indigenous populations. An important bias in our search strategy may have been our focus on published work. While many Indigenous communities use written knowledge transfer, it could be that some Indigenous planning processes occur in communities with a strong oral tradition and thus their knowledge lies with community members and not within published literature. For example, in developing research ethics codes, it is important to recognize that community knowledge can come from community members who are educated in oral tradition (Castellano, 2004). The Kahnawake Schools Diabetes Prevention Project, for example, has made use of a research partnership agreement to acknowledge that rules of conduct may be either written or spoken (Code of Research Ethics, 2007). While our review set out to understand what was in the published literature, health planners who rely too heavily on published literature may miss important Indigenous models and priorities. Further, health planners could also benefit from looking at unpublished grey literature such as reports and planning documents.

## Culturally Safe Management

There is a growing body of literature on culturally safe health services, of which this review has only captured part. Cultural safety emerged as a nursing concept in New Zealand to ensure that patient safety included cultural as well as physical and mental aspects (Papps & Ramsden, 1996). While the concept is continuously being refined, Brascoupé and Waters (2009) have stated that "essential factors in the definition of cultural safety are the *visibility* of cultural differences and the *power* that may flow from that visibility, leading to the demand for equality, respect and control by Aboriginal people" (p. 12). The need for cultural safety stems from the historical and ongoing racism experienced by Indigenous populations (Allan & Smylie, 2015).

Indeed, the notion of cultural safety extends beyond individual patient safety to acknowledge and address the power dynamics between patients, communities, institutions, and management. Acknowledging the often neo-colonial approach to Indigenous affairs can motivate health institutions to partner with Indigenous groups and, in so doing, provide Indigenous populations with more power to determine how their health services are organized (Brascoupé & Waters, 2009). With a view to social determinants of health, it is important to consider cultural safety in areas such as education, economic opportunity, and justice (Brascoupé & Waters, 2009). For example, One Health, a broad initiative in Canada, has encouraged cross-disciplinary collaboration to address health issues by considering social determinants of health such as climate change and the relationship between the environment, animals, and humans (Ruscio, Brubaker, Glasser, Hueston, & Hennessy, 2015).

Planners in health and these other fields could benefit from an awareness of the literature on cultural safety, though it is beyond the scope of this review to cultivate such awareness (a targeted search could provide more detail on this topic). Furthermore, health planners should look to the literature on built

environment (e.g., housing, infrastructure, air and water quality), as it could impact Indigenous health inequities (Gelormino, Melis, Marietta, & Costa, 2015). However, while existing literature will provide guidance, much health planning depends on local realities, and community priorities may vary based on politics, history, and economics (Browne et al., 2016). Adapting to local contexts is essential to providing culturally safe care, and it can provide innovative ideas such as Look et al.'s (2012) hula-based cardiac rehabilitation program in Hawaii and the use of Tåîchô songs and stories to develop policy frameworks grounded in Tåîchô values (Gibson et al., 2007). Partnering with communities in a sustained manner can help ensure local needs and preferences are brought forward (Potvin, Cargo, McComber, Delormier, & Macaulay, 2003). Moreover, acknowledging the differences among Indigenous communities will also help move planning from an approach that is top–down to one that is bottom–up, prioritizing and building from communities' unique needs and preferences.

## Building the Database for Planning

Since many of the articles we reviewed were case studies of individual communities or groups, they tended to describe planning *processes* rather than to evaluate or compare the *outcomes* of using specific processes. As such, it is difficult for this review to identify "best practices" that can transcend a local community. Despite the lack of formal evaluation, however, the value of having accurate information on Indigenous populations as a basis for future planning has increasingly been recognized by knowledge organizations in Canada. Data on Indigenous populations is collected by Statistics Canada and the Canadian Institute of Health Information (to name but two agencies), although it is not always easy to identify Indigenous people in the data or to combine different data sets. The First Nations Information Governance Centre (FNIGC), a non-profit Canadian organization, has aimed to fill this gap by carrying out additional surveys (Milne et al., 2016). In 2015, for example, FNIGC asked First Nations, federal departments, research agencies, and other stakeholders for their priorities for health research; 14 priority areas, including mental health and the impact of residential schools, were addressed in the surveys (Milne et al., 2016).

Carrying out more evaluations of health planning processes *with* Indigenous communities will help bolster the existing body of literature and improve the data upon which health planners base their decisions and actions.

## Participation of Elders

Many of the articles we reviewed discussed the importance of participatory approaches to health planning. Similar to participatory research (Cargo & Mercer, 2008), it has been argued that health service planning should be conducted in partnership with affected Indigenous stakeholders. In particular, the high value placed on consulting community Elders was presented in three studies included in this review (Look et al., 2012; Polus et al., 2012; Walker et al., 2010). Elders are knowledge keepers; they pass on knowledge within a community and act as leaders and role models for youth (Warburton & McLaughlin, 2006). Authors in other disciplines, such as wildlife research (Byers, 1999) and the development of educational programs (Simpson, 2002), have recommended including Elders in the research process. The inclusion of Elders and other Indigenous people should always acknowledge the history of injustices and traumas related to colonialism; qualitative methods, participatory approaches, and decolonizing frameworks may help to ensure that Elders and others can participate as

equal partners, and are not used as "token" participants (Braun, Browne, Kaʻopua, Kim, & Mokuau, 2014; Smith, 1999).

A notable absence in the reviewed literature was a lack of youth involvement in health planning. Although one study included in our the review consulted youth (Allen et al., 2004), this omission was striking given the large proportion of youth in many Indigenous populations.

## Conclusion

This review has offered a guide to published literature on health planning, and it is intended to help inform future investigations on this topic. We have identified four domains in this literature and have offered key messages with examples for health planners. Future planning efforts should be encouraged to contribute to the knowledge gap around how to evaluate existing and proposed initiatives so as to raise the quality and quantity of evidence for policy and practice related to health planning for Indigenous people.

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