Table of Contents

Well-being Measures and Frameworks

Introduction

Having a modern treaty, otherwise known as a comprehensive land claims agreement, is considered a means for improving the lives of Indigenous peoples in Canada. Modern treaties are tripartite agreements between Canada, an Indigenous Nation or People, and a province or territory. These are negotiated in cases in which an Aboriginal title has not already been ceded through historic treaties or addressed by other legal means. Once signed, Modern Treaties provide for the transfer of financial resources from the state to the Indigenous signatories, the entrenchment of specific rights, including surface and mineral rights, as well as self-government arrangements in certain cases. These agreements provide specific rights and negotiated benefits that support the recognition and application of indigenous laws and establish a "nation-to-nation" relationship that may foster positive legislative changes affecting control indigenous control over economic development service delivery, the protection of indigenous communities and culture (Abele and Prince 2006; Borrows 2016; Russell 2000). To the federal government, comprehensive land claims thus strengthen the participation of Indigenous citizens in the Canadian federation, and encourage strong and self-reliant communities (Crown-Indigenous Relations and Northern Affairs Canada 2011). To date, 26 modern treaties have been concluded, yet very few studies have been conducted about their impacts on the lives of the Indigenous signatories.

Studies have linked comprehensive land claims agreements, both with and without associated self-government agreements, to several positive outcomes, such as income, gains for Indigenous households employment and economic growth (Aragón 2015a; Pendakur and Pendakur 2018). While these may effectively improve living conditions, studies have also demonstrated that increasing material well-being does not suffice in providing the necessary conditions for Indigenous people to live valuable and fulfilling lives (Denis, Duhaime, and Newhouse 2017; Kant et al. 2014). For example, Édouard and Duhaime (2013) demonstrated in their study on Inuit happiness that the absence of material resources may cause unhappiness, but its presence does not by any means guarantee happiness. Additional factors were shown to positively affect Inuit well-being, such as the social integration provided by employment as it improves the access to important resources, including social activities and networks, food, housing and physical safety (Édouard and Duhaime 2013, 389).

Moreover, in a 2008 study on the impacts of the James Bay and Northern Québec Agreement (JBNQA), Papillon (2008) showed that the socio-economic improvements that resulted from the financial transfers provided by the federal government to social programs and infrastructure development did not, in fact, markedly improve the overall quality of life of the Crees of Eeyou Istchee and the Inuit of Nunavik ten years after the agreement's signing. The JBNQA was not shown to significantly change the socio-economic conditions and overall well-being of communities, or radically alter the foundations of the relationship the Indigenous peoples with the state, largely due to the ways in which it was interpreted and implemented by the federal and provincial government signatories (Papillon 2008, 26). However, the institutions of governance created under the JBNQA regime provided Cree and Inuit communities with the conditions, tools and resources to advance their political agendas, contributing to the development of their expertise in a number of policy fields, and played an important role in the consolidation of strong regional political identities in Eeyou Istchee and Nunavik (Papillon 2008). Thus, "over time, and with proactive leadership and collaboration between all parties involved, CLCAs can become the instruments whereby Aboriginal peoples establish a governance relationship that better reflects their social, economic and political aspirations" (Papillon 2012, 5).

While studies have shed light on the implementation and impacts of specific Modern Treaties in Canada (Aragón 2015b; Cameron 2019; Dokis 2010; Guimond, O'Sullivan, and Morin 2013; Kulchyski and Bernauer 2014; Pendakur and Pendakur 2018; Saku and Bone 2000), more research is needed to understand under what conditions and to what extent these agreements may enhance the living conditions and the quality life of indigenous people.

Objectives

This report contributes to the work undertaken as part of the Modern Treaties Implementation Research Project's Implementation Evaluation and Socio-Economic Impacts research theme, which aims to develop an approach to gathering evidence that will assist policy makers in improving Modern Treaty implementation. The following review of literature was conducted to identify potentially relevant and culturally adapted quantitative and qualitative indicators of well-being for measuring the impacts of treaties on indigenous peoples in Canada. By doing so, it more specifically seeks answering the following question: do modern treaties make a difference?

In line with the Modern Treaties Implementation Research Project's objectives, this review will help

- To develop and identify meaningful indicators, which are inclusive of indigenous perspectives, to measure the impact of treaty implementation on Indigenous well-being;
- To build a searchable database of existing analyses and documents, including those generated by Indigenous governments and academic contributions.

Drawing on Indigenous well-being assessment frameworks and initiatives in Canada and abroad, this report explores the processes, approaches and benchmarks used to identify, measure and monitor indigenous well-being through indicators. This report first outlines a definition of indigenous well-being, then explores how quantitative and qualitative approached can be used for data collection and analysis. National frameworks for measuring components associated to Indigenous well-being and socio-economic disparities among Indigenous and non-Indigenous populations are subsequently examined, namely Australia's Overcoming Indigenous Disadvantage, New Zealand's Living Standards Framework, the United States' Human Well-Being Index. International organisations which either offer frameworks or identify measures adapted to Indigenous realities are later discussed. This more specifically includes the frameworks developed by the United Nations Permanent Forum on Indigenous Issues, the Sustainable Development Goals (SDGs), the key elements identified by the Organisation for Economic Co-operation and Development (OECD) for grasping the particularities of Indigenous economic development, and the 5-item World Health Organization Well-Being Index (WHO-5). Academic studies and projects on Indigenous well-being are then discussed, with a particular focus on the research undertaken by the International Group for Indigenous Health Measurement (IGIHM), the Indigenous Youth Futures Partnership (IYFP), and the Poverty Action Research Project. This overview leads to a presentation of well-being initiatives undertaken in Canada and finally, conclusive remarks drawn from this review.

Indigenous Well-being

Well-being is an elusive concept frequently confused or used interchangeably with others, such as quality of life, living standards, social welfare, needs fulfillment, wellness, life satisfaction and happiness. However, there is a basic agreement that well-being is a broad, multidimensional construct that refers to "a positive and sustainable state that allows individuals, groups, or nations to thrive and flourish" and of "the social, economic and political conditions that allow people to lead fulfilling and enjoyable lives (Wingert 2013, 209). As such, it offers a simple rationale for collecting social statistics for evaluating a society's quality of life based on the conditions and factors that determine, to various extents, the capacity of individuals and groups to lead fulfilling lives (Cummins 2018; Michalos and Land 2018).

The well-being concept is typically associated with the satisfactions of material needs, the experience of freedom, health, personal security, good social relations and healthy natural environment (Sangha 2019). However, well-being theories mobilize this concept in various ways which reflect the sociocultural norms and values that prevail in a given historical, sociocultural and geographic setting (Krieger et al. 2014). The extent of this diversity was notably exposed in the systematic literature review performed by Linton, Dieppe, and Medina-Lara (2016, 11), which identifies 99 measures encompassing 196 dimensions and six key thematic clusters associated to the well-being concept: mental well-being, social well-being, physical well-being, spiritual well-being, activities and functioning, and personal circumstances (Figure 1) and in the definition of wellness developed by the Thunderbird Partnership Foundation (Figure 2).

Figure 1 Description of the themes identified by Linton, Dieppe, and Medina-Lara (2016, 16)

Themes	Theme description
Mental Well-being	Dimensions linked to the theme of mental well-being assess the psychological, cognitive and emotional quality of a person's life. This includes the thoughts and feelings that individuals have about the state of their life, and a person's experience of happiness.
Social Well-being	Social well-being concerns how well an individual is connected to others in their local and wider social community. This includes social interactions, the depth of key relationships and the availability of social support.
Activities and Functioning	The focus of this theme is the behaviour and activities that characterise daily life. This involves the specific activities we fill our time with, and our ability to undertake these tasks.
Physical Well-being	Physical well-being refers to the quality and performance of bodily functioning. This includes having the energy to live well, the capacity to sense the external environment and our experiences of pain and comfort.
Spiritual Well-being	Spiritual well-being is concerned with meaning, a connection to something greater than oneself and in some cases faith in a higher power.
Personal Circumstances	These dimensions are related to the conditions and external pressures that an individual faces. This involves numerous environmental and socio-economic concerns such as financial security.

Well-being indicators are usually grouped into domains of life or dimensions that include various interpretations of the seven following categories: 1) health, mortality and morbidity by age and gender; 2) education; 3) the balance of time including paid work, commuting, unpaid work and leisure time; 4) political voice and governance; 5) social connections; 6) environmental conditions; 7) personal security and economic security (Stiglitz, Sen, and Fitoussi 2009).

There have been increasing efforts to develop well-being measures adapted to Indigenous peoples that reflect their commonalities and inherent specificities. Much of the literature associates Indigenous well-being with several interdependent factors called determinants of health. Determinants of health are factors both connected to, and affecting health, which include general social and economic factors, such as income, education, employment, living conditions, social support, and access to health services.

While there is no definitive list of determinants, there is a general consensus that colonialism is an active and ongoing force impacting the health and well-being of Indigenous peoples and communities, as notably reflected by

cultural/lifestyle shifts, and identity loss (Greenwood, De Leeuw, and Lindsay 2018; Richmond and Cook 2016). As explained by (Nathenson 2014), colonization introduced new diseases to indigenous people, upset traditional ways of cultivating the land for sustenance, and created an upsurge of "lifestyle" diseases, such as diabetes and cardiovascular disease, associated with urbanization and the rapid modernization of indigenous ways of life. The loss of culture, language, and identity has been tied to problems with drugs, alcohol, mental illness, and violence among indigenous peoples (*Ibid*.).

Figure 2 The Definition of Wellness, Thunderbird Partnership Foundation, https://thunderbirdpf.org/wp-content/uploads/2015/07/1_Definition_of_Wellness.pdf

The factors affecting Indigenous well-being include the circumstances and environments in which individuals and communities live, which encompass the transient needs and requirements that emerge from the events shaping a person's life course, as well as the social structures, systems and institutions responsible of the enduring health inequities between particular subgroups of a given population (Greenwood, De Leeuw, and Lindsay 2018).

Measures and indicators

Assessing well-being requires the definition and the measurement of several elements (indicators and/or observed variables) (Maggino and Fattore 2014). Quality information is necessary for addressing such a complexity, often referred in terms of multidimensionality. This information may consist of "statistics, statistical series and all other forms of evidence that enable us to assess where we stand and are going with respect to our values and goals" (Noll 2018, 953).

Well-being can be measured through sets of quantitative data, produced from both qualitative and quantitative methods, that can be compared on various scales, across different socio-economic, geographic and demographic

settings. Standard measures provided by quantitative data are essential for systematic comparisons over time across different population sub-groups, communities or nations, while qualitative approaches offer invaluable information for constructing, applying, as well as analyzing the data gathered from the implementation of well-being assessment and monitoring tools.

While the need for quality data is particularly relevant for indigenous governments to put in place "solid policies and programs effectively, to demonstrate accountability, and to be transparent to their citizens", there is a general lack of disaggregated data in sufficient quality and quantity for longitudinal or comparative studies (Steffler 2016, 149). In 2019, the Assembly of First Nations and Indigenous Services Canada published a report which highlighted several issues regarding to the Indigenous data landscape in Canada (Figure 3) (Trevethan 2019). While numerous organizations were found to collect information on various components of indigenous livelihoods, these data are not easy to access, nor do they necessarily provide the information needed by indigenous governments to better serve their communities (Trevethan 2019). As noted by the report's author, Trevethan (2019), First Nations governments are not currently able to produce a comprehensive profile of strengths and challenges of their communities with which they could prepare plans and reports to their citizens on the progress of programs/services.

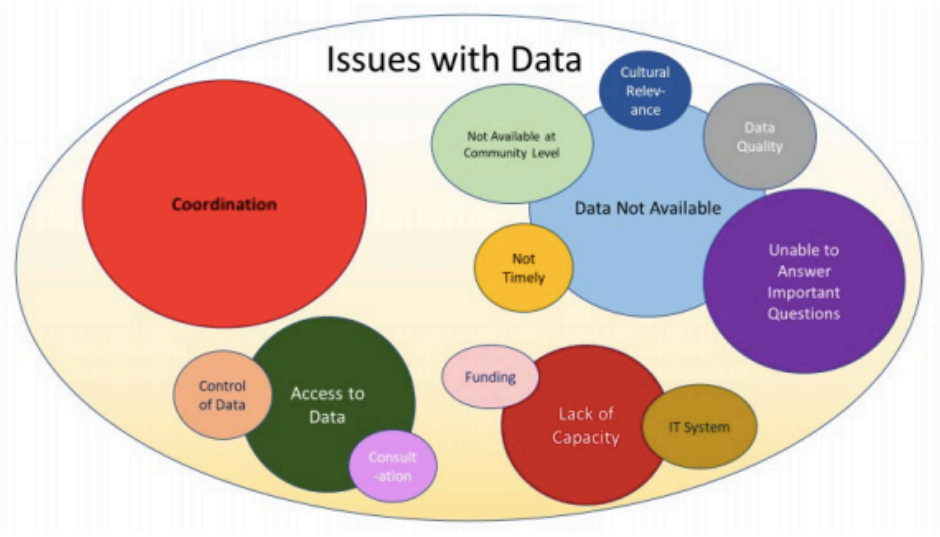


Figure 3 Results of interviews conducted with about 70 key stakeholders across Canada on the data gaps relating to First Nations, including with individuals from various First Nations as part of the Strengthening the Availability of First Nations Data report (AFN 2019, 23), https://www.afn.ca/wp-content/uploads/2019/05/NCR-11176060-v1-STRENGTHENING_THE_AVAILABILITY_OF_FIRST_NATIONS_DATA-MAR_25_2019-FINAL_E.pdf

In fact, data gathered through program or policy evaluations, often designed for reporting, compliance and accountability requirements rather than to assess program outcomes or consequences have proven extremely challenging, or impossible to use for assessing, in a consistent and reliable way, the state and progress of Indigenous conditions of life. As explained by Steffler (2016, 152), the information "collected for operational and/or legislative requirements or reporting requirements under the terms and conditions of funding agreements", otherwise known as administrative data, tends to lack metadata (data dictionaries and methodological frameworks), standard demographic data fields and Indigenous identifiers. Strict privacy rules and conditions further restrict the access and use of these data sets, particularly given the small sizes of Indigenous communities, while the narrowly defined objectives they were intended to service also limit their usefulness for research purposes (Steffler 2016).

Well-being frameworks and indicators necessarily reflect these challenges, as their objectives must be formulated and reached in light of the possibilities and limitations these provide. Innovative ways to work around these issues by using public data or by launching data collection initiatives. Once this information is gathered, there exists several ways of presenting it, such as through an index or a collection of indicators. Qualitative approaches and methods can also be used throughout this process to better determine how data should be used, understood and shared.

Indexes

Indexes, or composite indicators, are scalar values which have been calculated as a weighted sum of multiple quantitative variables represented as a single value that can be tracked over time, compared and efficiently communicated (Barrington-Leigh and Escande 2018). As explained by Barrington-Leigh and Escande (2018), a single number that summarizes desirable outcomes can provide a clear and convincing portrait of an otherwise complicated reality. Chaaban, Irani, and Khoury (2016, 467) similarly contend that composite indices can effectively simplify multi-dimensional issues and facilitate interpretation for decision-makers.

The variables used in an index may, in certain cases, be selected through a statistical method (factor analysis) that identifies covariance among a set of observed variables in relation to a latent variable. Once these are chosen, the contribution (weight) of each variable in a given index can either be determined through subjective or objective criteria. Multidimensional analysis, for example, provides a set of statistical tools and methodologies that can be used to this end (Maggino and Fattore 2014). The construction process of indices necessarily involves judgments in the selection of indicators. It also requires choosing a suitable aggregation model as well as defining the relative importance (weight) of each indicator it contains. If not carefully considered, an index of culturally unsuitable standards and measures would report compliance with dominant sociocultural norms rather than progress towards desirable collective goal.

Numerous indices have been developed to summarize a population's well-being, quality of life, happiness, or development. Cooke et al. (2005), for instance, presents ten composite social indicators of well-being or quality of life, encompassing different variables and methodologies: the Human Development Index (HDI), the Weighted Index of Social Progress (WISP), the Quality of Life Index (QOL), the Prescott-Allen's Indices of the Well-Being of Nations, the Conference Board of Canada's Quality of Life Scorecard, the Genuine Progress Indicator (GPI), the Fordham Index of Social Health (ISH), the Fraser Institute Index of Living Standards, the Ontario Social Development Quality of Life Index and the Index of Relative Indigenous Socioeconomic Disadvantage.

Collection of Indicators

Collection of indicators, commonly termed dashboards, feature a set of quantitative measures organized thematically, and typically distributed across several dimensions or levels. As explained by Smith (2013, 21): "Data dashboards are visual displays that feature the most important information needed to achieve specific goals captured on a single screen. Effective dashboards should be designed as monitoring tools that are understood at a glance. Dashboards are useful tools because they can leverage visual perception to communicate dense amounts of data clearly and concisely." These are useful for both interpretation and for making the indicators a useful tool for policy accountability (Barrington-Leigh and Escande 2018).

The Canadian Index of Well-being (CIWB), for instance, provides a dashboard as well as an index (Figure 4). More specifically, the CIWB encompasses 64 indicators organized into eight quality of life domains: community vitality, democratic engagement, education, environment, healthy populations, leisure and culture, living standards, and time use (University of Waterloo 2012). These were drawn from public engagement sessions and completed by research.

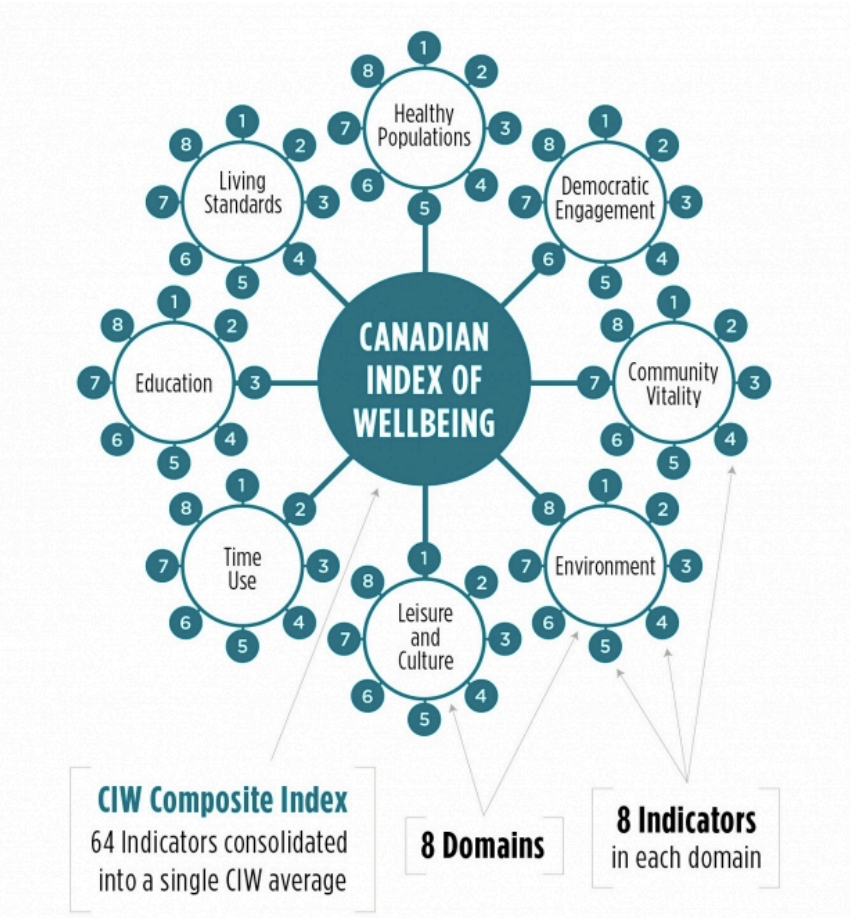


Figure 4 The Conceptual Framework of the Canadian Index of Wellbeing (University of Waterloo 2012)

The Saskatchewan First Nations Regional Dashboard provides another interesting example (Figure 5). The dashboard consists of an information tool providing key data points relevant to First Nations in Saskatchewan as well as a Resources Library. The data and data visualizations functions, which draw on several data sources, offer users a means of exploring 100 indicators. The Resources Library provides additional information contained in over 500 programs, services and planning resources to support First Nations in implementing their priorities.

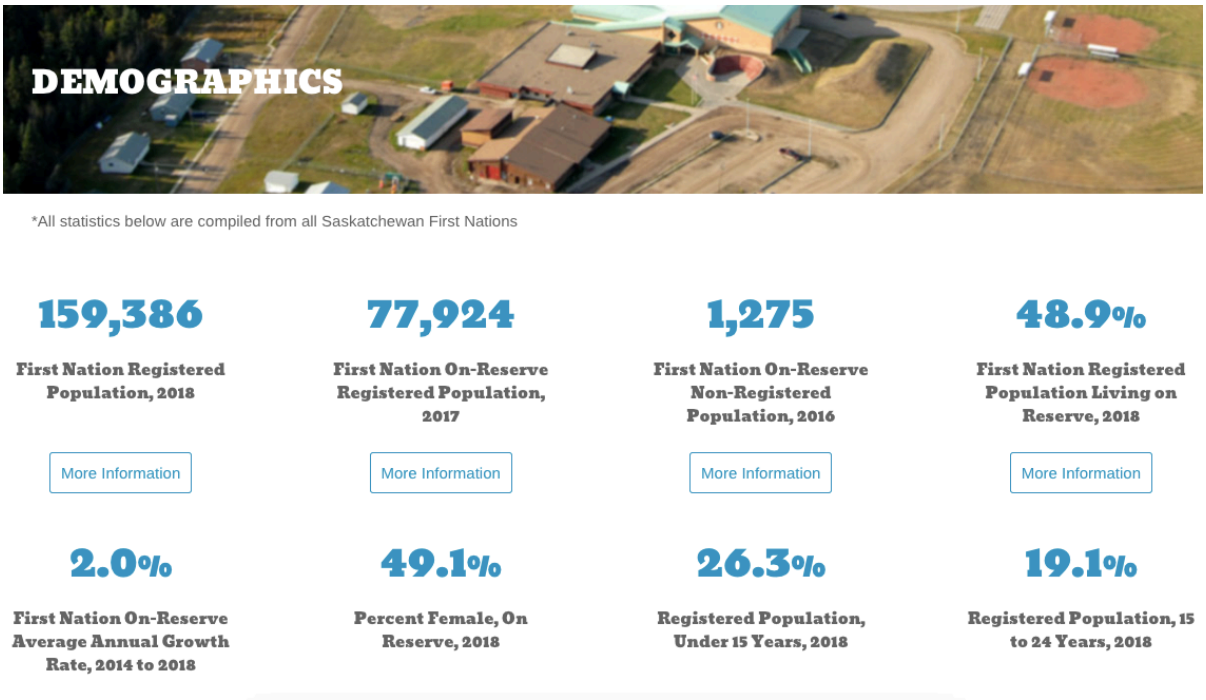


Figure 5 The demographic data provided by the Saskatchewan First Nations Regional Dashboard (http://skfn.ca/)

However, as pointed out by Manning, Ambrey, and Fleming (2016), while "progress" can be measured through objective criteria such as life expectancy, rates of literacy and levels of unemployment, the assessment of other well-being dimensions can be more problematic. Many things that matter to Indigenous peoples are, in fact, difficult or near impossible to measure objectively, including family stability, community life, cultural identity and connectedness with one's territory and ancestors. A vast array of qualitative tools and methods have been developed and used to define local conceptions and experiences of well-being.

Qualitative Approaches and Methods

The strengths of qualitative methods derive from their focus on specific situations or people, as well as their emphasis on personal experiences, including a person's opinions, feelings, perceptions and ideas. Notably, using a qualitative approach requires a researcher's recognition of his or her own sociocultural and historical position, which implies ethics and politics in connection with the research, methodological versatility, an extensive knowledge of theory, and an ability to conceptualize, write, and communicate (Tonon 2014). Qualitative researchers typically emphasize that data ought to be "rich, nuanced and detailed" to produce "rounded and contextual understandings" of how people "experience, interpret and produce the social world" (Orkin 2014, 1430). As such, qualitative data is said to "convey meaningful information in a form other than numbers" (Orkin 2014, 1430).

Focus groups and individual interviews are techniques frequently used to collect qualitative data. Both individual and group interviews can use elicitation techniques, where interviewees respond to photographs, drawings, or other material (Orkin 2014). Respondents may also participate in activities such as drawing, writing, body mapping, or role-play. The selection of participants usually abides to the following criteria: diversity, accessibility, saturation, and strategic selection. Maintaining the anonymity of respondents must be respected (Tonon 2014).

Interview structure	Purpose of research
Structured: questions are all agreed in advance; interviewers must stick rigidly to a script	To collect standard information about informants
Semi-structured: main questions are fixed, but interviewers are able to improvise follow-up questions and to explore meanings and areas of interest that emerge	To explore, probe, and substantiate issues identified by the researcher on a particular topic or topics
Unstructured: the interviewer may have a list of broad topics or themes to explore or may even have none. The direction of the research is largely set by the informant	To generate an interview schedule for subsequent semi-structured interviews; explore what matters to someone and how they articulate this; collect a life history

Figure 6 Difference between structured, semi-structured, and unstructured interviews (Camfield 2014)

Interviews can make use of a structured, semi-structured or unstructured approach (Figure 6). For Camfield, Crivello, and Woodhead (2009), certain situations may warrant closed questions, for example, if specific demographic information are required from all interviewees. Others may, conversely, be more suited for open-ended questions, like when additional examples are needed to better understand a participant's initial response.

Enquiring about the perspectives of a group on particular issues allows participants to share opinions and experiences, which not only provides a means of grasping their experiential knowledge, insights and interpretations on a given issue, but also to understand the underlying logic, that is, why they think the way they do. This information may highlight relevant, contextually and culturally grounded realities that would need to be considered in a framework or data collection tool's development and implementation. Focus groups can also facilitate the collaboration of participants, and the involvement of people that are usually excluded in the research process. When used in combination with other data collection techniques, focus groups can serve to different purposes (Albanesi 2014).

At the early stage of a research project, focus groups could be used to obtain preliminary data on the context, contributing to the definition of the community profile; to pretest a survey (Are items clear enough? Do the words used by researchers have the same meaning from the participants' perspective?) or to create new scales, by clarifying whether the dimensions proposed are suitable or relevant (Camfield, Crivello, and Woodhead 2009; Kwiatkowski et al. 2009). In the central stage of the research, focus groups can supplement other qualitative methods, offering new perspectives on a given topic, identifying gaps, limits or potential issues in the approach, methods or data, or to increase the validity of conclusions previously drawn (Albanesi 2014). In the final stage of the research, focus groups can offer an opportunity to discuss the data, trends (including possible anomalies or discrepancies) and conclusions with people that were involved in previous phases of the research or which have not been involved, and that may wish to contribute to the analytical process. For instance, a qualitative approach can both be used in the formulation of questions to assess subjective well-being and for developing and implementing effective well-being data collection methods.

Qualitative methods have proven useful to uncover and explain the complex relationship between social, spiritual, economic, political and cultural well-being determinants, while capturing the components, factors and conditions that influence wellness, but which are difficult or near impossible to quantify (Kwiatkowski, 2009). A thematic

analysis is extensively used for identifying and interpreting patterns of meaning across qualitative data (Braun and Clarke 2013; Clarke, Braun, and Hayfield 2015).

Subjective Well-being

Subjective wellbeing is increasingly considered a meaningful indicator of happiness that complements traditional socio-economic measures of progress. Subjective well-being refers to a question used to assess an individual's overall satisfaction with life. The measure, therefore, consists of a personal appraisal, which is based on the answer provided to a carefully formulated question addressing the respondent's current situation. These evaluations reflect individual experiences and preferences (Barrington-Leigh and Escande 2018, 914). The Gallup-Healthways Well-being index is an example of a cross-country survey-based index mobilizing subjective well-being measures (Chaaban, Irani, and Khoury 2016, 467). Subjective well-being can be measured in relation to specific domains of life, such as satisfaction with work, family life, or health, or constitute a global evaluation of one's life satisfaction, and include various levels or degrees. It can also be very broad, depending on the context in which such an appraisal is used.

As explained by Barrington-Leigh and Escande (2018), numerous studies have proven that subjective measures of well-being exhibit stability within individuals, sensitivity to life conditions and changes, intuitive variation with material and other circumstances across the entire range of global national development levels, and even international and inter-cultural comparability. Conventional question developed to assess subjective well-being may, however, need to be reformulated to reflect the specificities of indigenous realities through focus group discussions and interviews, then tested and assessed before being used in surveys.

Subjective well-being should be interpreted in relation to other variables to explain variations, especially demographic data, but also how and to what extent these are affected by a wide range of other factors, including material conditions (e.g. income, consumption, wealth), health status, unemployment, social contact and safety. For the OECD (2013), this applies whether the goal is understanding the drivers of subjective well-being – which requires understanding the causes of change – or where the main purpose is monitoring well-being over time and across population groups – which requires understanding changes in demographics in order to understand a given change is due to changes in average levels or in the ratios of different population groups in society.

Indigenous Well-being Frameworks

Numerous frameworks and measures have been developed by national governments and international organization to assess, monitor and report on the state of indigenous well-being. Selected national initiatives will first be presented followed by an overview of certain international initiatives.

National Initiatives

In the 1960s, a growing recognition that average levels of happiness did not correspond with national economic prosperity levels, as measured by Gross Domestic Product, led researchers and governments to question whether and the extent to which economic measures could effectively and reliably define a society's state of development (Cummins 2018). Bauer's (1966) milestone publication *Social Indicators* notably pleaded for "greater use of sample surveys to collect a greater variety of basic social statistics" to this end (Pega et al. 2010). From their humble beginnings as data collection tools used for taxation or to determine a nation's potential military strength, the census thus became, over the course of centuries, sophisticated tools for collecting elaborate data series on a wide and diverse range of life domains.

National statistical agencies have, for decades, been collecting social and economic data to inform public policies and government programs of key socio-economic development indicators and stimulate public discussions on the

direction and objectives of societal progress (Barrington-Leigh and Escande 2018). Ever since, social reporting has become an established academic and public policy discipline, enjoying a long tradition both nationally and internationally (Pega et al. 2010, 7). As well-being has matured as a statistical and measurement agenda, it is now increasingly relevant as a "compass" for policy, with a growing number of countries using well-being metrics to guide decision-making and inform budgetary processes (Nozal and Murtin 2019).

The Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), commonly known as the Stiglitz-Sen-Fitoussi Commission, has most recently revived discussions on the practical importance and usefulness of collecting social statistics for data-driven policy development. Created in 2008 by the President of the French Republic, Nicholas Sarkozy, the Commission was tasked to address mounting global demands for data-driven policies which mobilized the increasing volume of available data; to discuss the limitations of standard metrics, especially the gross domestic product, and to identify measures that would improve public accounting systems (Stiglitz, Sen, and Fitoussi 2009).

The Commission published a report in 2009 which highlighted the need to attach political actions to societal values and objectives ("what we, as a society, care about, and whether we are really striving for what is important") and to encourage ongoing research focused on the development of metrics that could enhance the evaluation of economic performance and social progress (Stiglitz, Sen, and Fitoussi 2009, 18). Sparking several worldwide measurement initiatives and important political statements, the Stiglitz-Sen-Fitoussi report contributed to the development of the 2012 UN resolution on happiness and well-being, as well as to the Rio+20 outcome document, which notably called for the UN Statistical Commission to develop measures of progress complementing GDP (OECD 2018). Its overall concern was to reflect "what counts for common people's well-being" and to capture "the most important features that give life its value" (White, Gaines, and Jha 2012, 764). Several countries responded to this call, developing frameworks that sought reflecting their recommendations.

Interesting examples of such initiatives can be found in Australia, New Zealand and the United States, Commonwealth Nations with comparably high levels of overall human development, and which share a common pattern of mainly British colonization and overall systems of government and state provisions (Cooke et al. 2007). These countries, which are the homes of minority Indigenous populations facing persistent inequalities on a range of health, social, and economic measures, have undertaken a progressive and contentious shift towards greater a recognition of Indigenous rights, notably through increased Indigenous control over the provision of health and social services (Cooke et al. 2007; Mitrou et al. 2014). This section explores the ways in which the three former countries explore socio-economic disparities between their respective indigenous and non-indigenous populations.

Australia's Overcoming Indigenous Disadvantage

In April 2002, the Council of Australian Governments commissioned its Steering Committee, advised by a working group of representatives of all Australian governments, including the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, as well as the Coalition of Aboriginal and Torres Strait Islander Peak Organisations, to produce a regular report of key indicators of Indigenous disadvantage (Productivity Commission 2020). The Australian *Overcoming Indigenous Disadvantage* framework was developed by the Council of Australian Government in response to the official decade of reconciliation with Indigenous Australians to achieve what the government called "practical reconciliation", or the pursuit of statistical equality between the standard of living of Indigenous and other Australians in the areas of health, housing, education and employment (Taylor 2008). This framework draws heavily on the social indicators gathered in census and survey sources. Results are published on a biannual basis as the *Productivity Commission Report Overcoming Indigenous Disadvantage* and in consultation with governments and Aboriginal and Torres Strait Islander Australians. An additional annual Report on Government Services produced by the Steering Committee for the *Review of Government Service Provision*, which includes a

separate compendium of Indigenous statistics relevant to the framework drawn from the administrative databases of Australian, State and Territory governments (Taylor 2008).

The *Overcoming Indigenous Disadvantage* report measures the well-being of Australia's Indigenous peoples across several intersecting dimensions and examines whether policies and programs are achieving positive outcomes for Indigenous Australians. It provides a framework encompassing three parts: Council of Australian Governments targets, Headline Indicators (Figure 7) and Strategic Areas. (Figure 8) The targets and headline indicators are essential outcomes required for positive changes to occur. Given their nature, progress is likely to take time, even if effective policies are implemented. Their actualisation further depends on the government's capacity to advance the objectives associated to its strategic development areas.

As of 2016, the report presented seven *Council of Australian Governments Targets*, measured by closely interrelated, high-level social and economic indicators:

1.1 Life expectancy at birth
1.2 Young child mortality for Aboriginal and Torres Strait Islander children aged 0-4 years (per 100 000 population and per 1000 live births)
1.3 Early childhood education (the method for deriving rates in 2016 does not account for different starting ages for preschool and primary school which affects accuracy of the results and will be changed in the next publication)
1.4 Reading, writing and numeracy (results for this indicator have fluctuated over time with and trends are therefore considered unclear)
1.5 Year 1 to 10 attendance
1.6 Year 12 attainment, measured as the proportion of Aboriginal and Torres Strait Islander 20–24 years old completing year 12 or equivalent or above
1.7 Employment (Data for this indicator are difficult to interpret due to a number of changes including the Community Development Employment Projects program)

These targets were, in turn, associated to six *Headline Indicators*:

2.1 Post-secondary education, measured as the proportion of Aboriginal and Torres Strait Islander 20-64 years old with a Certificate level III or above or studying
2.2 Disability and chronic disease, measured as the overall rate of disability among Aboriginal and Torres Strait Islander Australians; and hospitalisation rates for all chronic diseases (except cancer);
2.3 Household and individual income, measured by the median real equalised gross weekly household income (after adjusting for income)
2.4 Substantiated child abuse and neglect (data for this indicator are difficult to interpret, as increases in substantiations and orders might reflect a mix of changes in laws and policies relating to mandatory reporting, increased propensity to report, increased services and/or an increase in prevalence)
2.5 Family and community violence, measured by the rates of Aboriginal and Torres Strait Islander adults who reported being a victim of physical or threatened violence
2.6 Imprisonment and juvenile detention, measured by the imprisonment rate for Aboriginal and Torres Strait Islander adults

The report encompassed seven strategic areas encompassing a total of 52 specific indicators for measuring and monitoring progress towards the framework's targets:

1. Governance, leadership and culture, which recognizes that effective governance and leadership, as well as culture, play essential parts in the social and economic development of Aboriginal and Torres Strait Islander Australians;

2. Early child development, indicators in this strategic area focus on the early drivers of long-term well-being which contribute to overcoming disadvantage;
3. Education and training, considered a life-long activity that can help strengthen communities and regions both economically and socially, while positively contributing to health outcomes;
4. Healthy lives, a strategic area which directly affects the quality of people's lives, include physical and mental wellness, as well as health risk behaviours;
5. Economic participation
6. Home environment
7. Safe and supportive communities

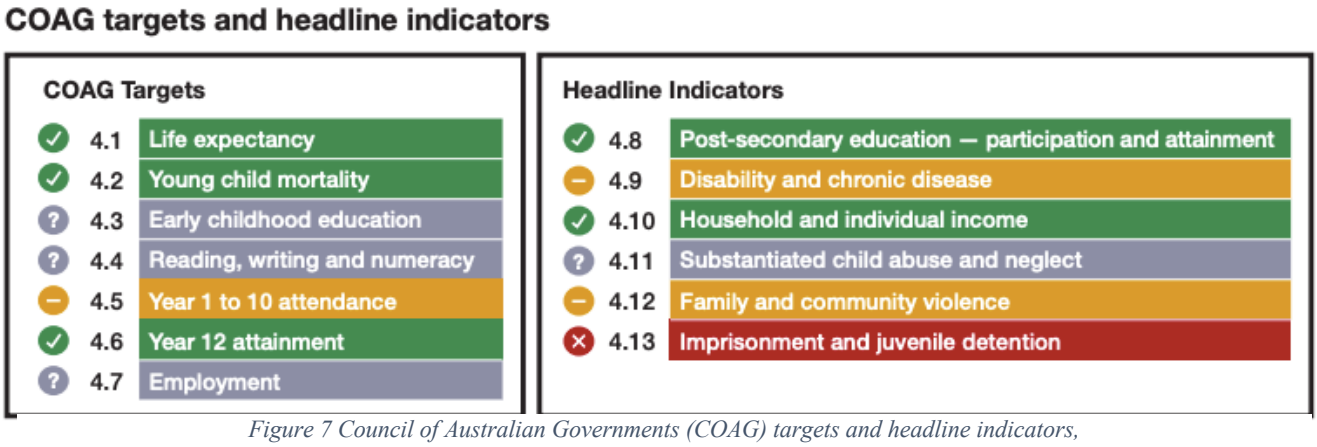


Figure 7 Council of Australian Governments (COAG) targets and headline indicators, https://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage/2016/report-documents/oid-2016-overcoming-indigenous-disadvantage-key-indicators-2016-overview.pdf

In 2008, the Council of Australian Governments (COAG) committed to addressing the disadvantage faced by Indigenous Australians through a "Closing the Gap" framework which included the following goals: (1) closing the life expectancy gap between Indigenous and non-Indigenous Australians within a generation; (2) halving the gap in the mortality rate for Indigenous children under five within a decade; (3) ensuring all Indigenous four years old in remote communities have access to quality early childhood programs within five years; (4) halving the gap in reading, writing and numeracy achievements for children within a decade; (5) halving the gap for Indigenous students in Year 12 attainment rates or equivalent by 2020; and (6) halving the gap in employment outcomes within a decade (Manning, Ambrey, and Fleming 2016). Similarly, the Aboriginal and Torres Strait Islander Peoples Recognition Act 2013 provided for an administrative review of the readiness of the Australian public to support a referendum to amend the Constitution for the recognition of Aboriginal and Torres Strait Islander peoples, thus "create provisions for the elimination of race discrimination, the 'advancement' of Aborigines and Torres Strait Islanders and the protection of their language and culture" (Manning, Ambrey, and Fleming 2016, 2504). In line with these objectives, the Australian Commonwealth Government established in 2014 a new Indigenous Advancement Strategy, replacing more than 150 individual programmes and activities with five flexible, overarching programmes: (1) Jobs, Land and Economy; (2) Children and Schooling; (3) Safety and Wellbeing; (4) Culture and Capability; and (5) Remote Australia Strategies (*Ibid*.).

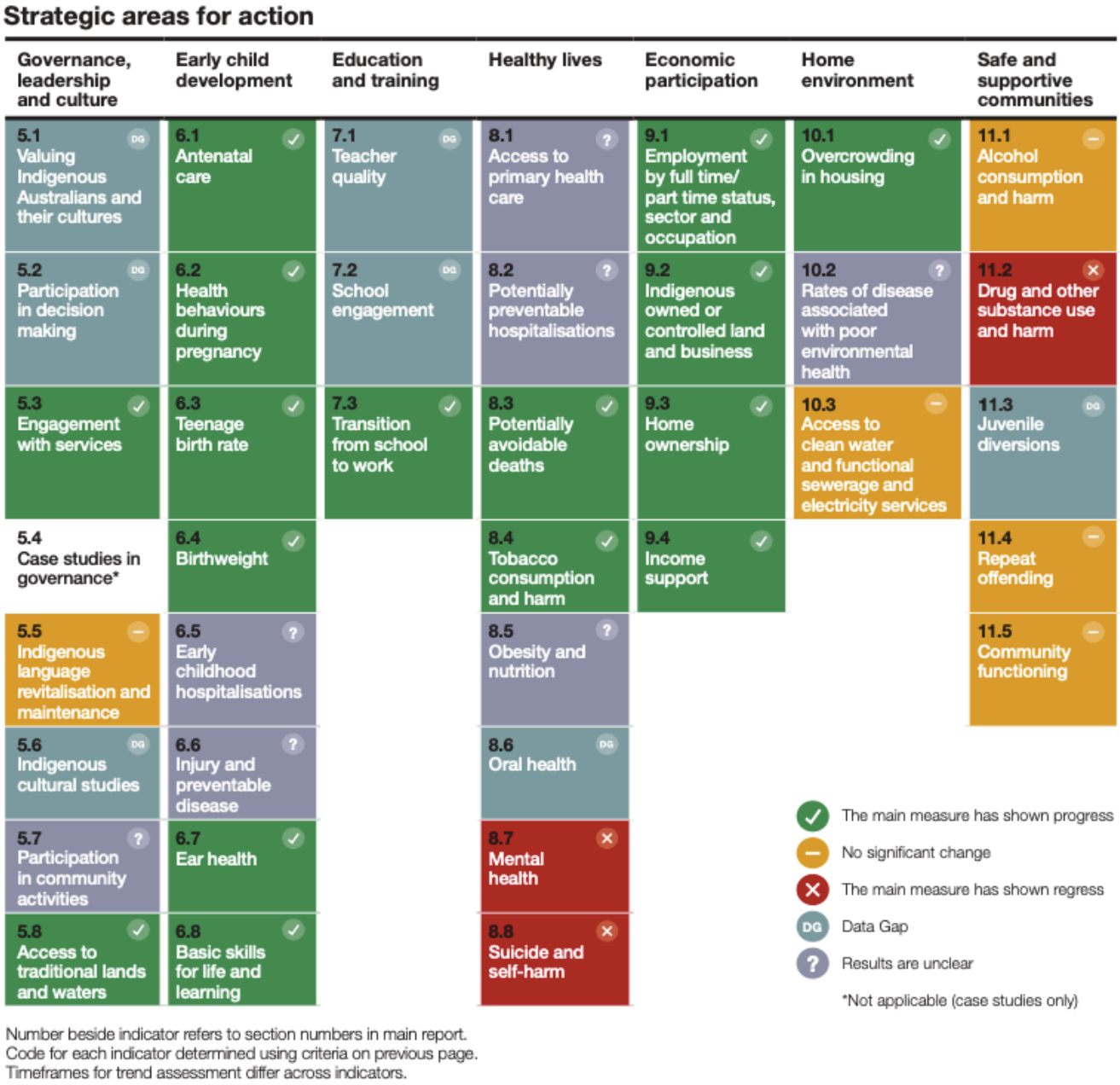


Figure 8 Strategic areas for action, https://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage/2016/report-documents/oid-2016-overcoming-indigenous-disadvantage-key-indicators-2016-overview.pdf

In December 2016, the COAG refreshed the Closing the Gap agenda ahead of the tenth anniversary of the agreement, including four of the seven targets predicted to expire in 2018. A Special Gathering of prominent Aboriginal and Torres Strait Islander Australians presented a statement setting out priorities to this end, calling for the next phase of Closing the Gap to be guided by the principles of empowerment and self-determination, and to deliver a community-led, strengths-based strategy that would enable Aboriginal and Torres Strait Islander peoples to thrive.

New Zealand's Living Standards Framework

The Living Standards Framework (LSF) has been developed by the New Zealand Treasury to consider the collective impact of policies on intergenerational well-being. The LSF is considered as both a process and a tool which can help illuminate some of the complex, long-standing issues that affect the well-being of New Zealanders. It reflects

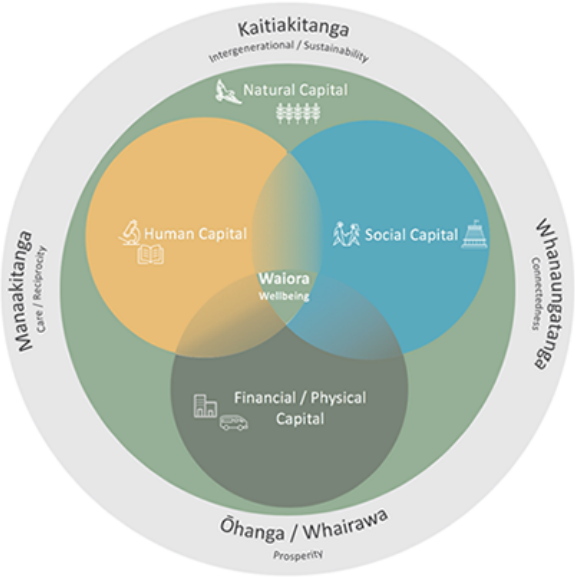


Figure 9 The four capitals, https://treasury.govt.nz/publications/dp/dp-18-11-html#section-4

the Treasury's perspective on "what matters for New Zealanders' well-being, now and into the future" and offers a flexible framework that considers how policies impact different well-being dimensions, as well as their long-term and distributional issues and implications (Figures 9 and 10) (Burton 2018). Their approach starts with a definition of current well-being, based on the OECD's "How's Life" analysis. It uses four capitals drawn from the OECD's framework, as it is considered a robust evidence base for understanding intergenerational well-being: natural capital, human capital, social capital, as well as financial and physical capital (Burton 2018). The LSF intends enabling government agencies to increase the cohesiveness of public policies on well-being, spending and other government interventions, while bearing in mind the impacts of current decisions on intergenerational well-being.

In their report for the New Zealand Treasury, O'Connell et al. (2018) associate the LSF's foundations for well-being to the notions of kaitiakitanga (stewardship of all our resources), manaakitanga (care for others), ōhanga (prosperity) and whanaungatanga (the connections between us), which informed the development of the four capital stocks at the framework's core. Well-being accordingly depends on the sustainable growth and distribution of these four capitals, which together represent the comprehensive wealth of New Zealand.

Born from the Treasury's mandate to promote higher living standards for all New Zealanders, the LSF was designed as a tool for substantive, measurable change and introduced as part of the Tax Working Group, mandated to review and create a more "future-focused tax system", especially as it relates to the potential taxation of Māori assets (O'Connell et al. 2018). The group was requested to examine further improvements to the structure, fairness, and balance of the tax system with a view to exploring the major challenges, risks, and opportunities facing the tax system over the next decade and beyond, in light of the values and expected behaviour around the distribution of goods for community well-being in relation to Te Ao Māori perspectives and in such a way as to best reflect the Treaty partnership (O'Connell et al. 2018). It more specifically invites consideration and balancing of three elements: Te Tiriti o Waitangi, te ao Māori and whānau-centred thinking (Te Puni Kōkiri 2019).

Te Tiriti o Waitangi refers to the historical context of Aotearoa New Zealand as well as the nature of the relationship and expectations of well-being that it creates. Te ao Māori (the Māori world) refer to Māori values, which result from their application through knowledge, beliefs and practices. A whānau-centred philosophy and approach is the foundational unit of Māori society, and reflects the structures and hierarchies observed within te ao Māori, and works to recognise the collective aspirations of a family-based group, inclusive of the individuals within it (Te Puni Kōkiri 2019).

Figure 10 The New Zealand Treasury's living standards framework (https://treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/our-living-standards-framework).

The LSF builds on the Maōri Statistics Framework, administered since 1995 by Statistics New Zealand. The Maōri well-being framework includes the following dimensions: the sustainability of Te Ao Maōri (the Maōri world), social capability, human resource potential, economic self-sufficiency, environmental sustainability, and empowerment and enablement. 125 measures, or indicators, are associated to these dimensions, with 68% of these which are unique to the Maōri framework.

The framework's development process and objectives, including the working papers commissioned to this end, aim to gather statistical information that is relevant to Maōri, to enhance the knowledge and awareness as well as the

use of official statistics in Maōri communities, and to enhance statistical capacity within Maōri community-based organisations, with the official statistical agency assuming a supportive facilitating role.

The United States' Human Well-Being Index

The US Environmental Protection Agency (EPA) developed a human well-being index (HWBI) to assess the overall well-being of its population at national, regional and local scales in relation to environmental drivers and services (Figure 11). The index utilizes eight domains (Connection to Nature, Cultural Fulfillment, Education, Health, Leisure Time, Living Standards, Safety and Security, Social Cohesion) 25 indicators (including Life Expectancy and Mortality, Physical and Mental Health Conditions, Income, Democratic Engagement, Family Bonding) and 80 metrics (including Diabetes Prevalence, Food Security, Incidence of Low Income, Median Household Income, Job Quality and Satisfaction, Violent Crime, Social Vulnerability Index, Trust in Government, Voter Turnout, Frequency of Meals at Home, Volunteering) (Summers et al. 2017). As explained by Summers et al. (2017, 97), "the conceptualization depicts the relationships among natural and built capital, goods and services, the domains of well-being and their sub-elements, and the value system of the entity being examined (i.e., relative importance values associated with specific communities)".

The HWBI was designed to empower and inform decision makers to proportionally weigh (or to assess in an equitable manner), the human health, socio-economic, environmental, and ecological factors that foster sustainability in a community (Summers et al. 2017).

In an attempt to determine the possible transferability of the HWBI to a specific population group, inclusive of American Indian Alaska Native and large tribal populations, Summers et al. (2017) highlighted several limitations. The HWBI's applicability was examined in relation to the relevancy of the domains used to describe well-being; the appropriateness of the metrics used to quantify and qualify the indicators; and the robustness of the metric data available (Summers et al. 2017). These criteria informed the work performed to compensate for data limitations and ultimately provide an analysis of the American Indian Alaska Native and large tribal populations in the United States. However, given that the transferability of the approach was demonstrated on the basis of the reliability of the data rather than the target populations themselves, additional research would be required to establish data acceptance criteria that are developed by, and therefore specific to the target population (L. M. Smith et al. 2015; Summers et al. 2017).

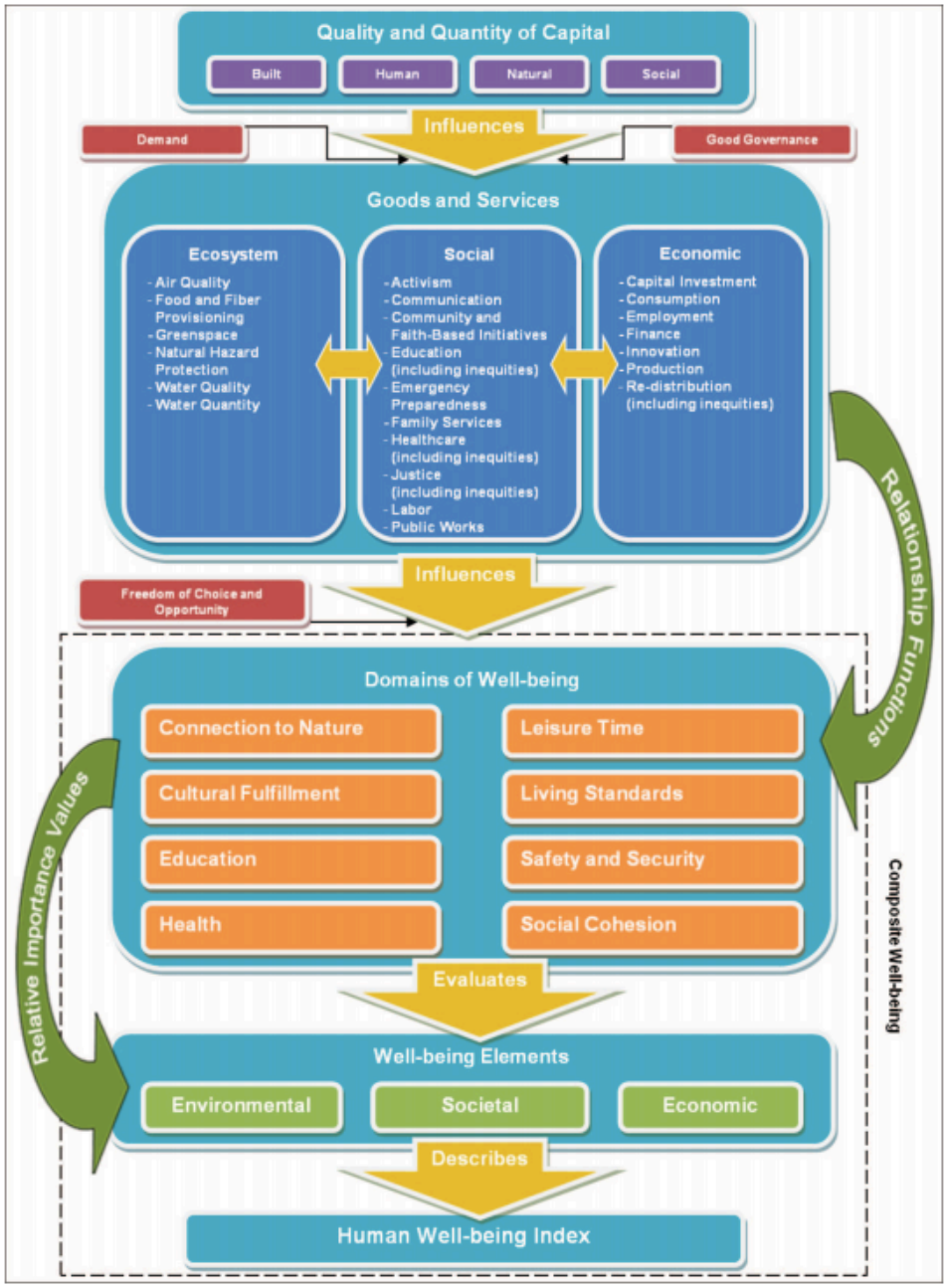


Figure 11 The "conceptual framework for evaluating the influence of service flows on well-being endpoints for the construction of a Human Well-Being Index" developed by the US Environmental Protection Agency (Summers et al. 2017, 98).

International Initiatives

International well-being frameworks and measurements have been developed throughout the years to assess the structural causes of socio-economic disparities. More recently, these have sought challenging narrow definitions of "development" associated with standardized measures of economic growth, and assumption that productivity and technological progress necessarily yield better social outcomes for all (Gilbert and Lennox 2019). This approach to

development, which is based on a very state-centric vision and favours natural resources exploitation. Given that large scale developmental projects have often become synonymous with forced displacement, land dispossession and environmental degradation, for many local and indigenous communities living in the vicinity of the concerned natural resources, policies developed in line with this approach have not produced favourable well-being outcomes (Gilbert and Lennox 2019).

The elaboration of international standards that enable indigenous participation in development, to promote a more inclusive and sustainable form of growth, was initially supported by the International Labour Organization Conventions' n° 107 (1957) and n° 169 (1989). In 1992, the UN Conference on Environment and Development recognized the role of indigenous people as owners, managers or trustees of critical environmental spaces and their significance to their ways of life – marking the first time a world conference dedicated a substantive section on indigenous peoples (Burger 2019).

This subsequently paved the way for the first United Nations' International Decade of the World's Indigenous People (1995-2004), born out of an ambition "to strengthen international cooperation for the solution of problems faced by Indigenous peoples in the areas of human rights, culture, the environment, development, education and health" (Corntassel 2012, 137). This decade was marked by a growing international recognition of the indigenous right to self-determination (Corntassel 2007). While the Indigenous Decade saw the emergence of transnational Indigenous rights networks, as pointed out by Corntassel (2007, 107), its outcomes did not match the far-reaching goals it set out. However, it did provide the momentum for the creation of the UN Permanent Forum on Indigenous Issues (UNPFII) in 2000 and significantly increased indigenous engagement within the UN system. Indigenous peoples became office holders in the UN's institutions, acquiring experience and expertise as members of high-level advisory bodies, and secured their place among non-state organizations with voting rights in UN bodies (Burger 2019; Peterson 2010). With the UNPFII came an increasing push to establish statistical profiles of the world's Indigenous peoples and to incorporate greater recognition of Indigenous concerns, interests, and interpretations of development and well-being (Taylor 2008).

The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted in 2007 has, more recently, led to the important changes in the landscape of development policy and practice which echoed the growing international recognition of the indigenous right to self-determination. Under Article 3, as explained by Cambou (2019), the declaration unambiguously stipulates that indigenous peoples, treated as a group of peoples rather than individual citizens, have the collective right to exercise the right to self-determination. The indigenous right to self-determination is one to control their own destiny and to maintain their distinct identity and livelihoods, as well as to manage their traditional land and natural resources, in respect to the territorial integrity or political unity of sovereign and independent states, as stated in Article 46 (*Ibid*.).

As explained by Gilbert and Lennox (2019, 106), the declaration asserts that "control by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions, and to promote their development in accordance with their aspirations and needs". The declaration places significant emphasis on self-determination, identity and culture, the maintenance and development of distinctive institutions, their continuation and revival of their customs, practices, judicial systems and traditional knowledge (*Ibid*.). It also highlights the intimate relationship of indigenous peoples with their lands and resources, such as in Article 32 which recognises the right of Indigenous peoples "to determine and develop priorities and strategies for the development or use of their lands or territories and other resources" (Burger 2019). As such, the UNDRIP has reinforced the ability of Indigenous peoples to challenge national and international development policies that exclude indigenous perspectives, as well as the very model of development that is being proposed and implemented, in defense of a model that takes into account their distinct cultures, their relationship with nature and focuses on community well-being rather than economic growth (Burger 2019).

Participation is, thereafter, considered an essential component of indigenous people's self-determination, and for the outcomes of decision-making processes to uphold the dignity, as well as to advance the well-being and rights of indigenous peoples worldwide.

Four examples of international frameworks relevant to indigenous peoples are presented below, namely: United Nations Permanent Forum on Indigenous Issues Frameworks, the Sustainable Development Goals (SDGs), the Organisation for Economic Co-operation and Development's (OECD)

The United Nations Permanent Forum on Indigenous Issues Frameworks

The first and arguably most important effort was made by the United Nations Permanent Forum on Indigenous Issues (UNPFII) in 2000. Building on the work undertaken as part of the Millennium Development Goals (MDGs) and the Human Development Index (HDI), the UNPFII was mandated at the time of its inauguration to create worldwide indigenous statistical profiles and establish a holistic method for measuring Indigenous well-being (Taylor 2008). Data collection and disaggregation, which was considered an important methodological issue, prompted a review of existing indicators that could directly or indirectly relate to indigenous well-being in 2006. The Programme of Action announced for the UN's Second International Decade on the World's Indigenous Peoples set out the framework for the objectives that the UN and related international agencies, governments and Indigenous peoples were to pursue during the decade. These included (Taylor 2008, 119):

- Promoting non-discrimination and inclusion of Indigenous people in laws, policies and programs at all levels;
- Promoting the full and effective participation of Indigenous people in decisions that directly or indirectly affect them and to do so in accordance with the principle of free, prior and informed consent;
- Adopting targets for improving the situation of Indigenous peoples, and
- Redefining development processes to ensure that they recognise the cultural diversity of Indigenous peoples.

The UNPFII convened a workshop Indigenous delegates from community-based organisations, government and academia to identify relevant indicators for measuring Indigenous well-being in developed country contexts. Two general themes were identified: "Identity, Land, and Ways of Living" and "Indigenous Rights to and Perspectives on Development".

The UNPFII *Identity, Land, and Ways of Living* framework suggests the following measures[1]:

- The number of language speakers, children learning language, language transmission programs, language in state documents and media;
- Size of the Indigenous estate, participation in subsistence activities, economic value of subsistence;
- Existence of programs to reduce violence against women and families, measures of the quality of health care access;
- Measures of biodiversity including the number of endangered species linked to subsistence and cultural practice, climate change data and impacts, employment in ecosystem management, regulations protecting ecosystems, no. of environmental protection violations, levels of toxic contamination, and the existence and nature of legal frameworks for veto over land use;
- Proportion of population in urban areas and rate of urban migration.

[1] Source United Nations (UN) (2006). Report of the meeting on Indigenous peoples and indicators of well-being. New York: United Nations Economic and Social Council, E/C.19/2006/CRP.3

The UNFPII *Indigenous Rights to and Perspectives on Development* framework includes[2]:

- Recognition of Indigenous governance and laws, support for Indigenous capacity building, leadership, policy and program development, number of Indigenous people engaged in government programs;
- Recognition of Indigenous rights in State laws, no. and effectiveness of consultations implementing free, prior and informed consent, percent of Indigenous peoples in public service, state elections, and parliaments, accountability of governments in meeting legal obligations and responsibilities, number of Indigenous rights complaints filed;
- Number and content of nation to nation agreements between governments and Indigenous peoples;
- Government expenditures relative to Indigenous need, existence of targeted budgetary, legal and policy measure to address discrimination.

The Sustainable Development Goals (SDGs)

In 2015, the United Nations developed the Sustainable Development Goals (SDGs), an integrated and universally applicable framework of goals and targets to implement the 2030 Agenda for Sustainable Development (Figure 12). The SDGs build on the United Nations' 15-year Millennium Development Goals (MDGs), pursuing and extending its mandate to eradicate poverty in all its forms and address the global challenge of sustainable development. Consisting of 232 indicators distributed among 17 goals, the SGDs provide aspirational objectives that each government expected to tailor and integrate into their planning processes, policies and strategies.

As contended by the National Collaborating Centre for Aboriginal Health (NCCAH), the SDG agenda comes at a potential turning point for Indigenous peoples in Canada, who have long experienced socio-economic marginalization and poorer health outcomes than non-Indigenous Canadians (NCCAH 2019). Referenced six times in the SDG resolution, Indigenous peoples would benefit from the framework's implementation especially with regards to the SDGs related to: 1) socio-economic marginalization; 2) promotion of health and well-being; 3) equality and social inclusiveness; and 4) the environment. However, as pointed out by the NCCAH (2019, 3), "the

Figure 12 The UN Sustainable Development Goals (SDGs), www.un.org/sustainabledevelopment/sustainable-development-goals.

[2] Source United Nations (UN) (2006). Report of the meeting on Indigenous peoples and indicators of well-being. New York: United Nations Economic and Social Council, E/C.19/2006/CRP.3

Agenda's silence on specific Indigenous issues like self-determination and governance, Indigenous land rights and ownership are particularly problematic as these issues are the foundations for inequality and poverty among Indigenous peoples. It is hoped that on a national level, Indigenous-specific targets can be drawn to ensure that Indigenous peoples are not left behind in the sustainability agenda".

The United Nations Permanent Forum on Indigenous Issues (UNPFII), a high-level advisory body to the Economic and Social Council, provided substantive input to the 2030 Agenda in order to ensure that indigenous peoples are not left behind in its implementation. They identified indicators relevant to indigenous peoples in the global list of indicators:

- No poverty: Proportion of population living below the national poverty line, by sex and age
- Land rights: Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure
- Zero hunger: Average income of small-scale food producers, by sex and indigenous status
- Education: Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict affected as data become available) for all indicators on this list that can be disaggregated
- Gender equality: (a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure
- Non-discrimination: Percentage of the population reporting having personally felt discriminated against or harassed within the last 12 months on the basis of a ground of discrimination prohibited under international human rights law.

The Organisation for Economic Co-operation and Development (OECD): Measuring Indigenous Economic Development

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental economic organisation created to foster prosperity, equality, opportunity and well-being by establishing international norms and evidence-based policy solutions. In 2017, the OECD Committee on Statistics and Statistical Policy developed a multi-dimensional framework for measuring well-being. This framework is based on a capabilities approach, which

Figure 13 The OECD Better Life Index, http://www.oecdbetterlifeindex.org/#/1111111111

conceptualizes development as a process that expands people's choices, their ability to seize opportunities and to use resources to pursue the rich and meaningful lives that they have reason to value.
Incorporating this approach to the framework meant including the material and non-material factors that people value through both objective and subjective measures. It also required paying close attention to the distribution of resources within societies, across different demographic and socio-economic groups.

The OECD has played a prominent role in developing the notion of "multidimensional well-being" as a research, measurement and policy tool, through instruments such as the *OECD Well-being Framework*, the *OECD Framework for Policy Action on Inclusive Growth*, the *Better Life Initiative* and the *New Approaches to Economic Challenges Initiative* (Nozal and Murtin 2019). The potential for improving policy decisions and outcomes, based on a multi-dimensional notion of well-being, is significant given its ability to direct policy-makers towards areas of good performance, enabling them detect challenges and areas of strain at an early stage and set priorities more effectively.

The OECD Better Life Initiative and the work programme on Measuring Well-Being and Progress were developed to answer the two following questions by understanding what drives well-being of people and nations and what needs to be done to achieve greater progress for all: Are our lives getting better? How can policies improve our lives? Are we measuring the right things? (OECD 2019).

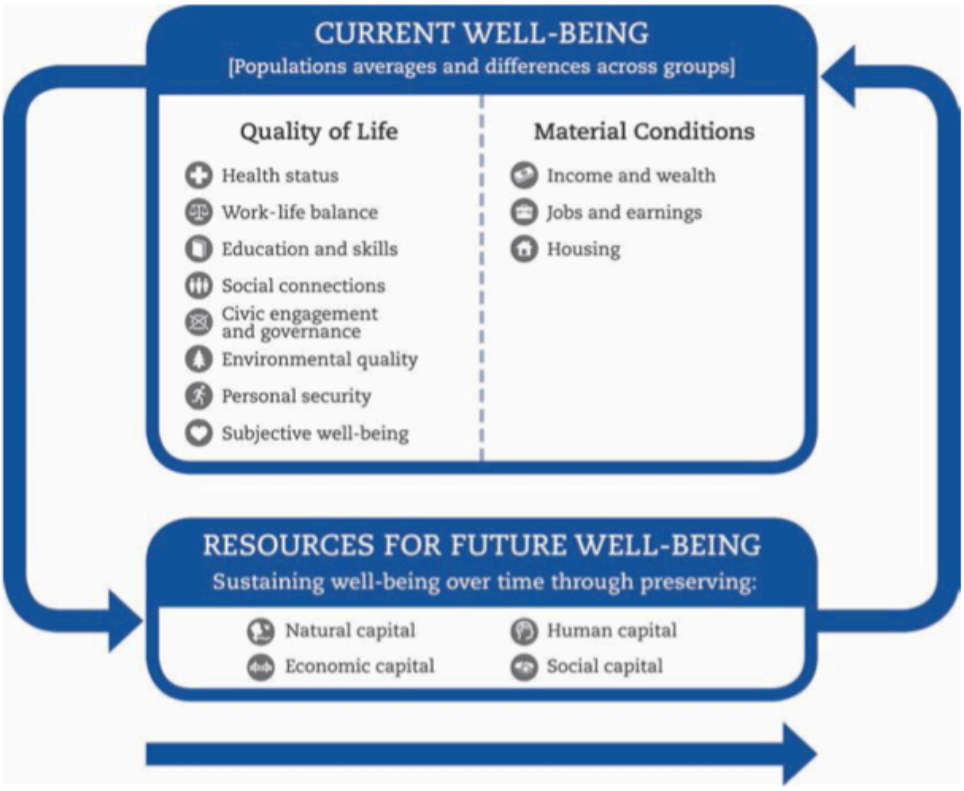


Figure 14 The OECD's well-being framework (2019)

The OECD well-being framework comprises eleven dimensions and 50 Indicators, which are recommended to be disaggregated by age, sex and education levels whenever possible: 1) income and wealth; 2) jobs and earnings; 3) housing conditions; 4) health status; 5) work-life balance; 6) education and skills; 7) social connections; 8) civic engagement and governance; 9) environmental quality; 10) personal security; and 11) subjective well-being (OECD, 2018). Different forms of capital are reflected in this framework, which considers development in terms of well-

being and beyond material considerations, as well as the resources that are necessary to expand and sustain future levels of societal well-being (McDonald, Moreno-Monroy, and Springare 2019). The framework further underlines the importance of measuring not only the levels of capital, but also how these stocks are managed, maintained or threatened by communities and societies to assess and monitor the effects of different types resources on the sustainability of development (McDonald, Moreno-Monroy, and Springare 2019).

In 2019, the OECD proposed an analytical framework for understanding and assessing Indigenous economic development in a place-based context. This reflected an acknowledgment that Indigenous, as well as regional economies have often been disconnected, since the conventional "predictors of success" such as human capital, access to capital, location or resource endowments, while necessary, may not be the key ones for Indigenous economies (McDonald, Moreno-Monroy, and Springare 2019). These conventional development assessment frameworks and targets, thus, typically fail to consider or address the challenges and opportunities that Indigenous peoples face, such as the centrality of governance and self-determination, as well as the continuing effects of colonial policies on Indigenous well-being. As argued by McDonald, Moreno-Monroy, and Springare (2019, 14), "the key to improving the well-being of Indigenous communities is to break dependency relationships by empowering them to develop community assets to create opportunities for new businesses and employment. This needs to be grounded in an understanding of community assets that incorporates Indigenous values, interests and perspectives". The authors propose five key elements for a framework intended to better account for the particularities of Indigenous economic development (*Ibid*.):

1. Place-based view of an Indigenous community, clan or nation (geography based on economic function and shared political and cultural identity), which differentiates in terms of level of development, and a territorial classification between urban, rural close to city, and rural remote areas.
2. A place-based framework for development that is inclusive of a broad view of progress (encompassing different forms of capital) and is based upon the self-determined development choices of Indigenous communities.
3. Identification of territorial assets, bottlenecks and growth potential based on evidence, engagement with community stakeholders, and effective forms of governance that enable Indigenous communities to invest in these assets, and leverage the links between them to mobilise development potential.
4. Strengthening linkages and realising opportunities for integration with regional, national and international markets.
5. Assessment of progress that is based on how levels of well-being are improving over time, and how place-based Indigenous communities compare with other communities of similar size and location (to complement national level benchmarking).

More recently, the OECD has been promoting the creation of "Economy of Well-being" which:

- expands the opportunities available to people for upward social mobility and for improving their lives along the dimensions that matter most to them;
- ensures that these opportunities translate into well-being outcomes for all segments of the population, including those at the bottom of the distribution;
- reduces inequalities; and
- fosters environmental and social sustainability (Nozal and Murtin 2019).

This has significant implications for policy. As explained by Nozal and Murtin (2019, 11), this would first entail investing to support positive well-being outcomes and long-term economic growth, and evaluating the effects of policies to minimise their detrimental impact on well-being and long-term growth. It would secondly require the prioritising the elimination of inequalities in well-being outcomes through a coherent and integrated approach, mobilising the whole of government. An economy of well-being would thirdly required a commitment from the

private sector who should be engaged through effective public/private partnerships. Mobilising private finance for social impact investment can constitute an innovative way of meeting financing challenges. These recommendations could inform an action-oriented Well-being and Sustainability Strategy (Nozal and Murtin 2019).

The World Health Organization's Approach to Health

The World Health Organization (WHO) considers one key marker of health inequalities globally is the persistence of health and social inequities between Indigenous and non-Indigenous populations, especially within the wealthiest of nations (Jackson Pulver et al. 2010). The WHO recognizes colonization as "a fundamental underlying health determinant" which must be remedied if the health disadvantages of Indigenous Peoples are to be overcome through political measures that enable their self-determination and help restore Indigenous control over their lives and destinies (Mowbray 2007). Indigenous peoples have also rarely been actively involved in deciding how or what should be studied about them, and for what purpose. often simplistic interpretations of data

The WHO adopted a social determinants of health approach to identify the factors underlying these inequalities and to identify the pathways to their resolution (Figure 15).

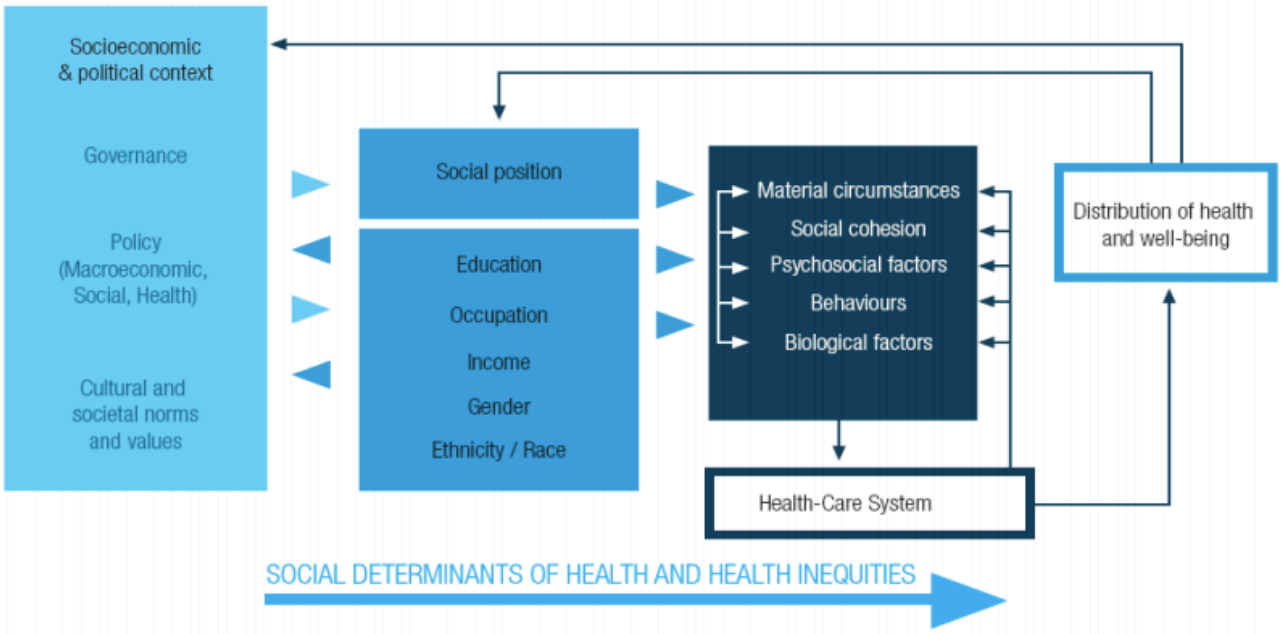


Figure 15 Commission on Social Determinants of Health (CSDH) framework linking social determinants of health and distribution of health (Jackson Pulver et al. 2010, 5)

Key questions are associated to each of the four "blocks" provided in the WHO framework, which can be summarized as follows (Jackson Pulver et al. 2010, 6):

1) Socio-economic Political Context: What are the main characteristics of a country that influence the form and magnitude of social stratification as well as the implications of stratification for the circumstances in which people live and work?
2) Social Stratification: What are the key dimensions of social stratification? How extensive is the social stratification?
3) Differential exposures, vulnerabilities, and consequences: What is the extent of
    a. differential vulnerabilities,
    b. differential exposures (e.g. ineffective services), and

   c. differential consequences (e.g. financial burden)?
4) Differential outcomes in health: What are the main resulting health inequities that emerge in a given society and what is the extent of these health inequities?

The 5-item World Health Organization Well-Being Index (WHO-5)

First published in 1998, the 5-item World Health Organization Well-Being Index (WHO-5) is among the most widely used questionnaires assessing subjective psychological well-being (Topp et al. 2015). The 5-item World Health Organization Well-Being Index (WHO-5) is a short and generic global rating scale measuring subjective well-being, which only contains positively phrased items: (1) 'I have felt cheerful and in good spirits', (2) 'I have felt calm and relaxed', (3) 'I have felt active and vigorous', (4) 'I woke up feeling fresh and rested' and (5) 'My daily life has been filled with things that interest me' (Topp et al. 2015, 168). Translated into more than 30 languages, the scale's extensive worldwide dissemination and use is associated by the authors to its straightforward language and "the fact that the questions do not seem to transgress any cultural norms in the individual countries"[3] :

> "The respondent is asked to rate how well each of these statements applies to him or her when considering the last 14 days. Each of the 5 items is scored from 5 (all of the time) to 0 (none of the time). The raw score therefore theoretically ranges from 0 (absence of well-being) to 25 (maximal well-being). Because scales measuring health-related quality of life are conventionally translated to a percentage scale from 0 (absent) to 100 (maximal), it is recommended to multiply the raw score by 4" Topp et al. (2015, 168).

Topp et al. (2015, 174) demonstrated the accuracy and efficiency of the WHO-5 as a screening tool "in both clinical practice (for instance to screen for depression) as well as in research studies in order to assess well-being over time or to compare well-being between groups". Their systematic literature review effectively revealed the extensive and successful applications of the WHO-5 as generic scale to measure well-being across a wide range of study fields. Shown highly useful for both clinical practice (for instance to screen for depression) as well as in research that study well-being over time or to compare well-being between groups, their findings have since been corroborated by numerous studies[4]. For example, Krieger et al. (2014) similarly argued that the WHO-5 is an economically valid measure for assessing depression severity, and Lucas-Carrasco (2012) showed its usefulness in for emotional well-being assessments and to detect depressive symptoms among older persons in primary care and community centers.

The WHO-5 has been applied to indigenous contexts. For example, in their study on the relationships between Māori cultural identity, ethnic discrimination and mental health outcomes for Māori youth in New Zealand, Williams, Clark, and Lewycka (2018) develop a 14-item Māori Cultural Identity Scale (MCIS) to explore how well-

[3] Topp et al. (2015, 174) documented the extensive use of the WHO-5 in the following countries: Africa (Algeria, South Africa), Asia (Bangladesh, China, India, Japan, South Korea, Sri Lanka, Taiwan, Thailand), Europe (Northern, Southern, Eastern, Western and Central Europe), the Americas (Canada, the US, Brazil, Mexico), the Middle East (Israel, Iran, Lebanon) and Oceania (Australia, New Zealand).

[4] The authors provide a systematic review of the extensive body of literature on the WHO-5, with particular emphasis on: "(1) the clinimetric validity of the WHO5; (2) the responsiveness/sensitivity of the WHO-5 in controlled clinical trials; (3) the potential of the WHO-5 as a screening tool for depression, and (4) the applicability of the WHO-5 across study fields" (Topp et al. 2015, 168).

being (WHO-5), depressive symptoms (Reynolds Adolescent Depression Scale-SF) and suicide attempts among New Zealand secondary school students.

Several recommendations made at the 2007 *International Symposium on the Social Determinants of Indigenous Health*, meant to inform advocacy on Indigenous health and to prompt WHO Member States to critically reflect and act on documented health inequalities between their Indigenous and non-Indigenous citizens, should be considered moving forward. These include examining how disagreements about what constitutes indigeneity affect the quality of available data; the inadequate attention provided to differences in levels of health and well-being within Indigenous peoples; how the holistic, and eco-social or communal, notions of health more likely to characterize Indigenous perspectives can be better incorporated and reflected in health/well-being frameworks; and that conventional social indicators may not be reliable or valid to assess Indigenous wellness since Indigenous people may live to some extent outside of the monetary economy, and have different understandings of education and health (Mowbray 2007).

Academic Studies and Projects on Indigenous Well-being

Academic studies several identify key dimensions and culturally adapted variables of indigenous well-being. These highlight the distinctive implications of individualism and collectivism; the extent to which roles are determined by rules and institutions, a distinction between the contributions and significance of the wage economy and subsistence activities to well-being (Dockery 2010). Indicators may include participation in land-based activities, cultural events and food sharing (Richmond 2009); the connection between healthy environments and speaking one's language (Parlee and O'Neil 2007); the importance of social support (Kral and Idlout 2012). Across this diversity, however, colonization has consistently features as a key determinant of indigenous health and well-being, associated with the loss of land and cultural resources, including languages, cultural traditions, and community practices (MacDonald and Steenbeek 2015).

In Canada, Indigenous well-being has been described as holistic, multidimensional, and based on community-centred experiences (Denis, Duhaime, and Newhouse 2017, 124; Sasakamoose et al. 2017). The Royal Commission on Aboriginal Peoples presented well-being as a circle in which self-government, economic self-reliance, healing and a partnership of mutual respect are key building blocks (Department of Indian Affairs and Northern Development 1997). Indigenous well-being has been theorised as part of the holistic, multidimensional and community-centred experiences rendered by the Anishinaabek notion of *Mino-Bimaadiziwin* (Denis, Duhaime, and Newhouse 2017).This conception underlies the medicine wheel approach used in the First Nations Holistic Policy and Planning Model, the Integrated Life Course and Social Determinants Model of Aboriginal Health, as well as the Misipawistik Cree notion of "E-Opinitowak", meaning the act of "lifting ourselves up, empowering the community and promoting self-reliance" (Assembly of First Nations 2013; Reading and Wien 2013; Wien et al. 2019a). This echoes research describing Indigenous wellness as the harmonious balance between the spiritual, physical, mental and emotional components of one's life. In the words of Indigenous participants interviewed by Wien et al. (2019), well-being, thus, refers to such things as "taking care of yourself, your family and your community", "showing love by performing acts of kindness", and "getting wisdom through years of listening to others and learning from our mistakes" (Wien et al. 2019a, 10). As further highlighted by the *Unikkaartuit* ("the people's stories") project, the family and kinship, talking and communication, and traditional knowledge and practice (Inuit Qaujimajatuqangit) play central parts in the well-being of Inuit high school and college students in Nunavut (Kral et al. 2011; Kral and Idlout 2012).

Different methods have been used to define the determinants and expressions of indigenous well-being. The distress and well-being of Inuit communities were, for instance, explored through fifty qualitative interviews in two communities of Nunavut and associated with three prominent components: family, communication, and traditional Inuit cultural values and practices (Kral and Idlout 2012). Family was characterised as "most commonly related to

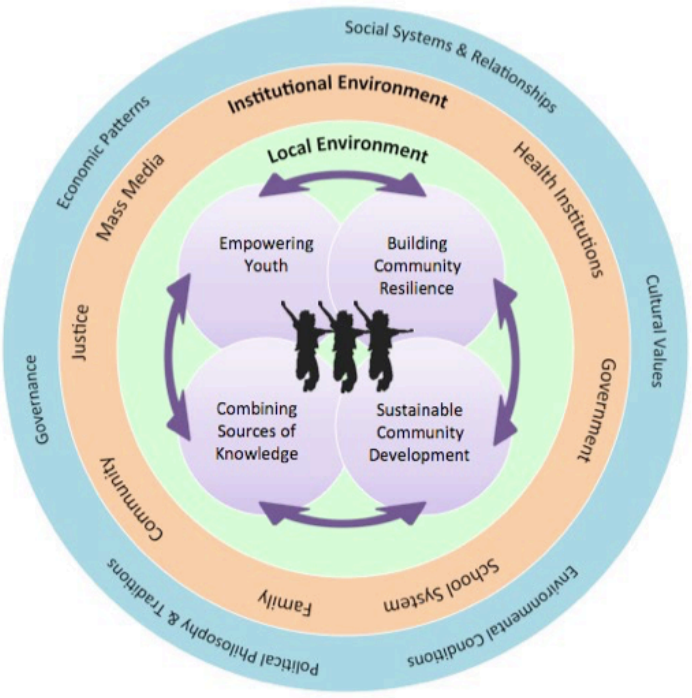
suicide prevention and intervention", while "narratives concerning community change were primarily negative" (Kral and Idlout 2012, 433). Poor dwelling conditions and quality have also been linked to health issues, such as unintentional injuries, respiratory and infectious diseases, mental and psychological challenges, and domestic violence (Kolahdooz et al. 2015). Indigenous well-being has also been theorised through qualitative interviews as part of the holistic, multidimensional and community-centred experiences rendered by the Anishinaabek notion of *Mino-Bimaadiziwin* (Denis, Duhaime, and Newhouse 2017).

Three examples are presented at greater lengths below, namely the International Group for Indigenous Health Measurement (IGIHM), the Indigenous Youth Futures Partnership (IYFP) and the Poverty Action Research Project.

The International Group for Indigenous Health Measurement (IGIHM)

The International Group for Indigenous Health Measurement (IGIHM) aims to promote awareness of the deficiencies of health data for Indigenous populations in four countries: Australia, Canada, New Zealand and the United States. Through international collaborations, the IGIHM seeks to improve methods and policies that will contribute to the improvement of Indigenous health. Since its founding in 2005, the IGIHM has pursued a variety of activities to further the right of Indigenous peoples "to count and be counted" (Chino et al. 2019, 16). Their Terms of Reference define their vision as improving internationally the availability, quality, depth, and utility of health knowledge and data for Indigenous populations, as well as promoting effective dialog across countries, populations, and agencies in order to ensure that Indigenous populations have rights to all their data, can expect accurate data, and can contribute to strengthening data collection, analysis, and interpretation at all levels (Chino et al. 2019, 16).

Building on this vision, they aim to 1) build multinational partnerships; 2) develop and promote/increase improved methods; and 3) inform policy. Their activities have, accordingly, been centered on multinational partnerships as well as the promotion of improved methods for the collection, analysis, interpretation and dissemination of information useful for improving the health of Indigenous populations, enhancing Indigenous health knowledge and data, and the elimination of health disparities. (Chino et al. 2019, 16). The IGIHM notably collaborates with the International Network for Indigenous Health Knowledge and Development (INIHKD), a network of Indigenous health professionals, researchers and health providers from several countries which aim to promote the development of Indigenous and community-led research, health services and workforce development and create opportunities for countries to share approaches, experiences and results for the improvement of health care systems for Indigenous people (Chino et al. 2019, 17). These partnerships have been instrumental in the development of criteria, which are both useful and meaningful for Indigenous lives that ensure quality health data.



The research group further contends that an information sharing process as well as the inclusion of culture, history and Indigenous worldviews are essential to improving the collection, interpretation, use and dissemination of health data. I order to transform current data policies and practices, national statistical agencies and others must be informed of the problems and potential solutions. Group co-chairs were, therefore, mandated to facilitate interactions and activities through monthly calls and a rotation of biennial meetings among the four countries. Topical subgroups and writing teams additionally develop thematic areas of focus, including mortality measurement and publications in mainstream journals such as The Lancet and the Statistical Journal of the IAOS (Coleman et al. 2016; Smylie and Firestone 2015).

The Indigenous Youth Futures Partnership (IYFP)

The Indigenous Youth Futures Partnership (IYFP) consists of a project developed by First Nations communities' which are part of the Sioux Lookout First Nations Health Authority (SLFNHA) area of the Nishnawbe Aski Nation in northwestern Ontario[5] with academic partners. It builds on SLFNHA's community-based strategy "Raising our Children", expanding the range of pathways communities can develop to support the healthy development of their young people with tools and approaches rooted in local Indigenous knowledge and Western science (Gordon and Matheson 2018). Founded on the need for an interconnected approach to suicide prevention expressed by First Nation youth, the IYFP reflects the importance of "being balanced physically, emotionally, mentally, and spiritually," "having and being a good role model and being a leader", "community gatherings" and especially "family" (Gordon and Matheson 2018, 23). These shaped the IYFP suicide prevention framework, which draws on a systems-based approach to youth resilience and wellness. The ability of communities to openly acknowledge and explicitly address the issue underlying suicide, reflect their resources and strengths as well as their unique visions and aspirations for the future. As explained by Gordon and Matheson (2018, 23), these provide for the development of various strategies that encourage a culturally relevant, holistic, and community-engaged framework, including the 2015 "First Nations Mental Wellness Continuum Framework" that highlights the need for youth to feel a sense of belonging, purpose, hope, and meaning in life.

Figure 16 The core elements of the Indigenous Youth Futures Partnership for fostering resilience and binaadiziwin, and the contexts in which they operate (Gordon and Matheson 2018, 24)

Their approach focuses on activities that target four well-being components (Gordon and Matheson 2018, 24);

- Empowering youth by fostering their hopes and goals for the future, strengthening coping skills, enabling a view of themselves as having something to contribute, and engaging them as decisionmakers;
- Providing a positive socio-cultural context for youth development, which depends on fostering community resilience (i.e., the capacity to prevail in the face of collective adversity);
- Encouraging the aspirations of youth by enabling them to contribute to, and benefit from, the development of their communities;
- Ensuring youth have a voice in shaping cultural identity by local values and traditions are a source of strength, and many communities have retained or are reclaiming traditional teachings, connection to the land, language, and ways of relating to one another

[5] This region includes 33 rural and remote fly-in communities that vary in size, accessibility, cultural connections and roots, treaty agreements and resources (Gordon and Matheson 2018, 24).

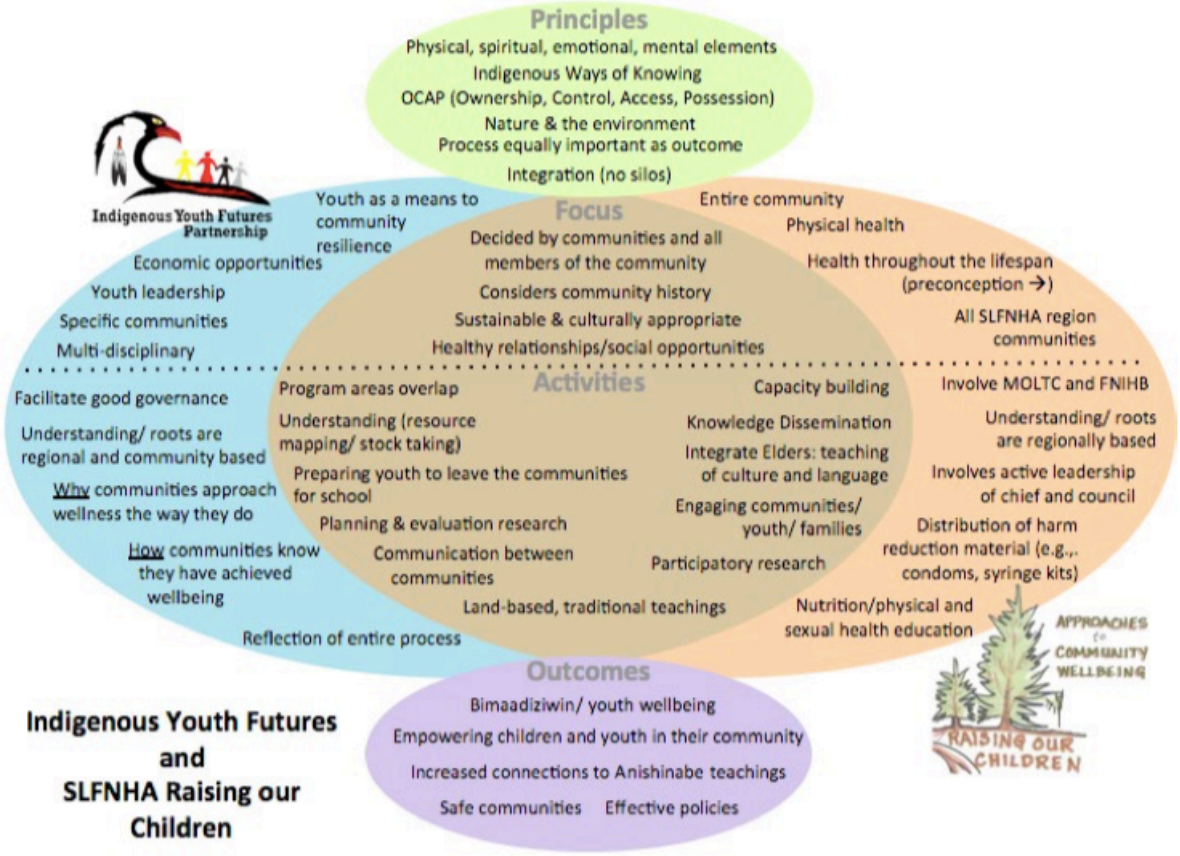


Figure 17 The relationship between the Indigenous Youth Futures Partnership and the Raising our Children component of SLFNHA's Approaches to Community Wellbeing framework (Gordon and Matheson 2018, 25)

The Poverty Action Research Project

The Poverty Action Research Project (PARP) is a poverty reduction approach to addressing determinants of health and well-being among Canada's First Nations. The project originated from the Make Poverty History Committee of Indigenous and non-Indigenous academic personnel from across Canada, established by the Assembly of First Nations (AFN) in 2008. The project's focus was determined by the members of the Make Poverty History Committee, which identified poverty as one of the most important but neglected determinants of health among First Nations. Their approach supports the assertion that improvements to housing, nutrition and self-esteem, among others, depends on ameliorations to First Nation economies, such as through employment, income, and business development initiatives (Wien et al. 2019b). As such, it challenges mainstream approaches that usually define and measure poverty in material terms, relying on levels of income or in relation to the income of others and employment.

Instead, the project adheres to a community-based action research approach that enables the participating First to determine and develop their own approach to community development in conjunction with the project team members from each region. This opportunity was forwarded to all 633 First Nations member of the AFN through a mail delivered invitation. Five communities were selected from those who responded positively according to a

range of criteria: the Sipekne'katik First Nation in Nova Scotia, the Opitciwan First Nation in Québec, the Eabametoong First Nation in Northern Ontario, the Misipawistik Cree Nation in Manitoba, and the T'ít'q'et in British Columbia. The project set out a common process for each participating First Nation:

- Engage a part-time First Nation-based coordinator
- Undertake background research on the history of the First Nation; use secondary data and key informant interviews to develop a profile
- Work with First Nation representatives to develop a multi-year strategy to address poverty as a determinant of health
- Have project team members located within the same geographic area offer to work with the First Nation in the implementation of the plan as needed
- Offer modest annual funding to the First Nation to support action projects.

The Poverty Action Research Project unfolded through numerous individual level community-led initiatives, such as a driver education/licensing project, and an initiative linking elders and youth in caring for the waters of the lake in the Mispawistik Cree Nation. The most effective strategies were, however, multi-faceted and based on a supportive collective context. These included the establishment of an economic development corporation as well as a policy regulating the distribution of gaming revenues within the community of Eabametoong; a survey of the health status of the population of T'ít'q'et to provide the leadership with information that would improve decision-making; and a case management approach to offering services to social assistance recipients that could enhance their transition into employment at Sipekne'katik (Wien et al. 2019b, 11). Other initiatives were designed "to revitalise, celebrate and apply Indigenous teachings, whether as part of a path toward health and healing or as an integral component of achieving success in education" as with the Sipekne'katik fishing derby initiative and the cultural tourism showcase launched by the Eabametoong First Nation (Wien et al. 2019, 12).

The project provided a much broader definition than material deprivation founded on local understandings of poverty and well-being conveyed through the explanations of indigenous participants;

> "What makes me feel rich is being in the woods with my grandson and seeing the big smile he has running around on the land, looking at the trees, the berries, the road we walk, the air we feel, the whistling of the wind on my face, the chirping of the birds, whatever we see on the land; that's richness for me; that's happiness" (Wien et al. 2019b, 10).

> "For Anishinaabe people, the good life does not mean making money, buying things, or winning awards. Rather, it has to do with taking care of yourself, your family and your community. It is showing love by performing acts of kindness. It is having the courage to be honest with ourselves and with others. It is getting wisdom through years of listening to others and learning from our mistakes. It is being generous to our family and community without expecting anything in return. It is living life as a kind, humble member of the community. This is the idea behind The Good Life, Bimaadizwin" (Wien et al. 2019b, 10).

Well-being was further described as the process of achieving balance and harmony as illustrated in the four directions model developed by project team members working with the Eabametoong First Nation, which was adapted from traditional Anishnaabe teachings

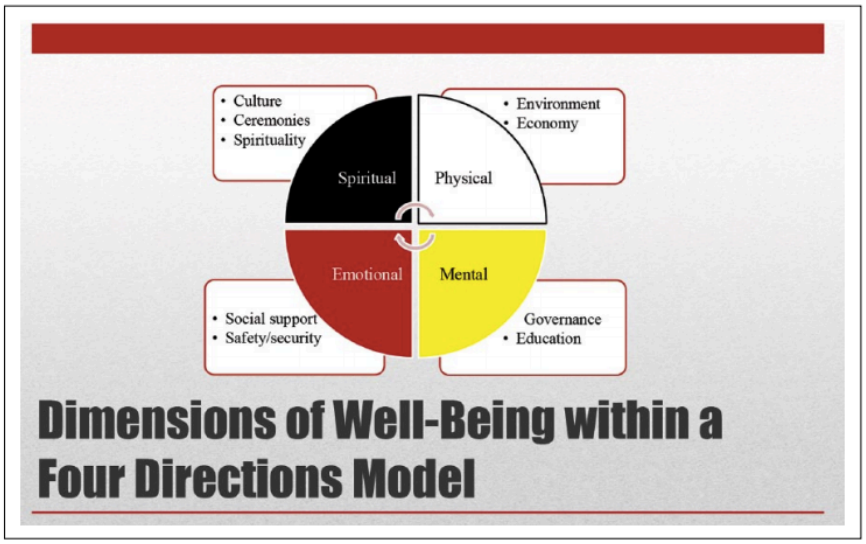


Figure 18 Four directions model (Wien et al. 2019, 11).

It also highlighted the importance of the active involvement and support of local leaders and administrators, as well as recognizing the foundational strengths of First Nations, including their resilience and accomplishments, is crucial. Exclusively focusing on deficits contributes to discouragement. It further associated the successful implementation of such projects on relationships and clear communication.

Well-being Initiatives in Canada

This section highlights well-being frameworks developed by governments, organizations and academics in Canada to assess and monitor the well-being of First Nations and Inuit peoples. It highlights initiatives to assess, at a provincial, regional or national scale, the well-being of Indigenous peoples in Canada that were recently developed or implemented. By no means exhaustive, this review simply aims highlighting noteworthy developments, resources and tools. The National Collaborating Centre for Aboriginal Health provide "a comprehensive, high-level summary of what is currently known and being done for the health of Canada's Aboriginal people" in their 2012 publication (NCCAH 2012). Kenny (2014) reviews and analyzes the methods and practices used by Aboriginal Affairs and Northern Development Canada to measure the well-being and the impact of modern treaties of Indigenous communities. The report offers insightful recommendations for improving processes for measuring the well-being of Indigenous communities; on tools and approaches Indigenous communities could use to measure the well-being of their constituents; and key considerations as well as challenges to processes for measuring the impact of comprehensive land claim agreements and self-government agreements on treaty Indigenous communities (Kenny 2014, 4).

The following initiatives are discussed at greater length below:

- The Human Development Index
- The First Nations Regional Longitudinal Health Survey (RHS) Cultural Framework
- The Community Well-being Index
- The National Collaborating Center for Indigenous Health (NCCIH)
- The First Nations Closing the Gap Reporting Framework and First Nations Mental Wellness Continuum Framework
- The First Nations Health Transformation Summit Getting the Relationships Right: Health Governance in the Era of Reconciliation
- The First Nations Perspective on Health and Wellness by the First Nations Health Authority (FNHA)
- The Indigenous Wellness Framework of the Thunderbird Partnership Foundation

- The Effects on Aboriginals from the Great Lakes Environment (EAGLE) Project
- The Aboriginal Community Health Indicator Project
- The First Nations Health Reporting Framework
- The Social Determinants of Inuit Health in Canada
- The Arctic Social Indicators Project

The Human Development Index

The United Nations Development Program (UNDP)'s Human Development Index has been used since 1990 to compare countries in terms of "human development", defined as "the enlargement of choices made possible by education and literacy, a decent material standard of living, and a long and healthy life" (Cooke et al. 2007, 3). As an alternative to using Gross Domestic Product (GDP) per capita to measure socio-economic development, the Human Development Index (HDI) sought extending our collective understanding and assessment of progress and welfare through a measure which includes three fundamental and inter-related dimensions (educational attainment, income and life expectancy) that are combined with equal weighting to produce an overall and internationally comparable score. To be applicable in the greatest number of countries, the HDI was designed to face the practical issues of data availability while reflecting theoretical definitions of well-being. While it only captures selected aspects of "well-being" or quality of life as a result of this objective, it does allow to complement other measure featured in the annual Human Development Report, like the Human Poverty Index(Cooke et al. 2007).

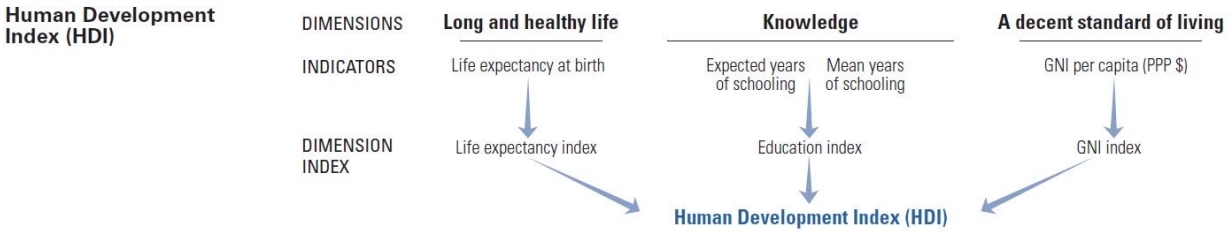


Figure 19 http://hdr.undp.org/en/content/human-development-index-hdi

In 1999, the Strategic Research and Analysis Directorate at Indian and Northern Affairs Canada (INAC) introduced an application of the United Nations Development Programs' HDI to the Registered Indian population (Cooke and Beavon, 2007). Focusing on educational attainment, average annual income, and life expectancy, this measure revealed gaps between Registered Indians, a sub-portion of the total Indigenous population of Canada, and other Canadians, including non-registered First Nations, Inuit and Métis people, as well as non-Indigenous people (Cooke, Beavon, and McHardy 2013). It was used to expose that the gap between the overall HDI scores of these two populations had, in fact, declined from 1981 to 2001, but that important disparities remained nevertheless (O'Sullivan and McHardy 2004; Penney, O'Sullivan, and Senécal 2013).

The HDI, thus, provides a way of assessing and comparing well-being in terms of life expectancy, education, and income, as well as disparities between these dimensions across subnational population groups in Canada and with other countries over time. This measure has additionally been used to compare Indigenous Peoples in Australia, Canada, New Zealand, and the United States over time (Mitrou et al. 2014) as well as with American Indian/Alaska Native population of the United States (Cooke et al. 2007).

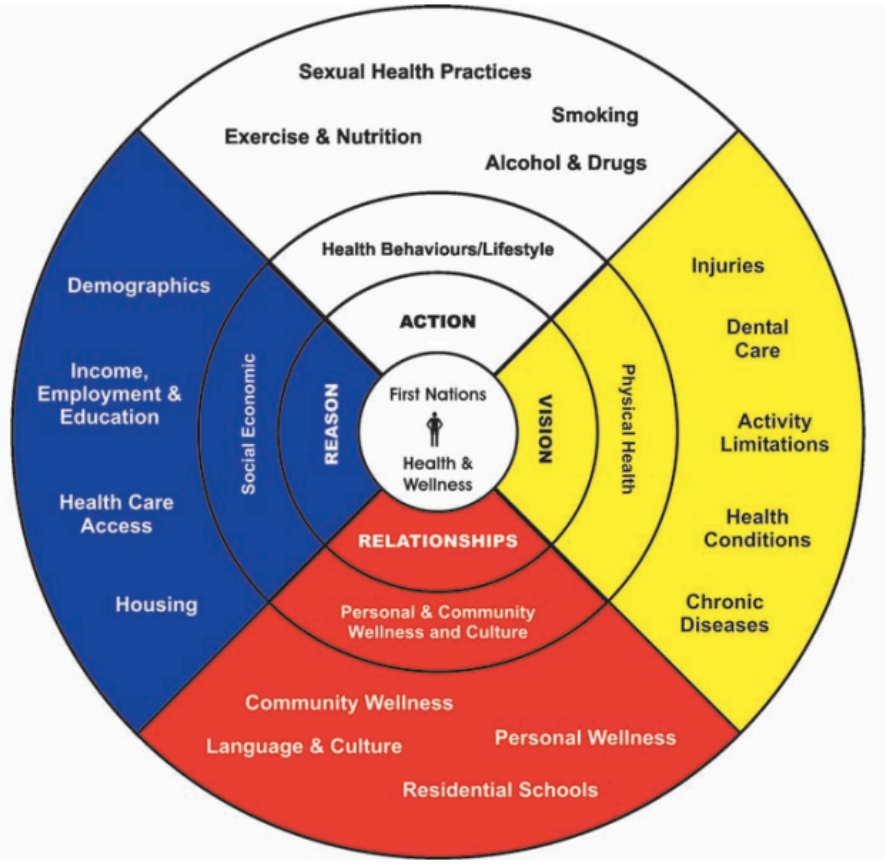


Figure 20 First Nations Regional Longitudinal Health Survey's Cultural Framework, source: https://achh.ca/wp-content/uploads/2018/07/Guide_Community_FNC_HealthIndicatorsInformationResource.pdf

It does not, however, provide a comprehensive what is commonly meant by well-being. It does not address important elements such as preservation of culture and language; relationship with one's family, community, or the land; and spirituality, as well as numerous additional aspects of overall well-being (Senécal et al. 2008). Whereas other measures may offer more detailed and complex evaluation of the overall social development and well-being of a population, these typically require much better data than are currently available for Indigenous populations in Canada.

The First Nations Regional Longitudinal Health Survey (RHS) Cultural Framework

A cultural framework was developed to guide the interpretation of the 2002-03 First Nations Regional Longitudinal Health Survey (RHS) results, the only national survey under complete First Nations control. Based on the model "working wheel" or "four directional wheel" (Figure 21), as explained by the First Nations Centre (2007, 9), the RHS cultural framework places people at the center of the circle, then organizing health and wellness into four cardinal directions: East (Vision), South (Relationships), West (Reason) and North (Action), while the outer circle identifies the themes of indicators gathered through the survey. In this model, health and wellness are about balance.

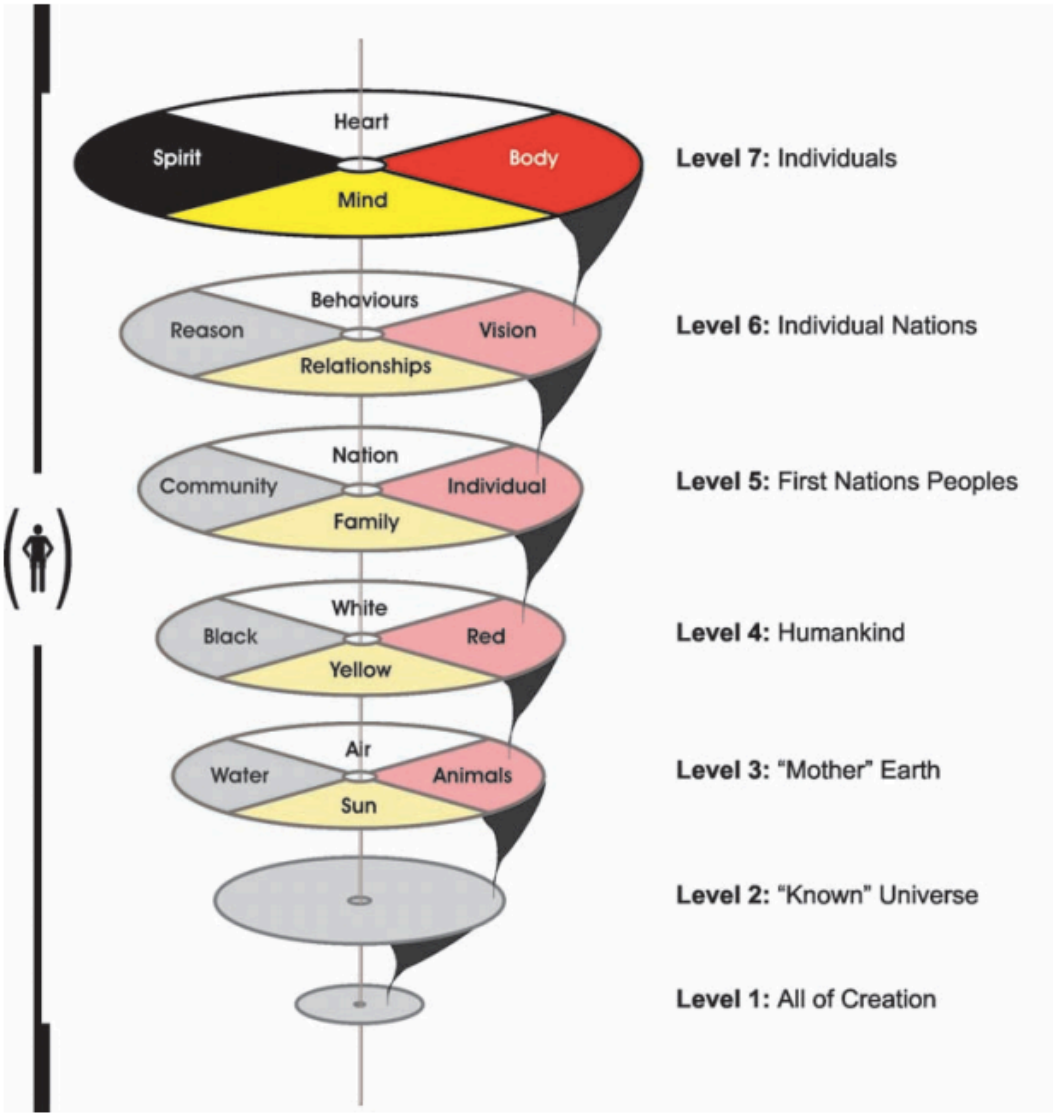


Figure 21 The First Nations Regional Longitudinal Health Survey's Wellness Model, source: https://achh.ca/wp-content/uploads/2018/07/Guide_Community_FNC_HealthIndicatorsInformationResource.pdf

The Community Well-being Index

The Community Well-Being (CWB) index was developed as a community-level complement of the national- and regional-level Human Development Index for First Nations and Inuit communities in Canada, itself based on the United Nations Development Programme's (UNDP) Human Development Index (HDI) (Indigenous and Northern Affairs Canada 2015). The CWB was developed by Aboriginal Affairs and Northern Development Canada (AANDC), formerly known as Indian Affairs and Northern Development Canada or INAC), to track and compare well-being in First Nations, Inuit, and other Canadian communities.

The CWB is the sum of four equally weighted components of socio-economic well-being: per capita income, education, housing, and workforce participation. Represented by a single numeric score which ranges from a low of zero to a high of 100, the CWB was designed as a reliable measure suited for longitudinal and comparative

analyses. The index can be used to compare the well-being of indigenous communities and non-indigenous Canadian communities, as well as in combination with other community-level data produced by Statistics Canada. CWB index scores were calculated for 1981, 1991, 1996, 2001, 2006 and 2016 based on Canada's Census of Population. Scores for 2011 have been calculated based on the 2011 National Household Survey (Cooke and O'Sullivan 2015; Flanagan 2019; Guimond, O'Sullivan, and Morin 2013; Penney, O'Sullivan, and Senécal 2013).

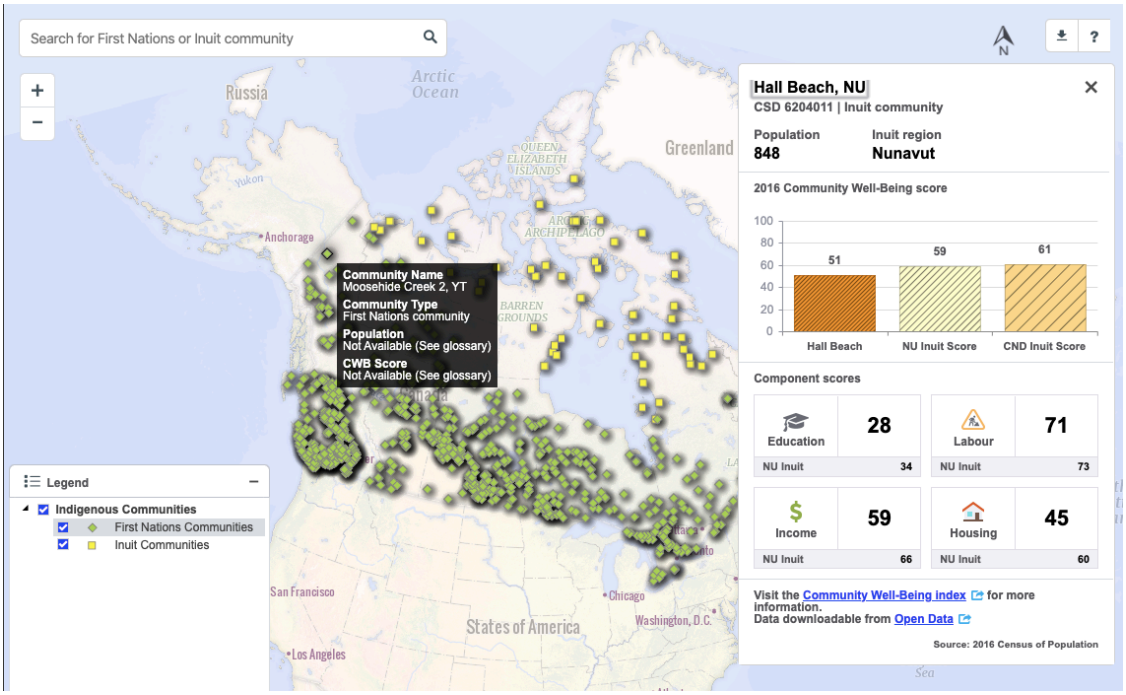


Figure 22 Interactive CWB map, accessible online: https://www.sac-isc.gc.ca/SAC-ISC/CWB/index-map-en.html

Communities are defined in terms of Census subdivisions (CSD). CSDs are areas deemed equivalent to a municipality for statistical reporting purposes and identified through a unique 7-digit code (Statistics Canada 2018). CIRNAC-ISC use a list of First Nation communities encompassing legally defined Indian Reserves as well as communities that are not legally defined as reserves, but whose population comprises a high proportion of First Nations individuals and that are associated with a First Nations group in Northern Saskatchewan, the Northwest Territories and the Yukon Territory. CWB scores are calculated for every Canadian community with at least 65 residents and those with a global non-response rate which did not exceed 25%. Scores were not produced for those in which enumeration was incomplete, not permitted or of insufficient quality.

Since Inuit communities are not legally defined by CIRNAC-ISC in the same way as First Nations reserves, Inuit communities are identified as all those within one of the four Comprehensive Land Claims Agreements regions of the Inuit Nunangat (the Inuit homeland) (Penney, O'Sullivan, and Senécal 2013): Nunatsiavut (Northern Labrador), Nunavik (Northern Québec), Nunavut and the Inuvialuit Settlement Region (Northwest Territories). Each is further associated with one of the four Land Claim Settlements designated on an informal or semi-formal basis as Inuit (Penney, O'Sullivan, and Senécal 2013). Well-being scores are not, however, calculated for the Métis population given that the CWB methodology is based on community-level data. Consequently, CSDs that are neither associated with First Nations nor Inuit communities are classified as non-Indigenous communities, although it is recognized that a number of these communities may have substantial Indigenous residents.

The Index has notably been used to review trends in the well-being of First Nation communities that are part of historic and modern-day treaties (Guimond, O'Sullivan, and Morin 2013), and to compare well-being outcomes of

Inuit communities within the four regions of Inuit Nunangat with those of non-Indigenous Canadian communities from 1981 to 2006 (Penney, O'Sullivan, and Senécal 2013).

It is important to emphasize that the CWB is based on all community residents, regardless of their ethnicity given that all community members contribute to the economic and cultural lives of their communities, and that the small size of most First Nations' non-Indigenous populations would preclude, on the grounds of privacy protection, the disaggregation of their CWB scores by ethic group (O'Sullivan and Senécal 2014). Moreover, analyses revealed that excluding non-indigenous individuals from the CWB scores of indigenous communities was proven to have little effect on observed well-being patterns (*Ibid.*).

An interactive map displays 2016 CWB data from First Nations, Inuit and non-Indigenous communities onto a map of Canada (Figure 21). Information can be retrieved by using the search field or clicking on a marker provided on the map, or viewed as a table by selecting the icon provided above the map. Graphs can also be produced through an online tool (Figures 22 and 23). It is additionally worth noting that all the data used in every CWB score calculated to this day are open access; available to consult, download, store, share and manipulate (using a statistical software).

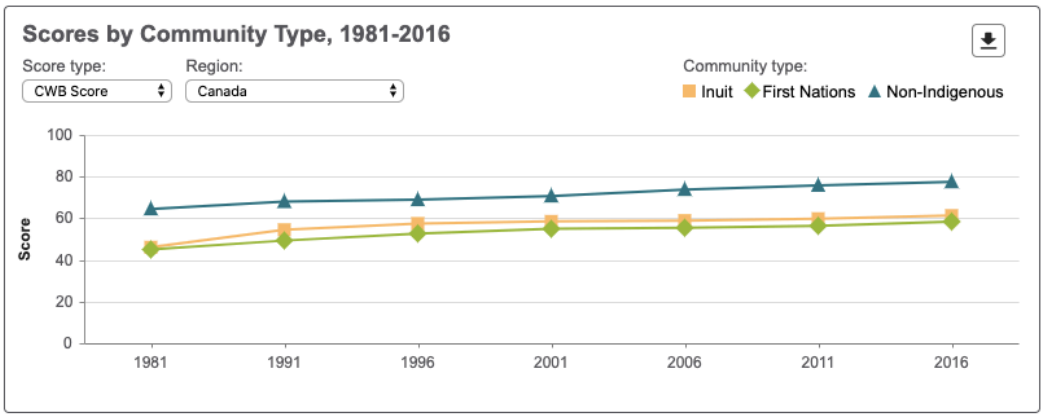


Figure 23 Interactive Community Well-being Index Graphs, available online: https://www.sac-isc.gc.ca/SAC-ISC/CWB/index-graphs-en.html

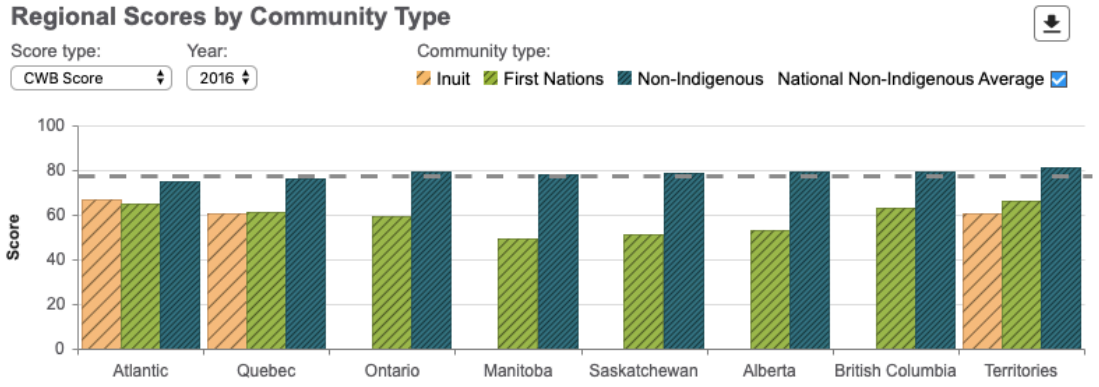


Figure 24 Interactive Community Well-being Index Graphs, available online: https://www.sac-isc.gc.ca/SAC-ISC/CWB/index-graphs-en.html

The National Collaborating Center for Indigenous Health (NCCIH)

Since its inception in 2005, the National Collaborating Centre for Aboriginal Health (NCCAH) has focused on the intersection of social determinants that are the underlying causes of disparities in First Nations, Inuit and Métis peoples' health (NCCAH 2017). As set out in its mandate, the NCCIH aims to support a renewed public health system in Canada that is inclusive and respectful of First Nations, Inuit and Métis peoples, using a holistic, coordinated and strengths-based approach to health (NCCIH 2020). The NCCIH additionally seeks fostering and reinforcing links between evidence, knowledge, practice and policy, while advancing self-determination and Indigenous knowledge in support of optimal health and well-being (NCCIH 2020).

In order to do so, the NCCAH hosted a series of four cross-sectoral national gatherings on the social determinants of Indigenous peoples' health involving representatives from diverse national and provincial Indigenous organizations, federal and provincial/territorial governments, Indigenous and non-Indigenous health organizations, practitioners and researchers: *The Circles of health: Sharing our gifts* in 2008; *From Visions to actions: Second forum on social determinants of Aboriginal peoples' health* in 2009; *Transforming our realities: The determinants of health and Indigenous Peoples* in 2015; and *The Fourth National Forum on Indigenous Determinants of Health: "Nakistowinan (Stop In) – Pimicisok (Stock Up) – Kapesik (Stay Over)"* in 2017. The most recent cross-sectoral national gatherings on the social determinants of Indigenous peoples' health had the following objectives:

- Discuss and share practical examples of the structural, systemic and community level applications of a "determinants of health" approach to the health and well-being of Indigenous peoples;
- Share successes and identify lessons learned from efforts to implement practical actions and collaborative approaches at the international, national, regional and community levels;
- Explore perspectives and implications arising from the Calls of Actions of the Truth and Reconciliation Commission of Canada and the United Nations Sustainable Development Goals; and
- Vision ongoing relationships of mutual respect and commitment to the optimal health and well-being of Indigenous peoples (NCCAH 2017).

The First Nations Closing the Gap Reporting Framework and Mental Wellness Continuum Framework

The Assembly of First Nations (AFN) has aimed to elaborate a comprehensive, rights-based and holistic approach to its political platform. In 2003, the AFN announced the *Getting Results Strategy* whose policy development cycle and priorities emphasized the ten following key determinants of First Nations well-being (AFN 2006):

1. First Nations Governance;
2. Housing;
3. Education;
4. Economic Partnerships;
5. Jobs for Youth;
6. Language & Culture;
7. Land Claims;
8. Revenue Sharing;
9. Building Institutions;
10. Environment.

In July 2005, proposed that all governments within Canada work collaboratively towards "Closing the Gap" among First Nations and Canadians in health and well-being over the next 10 years. To this end, the AFN developed a *First Nations Wholistic Policy & Planning Model* (Figure 11). The model has the following key characteristics (AFN 2006, 6): Wholistic focus on determinants of well-being; Community at its core; Governance as its underpinning (self-government/jurisdiction, fiscal relationships/accountability, collective and individual rights, capacity/negotiations); Premised on the components of the Medicine Wheel; Inclusive of the four cycles of the lifespan (child, youth, adult, elder); and Inclusive of the three components of social capital (bonding, bridging, linkage).

To this end, it created the First Nations Mental Wellness Continuum Framework to strengthen federal mental wellness programming and support appropriate integration between federal, provincial, and territorial programs (Health Canada 2015, 1). The First Nations Mental Wellness Continuum (FNMWC) is a national framework that addresses mental wellness among First Nations in Canada. The FNMWC framework was developed through a collaboration between the Assembly of First Nations, Health Canada's First Nations and Inuit Health Branch, the National Native Addictions Partnership Foundation, the Native Mental Health Association, and other community mental health leaders, building upon the "Honouring Our Strengths National Framework" published in 2012 (AFN, Health Canada, and National Native Addictions Partnership Foundation 2012).

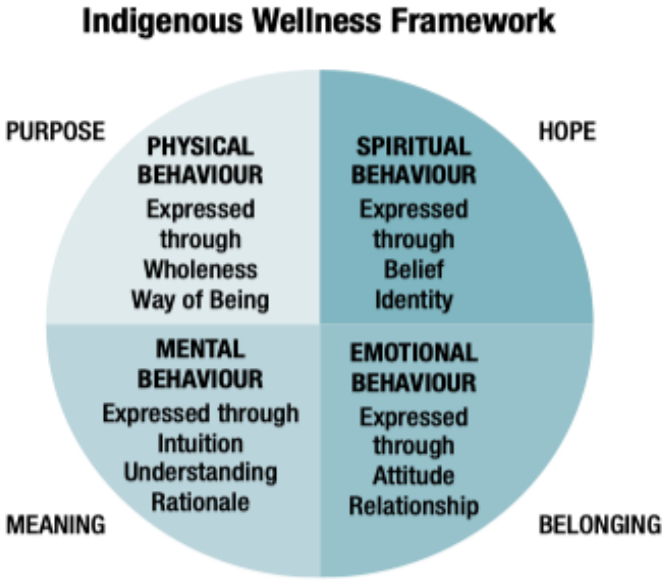


Figure 25 The four "directions" of the "culture as intervention model" (Health Canada 2015, 4)

The framework emphasizes First Nations' strengths and capacities, while offering advice for policy and program changes that could enhance First Nations mental wellness outcomes (Thunderbird Partnership Foundation 2020). It outlines how communities can adapt, optimize, and realign their mental wellness programs and services to achieve a comprehensive continuum of quality programs and services, regardless of their local availability. The "culture as intervention model" was, therefore, developed through discussion with cultural practitioners and Elders from across the country to the necessary balance and interconnectedness for mental wellness at the individual, family, and community level. Wellness is understood from this perspective through a "whole person" approach, depending on a balance of one's spirit, heart/emotions, mind, and physical being (Health Canada 2015, 4). The wellness framework presents four key outcomes, hope, belonging, meaning, and purpose, that can achieved "through core attributes of First Nations cultures across Canada, such as those relating to identity and intuition" (Health Canada 2015, 5). Identity is derived from sociocultural factors such as language, land, and ancestry, expressed in unique manners across First Nations communities. Intuition refers to First Nations peoples' relationship with Creation, which broadly refers to the "beings" endowed with "a spirit, identity, unique purpose and way of being" to which indigenous persons connect, as well as their connection with their own spirit, the spirits of their ancestors (Health Canada 2015, 5).

The Medicine Wheel underscores the model's design. The four directions, articulated as 1) spiritual & social, 2) cultural & physical, 3) emotional & environmental, and 4) economic & mental, constitute domains from which appropriate subcomponents are identified and operationalized (AFN 2006). It further informed a proposed First Nations Health Reporting Framework.

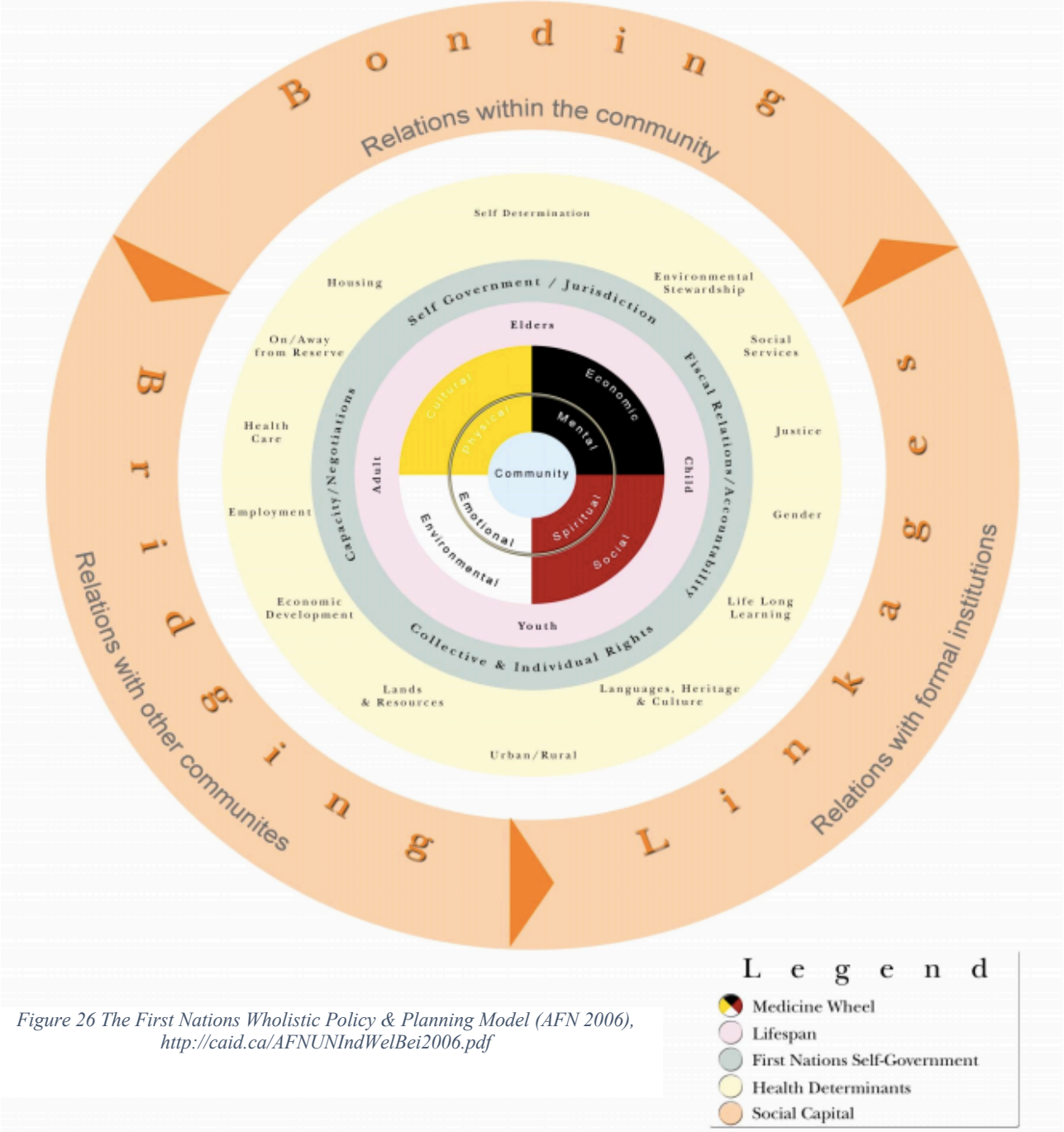


Figure 26 The First Nations Wholistic Policy & Planning Model (AFN 2006), http://caid.ca/AFNUNIndWelBei2006.pdf

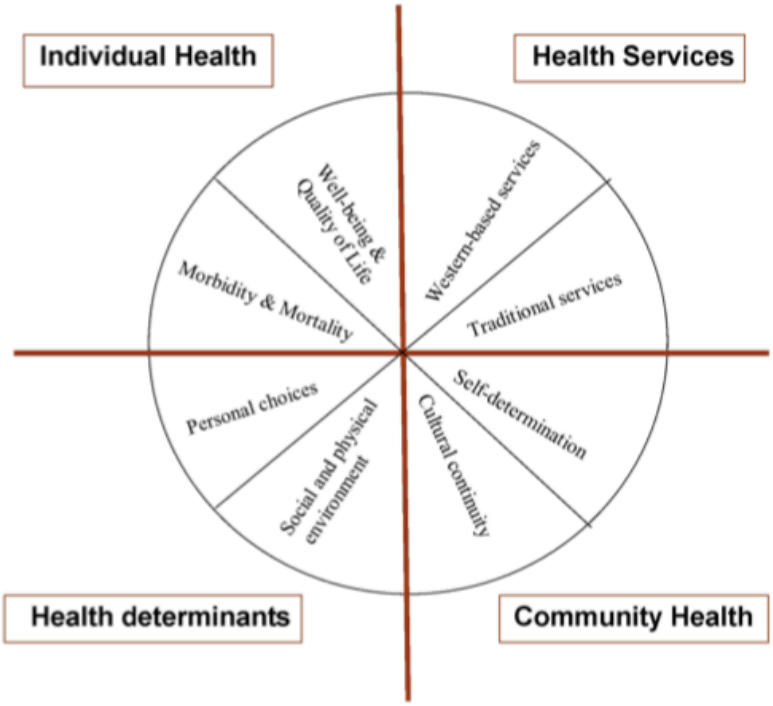


Figure 27 The Proposed First Nations Health Reporting Framework for the AFN's Closing the Gap Reporting Framework (AFN 2006, 9).

In 2017, the AFN reiterated its support of determinants of health to grasp and act upon a holistic and sustainable approaches to wellness that supports a better identify of the causes health outcomes and disparities across Canada (AFN 2017). While the AFN recognised that there is no singular and universal definition of wellness within diverse First Nations cultures, indigenous worldviews share a common understanding of the interconnectedness between the physical, mental, emotional and spiritual realms.

The First Nations Health Transformation Summit Getting the Relationships Right: Health Governance in the Era of Reconciliation

The First Nations Health Transformation Summit *Getting the Relationships Right: Health Governance in the Era of Reconciliation* was undertaken as part of the AFN's efforts to facilitate relationship building, as well as to highlight innovative First Nations built health programs, services and systems that have found success in overcoming jurisdictional gaps in Canada. It also provided an opportunity for First Nations, the federal government, and provinces/territories to come together to develop shared priorities and determine next steps towards closing jurisdictional gaps in First Nations health (AFN 2018). It explicitly aimed (AFN 2018, 4) :

- to connect decision-makers (First Nations, the provinces/territories and the federal government) and generate conversations and commitment to overcome jurisdictional challenges - thus moving towards improving health outcomes for First Nations;
- to demonstrate success and share promising models of jurisdictional cooperation and innovation.
- to Support First Nations capacity development in health systems governance.

There were four key summit themes were: 1) Culture as Foundation, 2) Self-Determination, 3) Getting the Relationships Right, and 4) Closing the Gap. Among this summit's highlights, First Nations emphasized the need for a responsive and culturally safe health system, implemented through a courageously innovative transformation for

an Indigenous, patient-centered system (AFN 2018). Several conclusions were drawn from Regional Caucus sessions (AFN 2018, 3):

- the need to take time to build trust, time to engage effectively with First Nations;
- the need expressed by First Nations to work on unity and collaboration between within regions;
- the need for engagement with First Nations at the local and regional levels for shared decision-making, accountability, and transparency throughout the process is required;
- in treaty areas, a strong desire to have First Nations' control of health services better reflect treaty rights;
- the need to identify and address jurisdictional issues between provincial/territorial and federal governments' roles and responsibilities;
- how change and transformations could be addressed within the context of the Canada Health Act;
- the lack of traditional health services in Canada;
- the need to address mental wellness in First Nations, particularly in the area of addictions, address chronic diseases and palliative care;
- the need for equitable and effective, sustainable, First Nations-specific, and committed funding beyond the current government;

The First Nations Governance Center (FNIGC) associates health to ten social factors: employment, education, housing, income, food, stable ecosystem, sustainable resources, social justice and equity. Determinants of health may also include participation in traditional activities, cultural connections, exposure to the Indian Residential School (IRS) system, and other factors that reflect the unique history and experience of First Nations communities (FNIGC 2018, 17).

Table 1 AFN's Health Transformation Summit – Summit Report (AFN 2018, 5–7)

Summit Themes	Key Points
Culture as Foundation	• Traditional health services: Elders, traditional healers, traditional medicines, healing ceremonies, and other First Nations practitioners are highly valued. • Cultural safety: a sure way to ensure cultural safety is to have health systems be culturally grounded, culturally informed, and culture-driven. • Patient-centered systems and care: cultural safety and humility are more likely when care and services are based on the individual, their history, and their culture. • Traditions and ceremony: stories; passing on the teachings of ancestors; traditional meals; etc. are identified as sources of healing. • Traditional Governance models: drawing on traditional teachings, laws, and beliefs to guide the development of health governance systems will best serve First Nations.
Self-Determination	• Support First Nations capacity: innovative First Nations-built health programs should be recognized, supported, and amplified. Accreditation, training and skills development for First Nations programs and practitioners is key. • Ownership: health systems, supports and services should be managed and delivered by First Nations. Also, ownership of data and information, and expertise in their handling, is a priority.

	• Jurisdictional confusion: disentangling from the complications of multiple and ambiguous jurisdictions, and getting out from between jurisdictional gaps, is required to facilitate progress towards self-determination. • Community level: community-led, community-based, and community-driven programs and initiatives will lead to increased efficiency, as well as fewer parallel programs and lack of integration. Also, if efforts are local, it is far more likely that they are First Nations-led, delivered, governed, self-determined, and culturally relevant. • Balancing long-term goals with immediate needs: while fulsome health transformation is underway, we cannot be passive. Meaningful incremental changes must be pursued in the meantime. Fulsome transformation takes time.
Getting the Relationships Right	• Shared decision making: First Nations are not adequately represented during "consultations" and planning, or other forms of engagement. Community voices and youth are not heard. Instead of participating in decision making, First Nations consent, and approval is sought as an afterthought. First Nations want less top-down programming and implementation. • Shared priorities: given the importance of combatting illness and increasing well-being, it is necessary that federal, provincial, territorial and First Nations governments develop and agree on shared priorities. Otherwise, coordination is inefficient and genuine cooperation is impossible. • Roles and responsibilities: First Nations want these to be clearly articulated. Federal, provincial and territorial governments can no longer hide behind obscure jurisdictions. Jordan's Principle must apply. Clear roles and responsibilities are essential components of transparency, and ensure accountability. • Proper engagement: needs assessments, consultations, planning, budgeting and general decision making: these should be guided by fair partnership and engagement protocols. First Nations must have the opportunity to give full consent. Appropriate milieus for engagement are necessary. This includes ways of interfacing and engaging amongst and between First Nations. • Trust and transparency: without full transparency, First Nations will continue to rightly distrust Canadian governments. First Nations want to know how budget numbers are determined, where do the funds go, and who administers and spends them. How can trust and transparency support the increased demand for First Nations-specific funding? • Honouring agreements: First Nations demand increased respect for the agreements and commitments which governments have already made. There are persistent shortcomings in relation to: Treaties; the Truth and Reconciliation Commission; Jordan's Principle; Non-Insured Health Benefits (NIHB); the Canada Health Act; the United Nations Declaration on the Rights of Indigenous Peoples; and many others. The lack of commitment is partly why the National Chief suggested using the international arena to pressure Canada to act on the disparities in First Nations health.

Closing the Gap	• Health outcomes: While discussing transformative change, forum participants continued to raise concerns regarding the current health and well-being of their First Nations, emphasizing that in many cases, there were health crises that required immediate attention and that were impacting First Nations at a greater level than non-First Nations. This included concerns regarding mental health and addictions, tuberculosis and Human Immunodeficiency Virus (HIV), palliative care, cancer, and chronic diseases (e.g. diabetes). • Health service access: Access and availability of appropriate health services must be improved. This includes the supplies, equipment, and expertise required for prevention; screening; diagnosis; treatment and aftercare. First Nations need the services and capacity within their communities. • Human Resource Capacity: In order to begin to close these gaps and to move forward with health transformation, more resources and attention must be given to building First Nations health human resource capacity. First Nations providers, administrators, and health managers have the best understanding of what is required for their people and are able to offer the care they need. • Sustainable, long-term, flexible funding: Throughout the forum, participants highlighted that transformation and closing the health gap could not occur without sustainable, long-term, and flexible funding that reflected the health needs of First Nations and fully encompassed and considered administrative costs. Current funding models are not adequate to meet their health needs and address the health disparities. • Health as a priority: Many summit participants shared that, somehow, health is not viewed as a priority by all of their communities, leaders, etc. There was a call for all leaders to make health a priority, and to be champions for health improvement and transformation.

The First Nations Perspective on Health and Wellness by the First Nations Health Authority (FNHA)

The First Nations Health Authority (FNHA) of British-Columbia, the first and only provincial First Nations Health Authority in Canada[6], developed the First Nations Perspective on Health and Wellness tool that reflects their vision of First Nation health and wellness: healthy, self-determining and vibrant First Nations children, families and communities (FNHA 2020). The First Nations Perspective on Health and Wellness started as a draft visual model and description of wellness created by the Traditional Wellness Working Group and staff and advisors from the FNHA, which was then presented to British-Columbia First Nations at a Gathering Wisdom (V) held in May 2012 (FNHA 2020). Feedback was gathered over the course of this event was and later incorporated into the model which prevails today. The Perspective on Health and Wellness tool aims to create a shared understanding of a holistic vision of wellness, as a fluid concept which can be adapted and customized freely and is not confined to remain the same (FNHA 2020). It intends to stimulate further discussions by First Nations on their vision of wellness for their

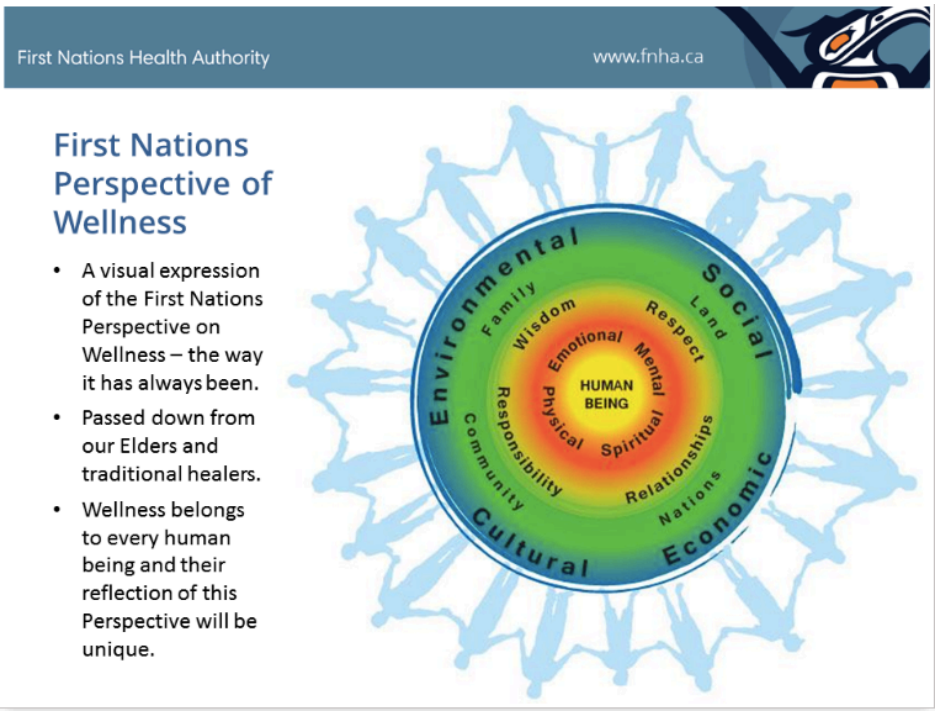


Figure 28 The First Nations Perspective on Health and Wellness (First Nations Health Authority 2020).

communities, themselves and the FNHA.

The FNHA (2020) describes their First Nations Perspective on Health and Wellness in relation to six concentric circles as follows:

- The Centre Circle represents individual human beings. Wellness starts with individuals taking responsibility for our own health and wellness (whether we are First Nations or not).
- The Second Circle illustrates the importance of Mental, Emotional, Spiritual and Physical facets of a healthy, well, and balanced life. It is important that there is balance between these aspects of wellness and that they are all nurtured together to create a holistic level of well-being in which all four areas are strong and healthy.

[6] "The British Columbia Tripartite Framework Agreement on First Nations Health Governance, which provided a phased approach to transformation which resulted in transfer of designated Health Canada headquarter functions to First Nations control in July 2013, and regional functions in October 2013" (AFN 2018, 2)

- The Third Circle represents the overarching values that support and uphold wellness: Respect, Wisdom, Responsibility, and Relationships.
- The Fourth Circle depicts the people that surround us and the places from which we come: Nations, Family, Community, and Land are all critical components of our healthy experience as human beings.
- The Fifth Circle depicts the Social, Cultural, Economic and Environmental determinants of our health and well-being.
- The people who make up the Outer Circle represent the FNHA Vision of strong children, families, elders, and people in communities.

Figure 29 Seven Directives: Planning, Reporting and Evaluation Standards, First Nations Health Authority, https://www.fnha.ca/WellnessSite/WellnessDocuments/FNHA-Health-and-Wellness-Planning-A-Toolkit-for-BC-First-Nations.pdf

Accordingly, seven directives that describe the fundamental standards and provide instructions for a health and wellness governance relationship that supports this vision (FNHA 2019):

The FNHA additionally suggests a planning process that follows the life cycle of a tree (Figure 13): "The plan is rooted in the 7 Directives and the Planning, Reporting and Evaluation Standards branches grow from there. Like a tree, plans are evergreen, and evolve with the seasons and over time" (FNHA 2019, 93).

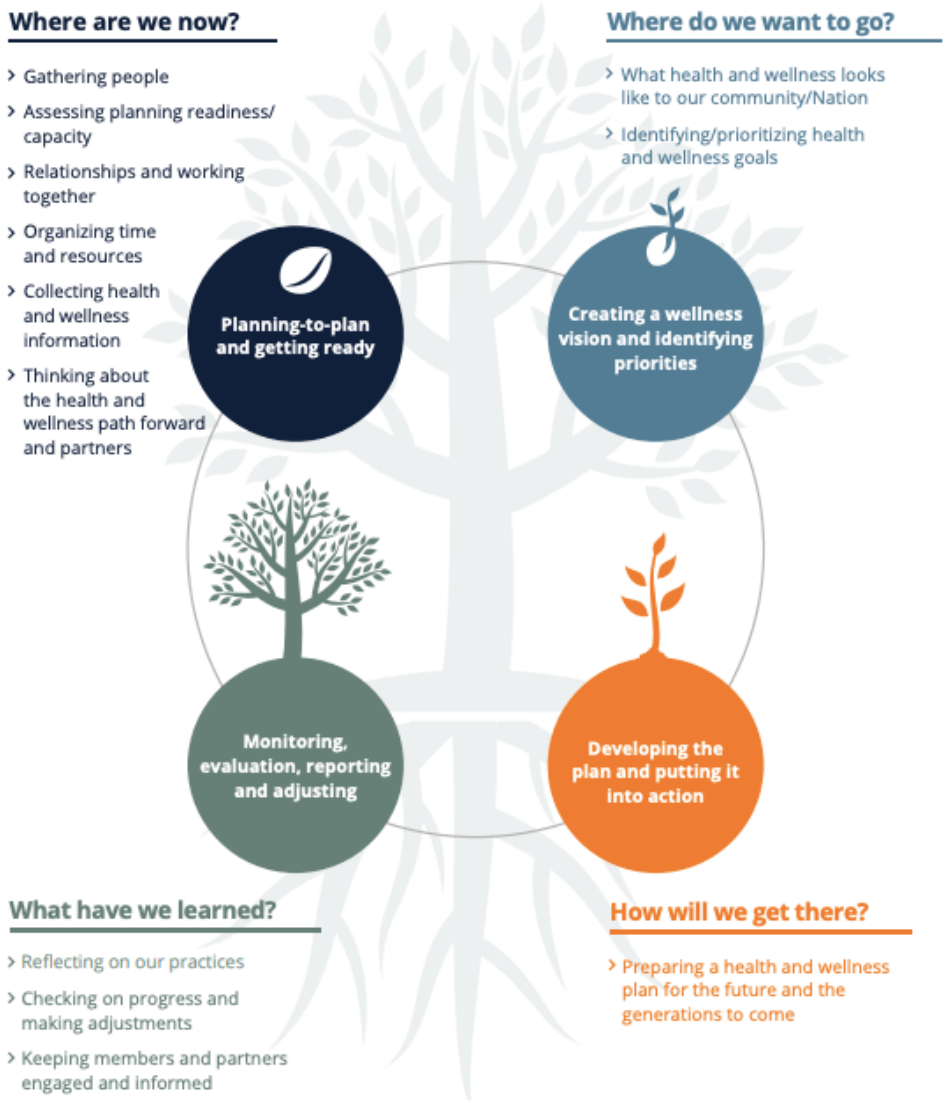


Figure 30 Sample Health and Wellness Planning Process (FNHA 2019, 59), https://www.fnha.ca/WellnessSite/WellnessDocuments/FNHA-Health-and-Wellness-Planning-A-Toolkit-for-BC-First-Nations.pdf

The Indigenous Wellness Framework of the Thunderbird Partnership Foundation

The Native Wellness Assessment is an Indigenous knowledge-based instrument which measures the effect of cultural interventions on a person's wellness, from a whole person and strengths-based perspective.

The Framework is statistically and psychometrically validated as a reliable measure of change in wellness over time, across all genders, age groups, and cultures. The assessment is a product of the Honouring Our Strengths: Indigenous Culture as Intervention in Addictions Treatment (CasI) research project developed by a team of Indigenous and non-Indigenous researchers from across Canada, Elders, Indigenous Knowledge Keepers, cultural practitioners, service providers, and decision makers.

Figure 31 The First Nations Mental Wellness Continuum Framework by the Thunderbird Partnership Foundation, https://thunderbirdpf.org/first-nations-mental-wellness-continuum-framework/

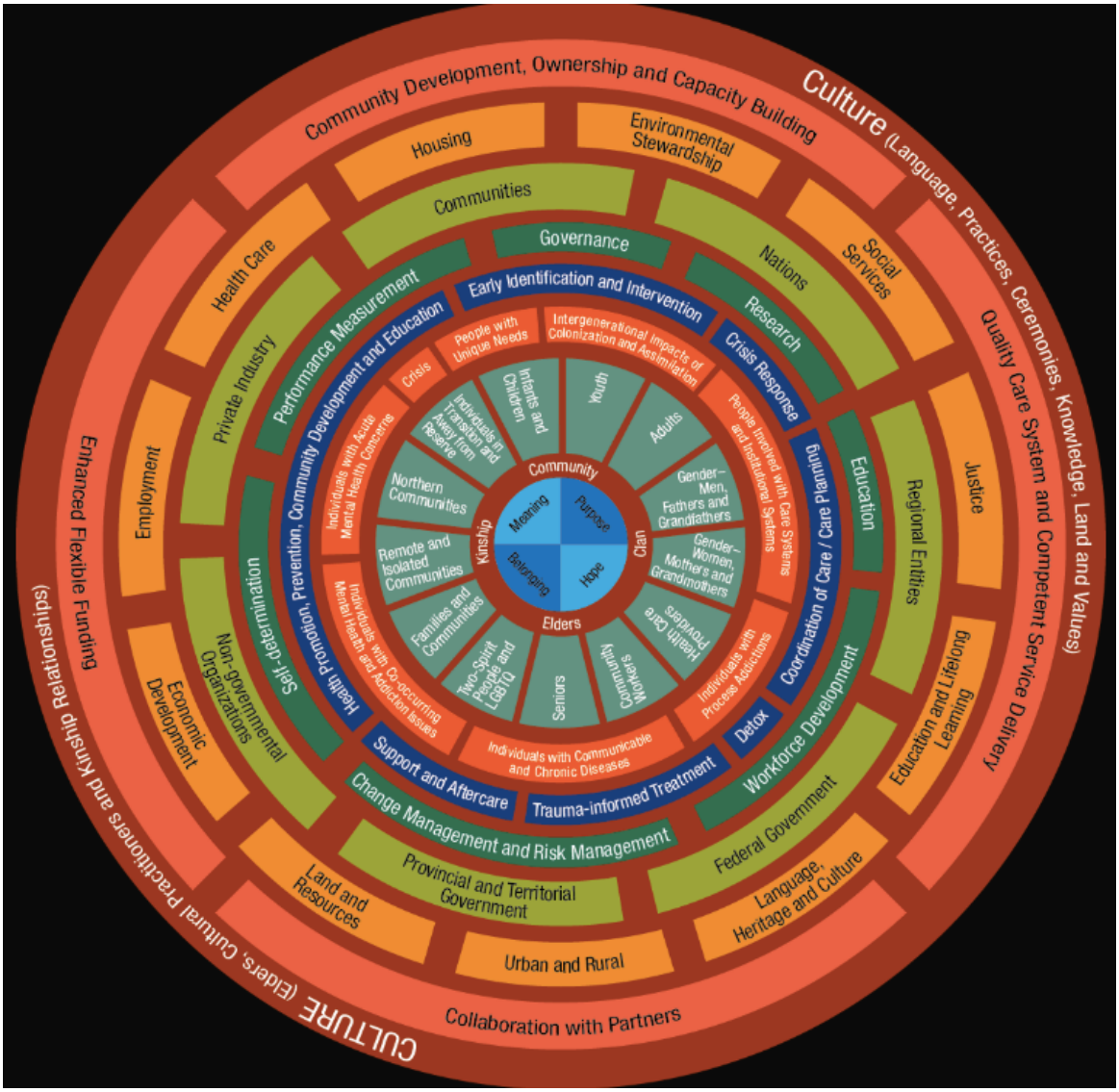


Figure 32 The Indigenous Wellness Framework of the Thunderbird Partnership Foundation, https://thunderbirdpf.org/about-tpf/scope-of-work/native-wellness-assessment/

The Effects on Aboriginals from the Great Lakes Environment (EAGLE) Project

The EAGLE project was designed through a collaboration between the Assembly of First Nations, the Chiefs of Ontario and Health Canada for research and monitoring purposes and implemented from 1990 to 2000 (First Nations Centre 2007). It focused on the ways in which environmental contaminants affected the health and well-being of First Nations living in the Great Lakes basin. The results and other materials from the study continued to be disseminated following its completion.

The project adopted a broad view of health, which sought blending traditional environmental knowledge and Western science through collaborative processes. To examine the impacts of contaminants on traditional ways of life, health, social and economic well-being, the project developed culturally relevant indicators which combined community disease indicators with indicators of traditional practices such as use of traditional medicines and country food consumption (First Nations Centre 2007). These were organized through the Community Life

Indicators wheel. Considered "a landmark study in terms of its approach to community-based research, First Nations knowledge and concepts of health", the project provided several important lessons, as listed by the First Nations Centre (2007, 12-13):

- Outside experts can provide advice but should not have decision-making power;
- Decision-making processes should be formalized and properly documented;
- Financial information should be disclosed to community representatives;
- All aspects of health should be considered;
- Develop partners' roles and responsibilities and the rules of engagement in writing and early on;
- Recognize that relationships take time;
- Community-based research should be initiated, developed, controlled and carried out by the community;
- Develop a protocol to integrate First Nations knowledge at all stages, giving it equal weight to Western scientific knowledge;
- Ensure fully informed participant consent;
- Establish and maintain a majority Aboriginal technical advisory committee;
- Ensure community review, input and validation processes;
- Develop access and dissemination protocols
- Build community capacity during all phases, including analysis and interpretation, and not just data collection.

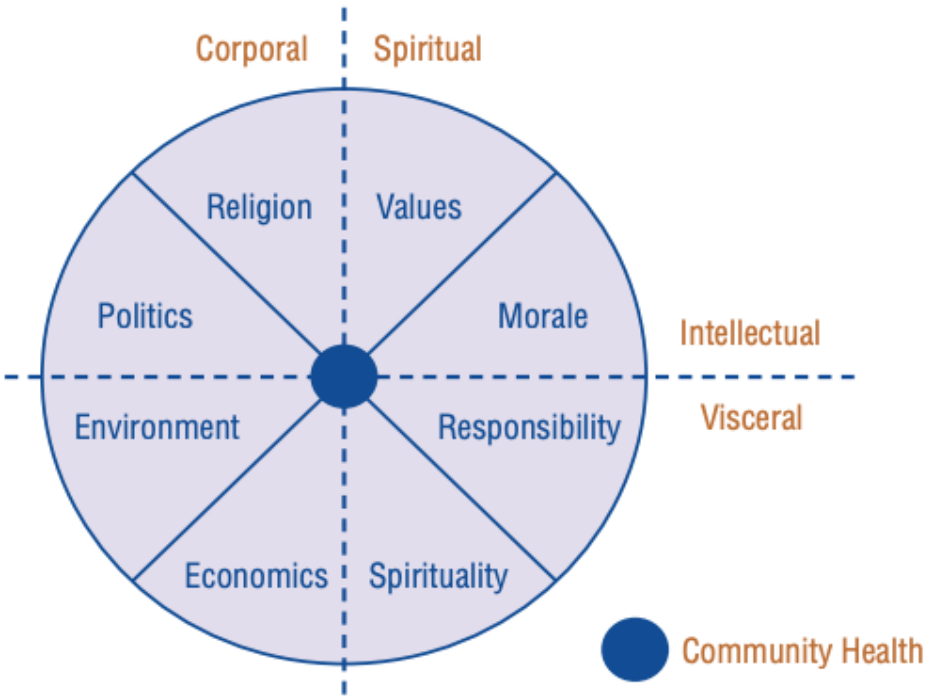


Figure 33 The Community Life Indicators Wheel (First Nations Centre 2007). Source: https://achh.ca/wp-content/uploads/2018/07/Guide_Community_FNC_HealthIndicatorsInformationResource.pdf

The Aboriginal Community Health Indicator Project

The Aboriginal Community Health Indicator Project, initiated in 2000, was born out of a collaboration between the Mohawk Council of Akwesasne, Little Red River Cree Nation, Miawpukek First Nation and the Institute of the Environment at the University of Ottawa. As explained by the First Nations Centre (2007), the project developed community health indicators based on First Nations community perspectives and starting with the "Life Indicator Wheel" (originally developed as part of the EAGLE project) according to the following principles: "First Nations communities must be understood by the people who live in them… indicators should be culturally sensitive and reflect the interconnectedness of the physical, mental, emotional, and spiritual aspects of life. The approach of developing indicators at the community level calls for a strong respect for the community and its members. It requires seeing the world through the eyes of the people who live in the community and reporting it in their words" (First Nations Centre 2007, 13).

The project resulted in the creation of First Nations indicators, organized according to paired aspects of the Community Life Indicators (Figure 33), which included:

Economics-Values

- Number of hunters in the community
- Catch rate of ungulates (e.g. deer)
- Ungulate population

Environment-Morale

- Number of community or group celebrations
- Size of forest area
- Extent and types of forest usage

Religion-Spirituality

- Number of drums in community
- Number of drumming occasions per year
- Number of religious space (e.g. churches, sweat lodges) in the community

The First Nations Health Reporting Framework

The Assembly of First Nations developed the First Nations Health Reporting Framework (FNHRF) "as an alternative to the Federal Aboriginal Health Reporting Framework" (First Nations Centre 2007, 14). The First Nations model was designed to specifically "maximize the value of reporting for community health planning, and implement reciprocal accountability between FNIHB and First Nations" based on a literature review and a set of guiding principles, including (*Ibid*.):

- Support reciprocal accountability;
- Serve both as a planning and reporting tool;
- Allow for comparison with Canadian data;
- Include feasible/existing indicators;
- Respect the principles of OCAP (Ownership, Control, Access and Possession).

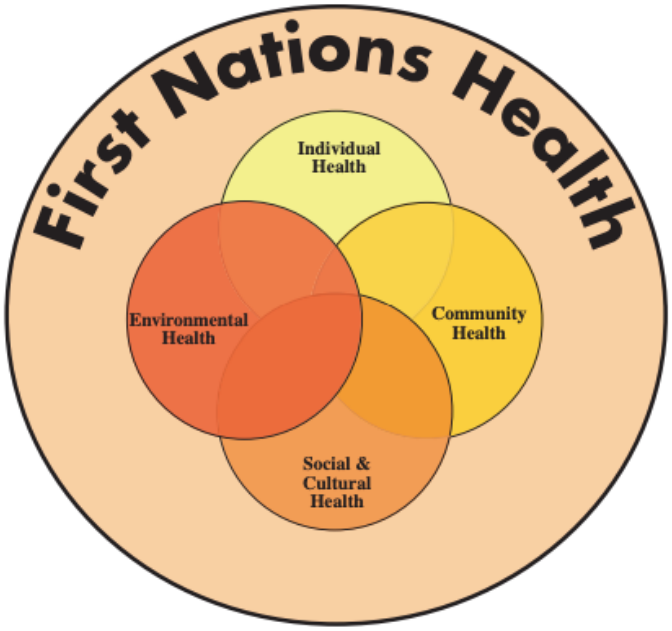


Figure 34 The First Nations Determinants of Health (First Nations Centre 2007), source: https://achh.ca/wp-content/uploads/2018/07/Guide_Community_FNC_HealthIndicatorsInformationResource.pdf

The Social Determinants of Inuit Health in Canada

In 2013, Inuit Tapiriit Kanatami (ITK), the national representative organization of the Inuit in Canada, produced a report which outlined the social determinants of health relevant to the Inuit populations of Canada, which predominantly live in Inuit Nunangat, the Inuit homeland, which encompasses 51 communities across the Inuvialuit Settlement Region (Northwest Territories), Nunavut, Nunavik (Northern Québec), and Nunatsiavut (Northern Labrador), representing approximately one third of Canada's landmass (ITK 2014). Inuit Nunangat is predominantly owned or co-managed by the Inuit through land claims agreements as well as a variety of governance arrangements, including shared jurisdiction between Inuit and public governments to self-government the Inuit of Canada (ITK 2019).

Initially developed as a discussion paper on a holistic view of health for the World Health Organization (WHO) in 2007, ITK produced a revised and updated version drawing on consultations with members of the Inuit Public Health Task Group (IPHTG), a subcommittee of the National Inuit Committee on Health. This work was informed by work previously undertaken as part of the 2007/2008 Inuit Health Survey *"Qanuqitpit? Qanuippitali? Kanuivit?" "How about us? How are we?"* to gather meaningful and relevant information for the Inuit of Canada about the health and wellness of Inuit adults, children and communities in the Inuvialuit Settlement Region, Nunavut and Nunatsiavut. The survey was intended to improve health care planning, personal health and community wellness for Inuit in each of the three regions by conducting a comprehensive and long-term health and wellness survey that:

- uses up-to-date scientific and research practices
- responds to Inuit needs and priorities
- is culturally appropriate and acceptable
- is developed in a participatory partnership and co-owned, in the long-term, by Inuit and community representatives (Nunavut Inuit Health Survey n.d.).

The discussion paper on the social determinants of Inuit health produced by ITK was developed as a resource in support of public health activities across Inuit regions in Canada and as a reference for organizations and governments working within the Canadian health and social services sector (ITK 2014). To ITK, a key action for this framework's successful implementation is the support of increasing levels of self-determination in Inuit regions (*Ibid*.). Following the World Health Organization, social determinants of health are defined in this document as the conditions or circumstances in which Inuit people are born, grow, live, work and age, including the health system. Further influenced by policy choices, these reflect the distribution of power and resources at multiple scales. Social determinants of health affect health inequities, notably though unfair and avoidable differences in health status, as well as the access to essential goods and services (ITK 2014, 11). ITK identified 11 key factors articulated as key social determinants that specifically impact the health outcomes of Inuit in Canada (see table below).

Table 2 Key social determinants, challenges and ley positive efforts towards Inuit health in Canada (ITK 2014).

Key social determinants of Inuit health	Challenges	Key Positive Efforts
Quality of early childhood development;	- Infant mortality; - Food insecurity and poor nutrition; - Overcrowded housing and stressful home environments; - Poverty; - Lack of access to quality health care facilities and support; - Culturally appropriate screening and assessment for growth and development; and - Substance abuse and smoking during pregnancy.	- Building a continuum of care for mothers and children from pre-pregnancy through pregnancy and childbirth to the early years of life; Encouraging breastfeeding and minimizing exposure to alcohol; - Providing access to Inuit-specific early childhood education opportunities; - Including Elders in child raising activities; and - Expanding access to Inuit midwifery and bringing birthing closer to home.
Culture and language;	- Rapid cultural and linguistic change among Inuit communities as a result of the legacy of residential schools and colonialism; and - An increasing prevalence of English combined with a decline in the use of Inuktitut.	- Drafting of legislation to protect and support Inuit language and culture in Inuit regions; - Expanding the use of Inuit language in workplaces and schools; and - Supporting community-based Inuit language and culture programming.
Livelihoods	- Lack of adequate employment in Inuit communities.	- Supporting harvesting activities; and - Establishing Impact and Benefit Agreements (IBAs) for major development projects in Inuit Land Claims areas.
Income distribution	- Lack of adequate opportunities for generating income in Inuit communities; and	- Increasing numbers of Inuit in apprenticeship programs; - Maximizing Inuit participation in training opportunities; and

	- High living costs across Inuit regions.	- Increasing recruitment and retention of qualified Inuit.
Housing	- Housing shortages and high rental costs; - Poor quality housing and ventilation; - High cost of home construction and repair in Inuit regions; and - Homelessness.	- Expanding federal, provincial and territorial funding for housing construction in Inuit communities; and - Developing and implementing multi-year initiatives for expanding social housing.
Personal safety and security	- Domestic violence and sexual abuse; - Children as witnesses of violence; and - Substance abuse and alcohol misuse.	- Increasing front-line workers and culturally appropriate community support, counselling, and healing; - Raising awareness and reducing tolerance of abuse; and - Expanding a harm reduction approach and associated strategies.
Education	- Low education attainment levels; - Relatively few post-secondary programs available in Inuit communities; and - Continuing lack of Inuit teachers at all education levels.	- Developing leaders in Inuit education; - Increasing the number of bilingual educators; - Investing in Early Years programming; - Expanding Inuit-centred curriculum and language resources; and - Expanding post-secondary options in Inuit communities.
Food security	- High rates of unemployment and underemployment; - Low household incomes; - Lack of access to adequate levels of quality foods including access to country foods; and - High cost of living, including the high cost of store-bought foods in Inuit communities.	- Expanding employment opportunities in Inuit communities; - Supporting programs to reduce the cost for shipping food and increasing access to country foods; - Increase number of nutrition education initiatives that encourage Inuit to make more nutritious food choices; - Developing food security strategies; and - Establishing harvester support programs and other community initiatives.
Availability of health services	- Less access to medical specialists and/or diagnostic testing; - Lack of long-term / continuing care options, particularly for those requiring a high level of care;	- Supporting the recruitment and retention of health-care providers in Inuit communities; - Increasing the use of telehealth; - Orienting, and educating healthcare workers to provide culturally relevant health services; and

	- Medical transfers to the south can be isolating or a deterrent to seek care; - Lack of adequate cultural orientation for health care providers; and - Few Inuit nurses or other medical staff, and related staffing shortages.	- Increasing the number of birthing centres staffed by Inuit midwives.
Mental wellness	- Intergenerational trauma relating to the legacy of residential schools; - Addictions; and - Youth suicide.	- Expanding culturally relevant mental wellness programs and supports; - Supporting Inuit-specific research and training focusing on mental health; and - Developing community-based initiatives in support of suicide prevention
The environment	- Contaminants entering the environment; and - Climate change and associated changes to the land and sea environment.	- Increasing monitoring of environmental factors to support adaptive measures addressing environmental change; and - Building capacity in Inuit health research through trainee support and strategic funding initiatives in key environmental health areas.

ITK's social determinants of health framework provides a holistic outlook on the overall health status of Inuit in opposition to commonly referenced indicators, which focus on health deficits, such as the higher rates of infant mortality, food insecurity, suicide, or infectious diseases relative to the total population in Canada, neglecting "Key Positive Efforts" that contribute to Inuit wellness. Substantial work are required to address the conditions underscoring the Inuit Nunangat's high rates of suicide, respiratory tract infections, smoking, and other ailments, associated with widespread housing shortages, unemployment, acculturation stress, inadequate incomes and low educational attainment throughout the Inuit regions (ITK 2014, 38). The orgnisation emphasizes the need for future health initiatives adhering to a more holistic view of social determinants of health as they relate to Inuit specifically and which accordingly focus on issues such as food security, acculturation, and livelihoods as well as specific health outcomes.

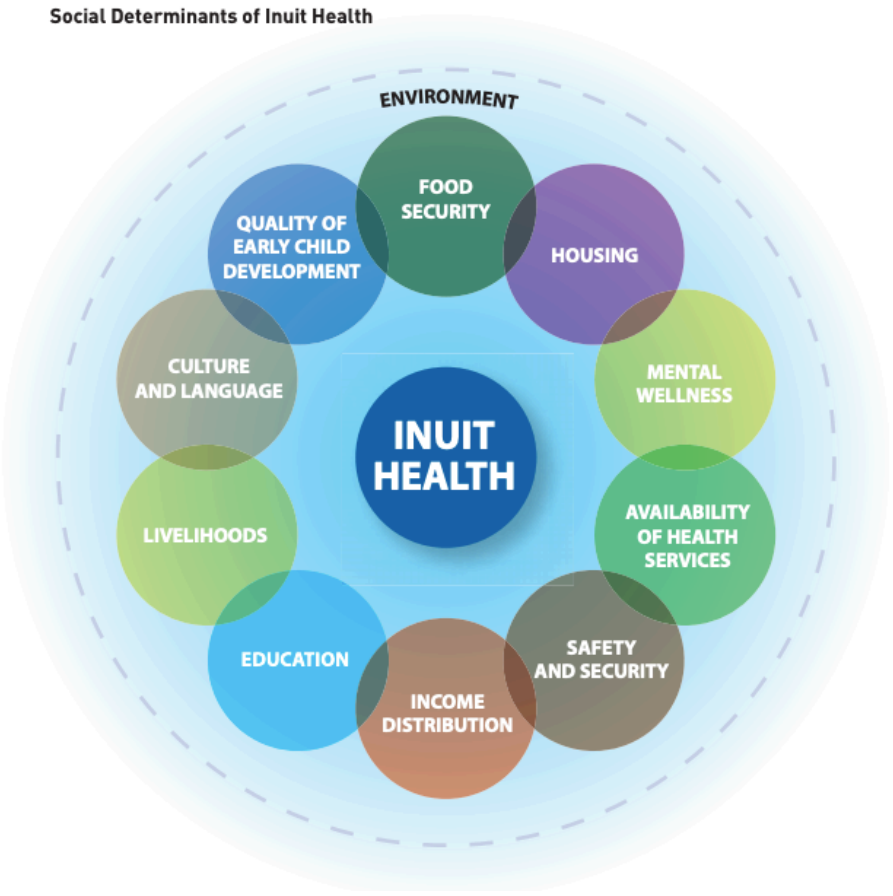


Figure 35 Key social determinants, challenges and ley positive efforts towards Inuit health in Canada (ITK 2014).

While most indicators are not strengths-based, they can provide the evidence required to highlight the changes needed to ensure that Inuit live healthy and fulfilling lives. Furthermore, as Inuit move towards self-determination in research and data activities, Inuit-specific strengths-based indicators could more accurately reflect the values, circumstances and objectives which determine the meaning and experiences of well-being and development. Such data-based and Inuit-informed indicators would enable the Inuit "to tell [their] own stories in [their] own ways, and to showcase [their] many strengths" (ITK 2018, 23)

Figure 36 Social Determinants of Inuit Health, posted by ITK on Twitter December 10, 2018 (https://twitter.com/itk_canadainuit/status/1072152010823094272?lang=en)

The Arctic Social Indicators

The 2014 Arctic social indicators are categorized into six domains: Health and Population, material Well-being, education; cultural Well-being– belonging to a viable local culture; contact with Nature – interacting closely with the natural world; and fate control – guiding one's destiny (Nymand Larsen and Nordic Council of Ministers 2014).

In the early 21st century, the Arctic Council commissioned the first Arctic Human Development Report (AHDR) under the auspices of the Arctic Council (2002–2004). Its main objective was to provide a comprehensive knowledge base for the Arctic Council's Sustainable Development Program, which could serve as a point of departure for assessing progress in the future (AHDR, 2004: 15 *in* Nordic Council of Ministers, 2014: 15). Arctic social indicators (ASI) were created to monitor trends in human development and to track changes in Arctic human well-being.

Several conditions guided the choice of indicators. An indicator had to be the most accurate statistic for measuring both the level and extent of change in the social outcome of interest. It should adequately reflect what it is intended to measure and, ideally, there should be wide support for the indicators chosen so they will not be changed regularly. It is critical that the chosen indicators are consistent over time and across places, as the usefulness of indicators is related directly to the ability to track trends over time and to compare levels of well-being in different regions (Nymand Larsen and Nordic Council of Ministers 2014).

The ASI more specifically referred to six conditions in the selection of appropriate social reporting and monitoring indicators: data availability (whether a measure exists and if it is retrievable), data affordability (the ongoing costs of data collection and monitoring), ease of measurement (how simple and straightforward data are to measure in a broadly accepted manner), robustness (the temporal stability of the indicator over time), scalability (the extent to which the data used to measure the chosen indicator can be collected at different geographical scales) and inclusiveness (if it effectively represents all sectors of the Arctic population: male and female, indigenous and non-indigenous, rural and urban, etc.) (Nymand Larsen and Nordic Council of Ministers 2014, 33–35). Six domains were chosen accordingly: Health and Population Domain, material Well-being Domain, education Domain; cultural Well-being Domain – belonging to a viable local culture; contact with Nature Domain – interacting closely with the natural world; and fate Control Domain – guiding one's destiny (Nymand Larsen and Nordic Council of Ministers 2014)

Conclusion

This report reveals the diversity of frameworks that attempt to define the conditions and capacities required for Indigenous persons and peoples to thrive, generally understood as an ability to lead a satisfying, rewarding and fulfilling life without compromising the well-being of future generations. Each is founded on a vision, such as to examine the changing situation of a population within a given time interval or period; to close the gap between Indigenous and non-Indigenous populations, or to determine whether indigenous populations are doing better or worse on certain well-being indicators, expressed through general objectives and specific targets. While there is no single indicator or framework that can perfectly capture the multiple, complex and inherently personal experiences of well-being, the concept of well-being offers a practical lens through which one can examine the factors or conditions that contribute to the ability of persons and communities to live healthy and meaningful lives. These determinants include the transient needs and requirements that emerge from the events shaping a person's life course, as well as the social structures, systems and institutions responsible of the enduring health inequities between particular subgroups of a given population.

While the need for quality data is particularly relevant for indigenous governments to put in place "solid policies and programs effectively, to demonstrate accountability, and to be transparent to their citizens", there is a general lack of disaggregated data in sufficient quality and quantity for longitudinal or comparative studies (Steffler 2016, 149). Well-being frameworks necessarily reflect these challenges, as their objectives must be formulated and reached in light of the possibilities and limitations these involve. Indices and collection of indicators can offer efficient monitoring tools to communicate dense amounts of data and complex realities clearly and concisely. These are useful for both interpretation and for making the indicators a useful tool for policy accountability. Qualitative methods can additionally be used to shape a framework and analyze the data gathered through its implementation, such as to clarify whether the dimensions proposed are suitable or relevant; to enhance the relevance and reliability of quantitative findings; to discuss trends and possible anomalies, as well as to uncover and explain the complex relationship between well-being determinants.

Aside from evaluating and monitoring the well-being of Indigenous communities and Nations, well-being frameworks and indicators should foster constructive public discussions over development priorities and objectives, and ultimately reinforces the legitimacy, capabilities, resources and accountability of governments (Taylor 2008).

Ultimately, these should further promote cooperation between different societal actors, groups, organizations as well as the government.

Frameworks should also build on the conclusions drawn from academic studies, as well as relevant government and international initiatives. The World Health Organization, for example, identifies five key areas that governments should consider to resolve health inequities: (i) governance for health and development; (ii) participation in policy-making and implementation; (iii) the reorientation of the health sector to reduce health inequities; (iv) strengthening global governance and collaboration; and (v) monitoring progress and increase accountability (World Health Organization 2019, 2). The OECD also highlights the need to address the specific challenges and opportunities of Indigenous peoples, such as the centrality of governance and self-determination, as well as the continuing effects of colonial policies when building analytical frameworks for understanding and assessing Indigenous well-being in relation to economic development.

As pointed out by Yap and Yu (2016, 317), well-being is also, and most importantly, having "autonomy over one's life and how individuals choose to live their life, but also about people's autonomy over the decisions and responsibility to care for and manage their country and land as part of their existing and enduring well-being". Effective governance, whether for small groups or large nations, means being capable of "future-oriented planning, problem-solving, evaluating outcomes, developing strategies and taking remedial action" (Smith 2016, 124). This requires demographic facts and contextual knowledge of the strengths, assets, resources, and expertise a nation, community, or organisation already has and can bring to bear. It also means knowing a community's existing infrastructure, technology, funding sources and base, among other things (Smith 2016). As explained by Cairney et al. (2017), the way in which governance bodies define and measure well-being should not, therefore, merely be considered as an expression of a society's values and goals, but also through the strong influence it exercises on peoples' daily lives through government policies. These discussions underscore those pertaining to the governance of data – that is, "who has the power and authority to make rules and decisions about the design, interpretation, validation, ownership, access to and use of data" – speaks of the struggle of Indigenous governments and organizations to meaningfully partake in the definition of a well-being framework (D. Smith 2016, 119).

Moving forward, this review highlights several considerations. As argued by the New-Zealand government, the cross-cutting nature of many social issues means that social well-being indicators are not a tool for evaluating the effectiveness of specific government policies (Ministry of Social Development 2016, 14). Instead, these should enable governments, civil society and citizens to monitor trends across key dimensions, compare well-being scores with other population groups (communities, regions or nations), support better-informed public debates, inform planning and decision-making process and identify areas where actions are needed (Ministry of Social Development 2016, 14). To live to this potential, however, requires a coordinated approach and collaboration between governments and academics. This would ensure that socio-economic and health information on of each indigenous community is accessible, useful and relevant. Standardization is also necessary for documenting the progress on closing the socio-economic gaps between Indigenous and non-Indigenous communities, as well as over time.

Several notable initiatives and projects are taking place across Canada. For example, certain First Nations governments and organizations have developed data agreements with federal and/or provincial/territorial governments (Trevethan 2019). Additionally, standardized socio-economic outcome indicators are being co-developed by the Assembly of First Nations and the Government of Canada, and the First Nations Information Governance Centre has been put in place to support the development of information governance and management systems at the community level through regional and national partnerships, including surveys on First Nations reserves (Trevethan 2019). Indigenous governments have also been undertaking their own data collection. The Nisga'a Nation of northwestern British Columbia, as represented by the Nisga'a Lisims Government (NLG), launched the Quality of Life Strategy to enhance the living conditions of Nisga'a citizens (Bouchard et al. 2019). A national

First Nations statistical entity or network has also been identified as a potentially effective way "to optimize the coordination and consistency of First Nations data and ensure that First Nations governments have access to the data they require for planning, decision-making and reporting" (Trevethan 2019, 2). Documenting the process and outcomes of these initiatives would allow other communities and nations, interested in possibly doing something alike, to learn from their accomplishments as well as their shortcomings.

References

Abele, Frances, and Michael J. Prince. 2006. "Four Pathways to Aboriginal Self-Government in Canada." *American Review of Canadian Studies* 36(4): 568–95.

AFN. 2006. *First Nations' Wholistic Approach to Indicators*. Ottawa, ON (Canada): Assembly of First Nations Canada. http://caid.ca/AFNUNIndWelBei2006.pdf.

———. 2017. *The First Nations Health Transformation Agenda*. Ottawa, ON (Canada): Assembly of First Nations. https://www.afn.ca/uploads/files/fnhta_final.pdf.

———. 2018. *First Nations Health Transformation Summit – Getting the Relationships Right: Health Governance in the Era of Reconciliation*. Toronto, ON - Traditional Territories of the Mississaugas of the New Credit First Nation: Assembly of First Nations. Summit Report. https://www.afn.ca/wp-content/uploads/2019/06/19-01-30-Health-Summit-Report-DRAFT-V4.pdf.

AFN, Health Canada, and National Native Addictions Partnership Foundation. 2012. *Honouring Our Strengths: A Renewed Framework to Address Substance Abuse Issues among First Nations People in Canada*. Ottawa, ON (Canada). http://nnadaprenewal.ca/wp-content/uploads/2012/01/Honouring-Our-Strengths-2011_Eng1.pdf.

Albanesi, Cinzia. 2014. "Focus Groups." In *Encyclopedia of Quality of Life and Well-Being Research*, ed. Alex C. Michalos. Dordrecht: Springer Netherlands, 2310–13. https://doi.org/10.1007/978-94-007-0753-5_1066.

Aragón, Fernando M. 2015a. "Do Better Property Rights Improve Local Income?: Evidence from First Nations' Treaties." *Journal of Development Economics* 116: 43–56.

———. 2015b. "The Effect of First Nations Modern Treaties on Local Income." *SSRN Electronic Journal*. http://www.ssrn.com/abstract=2683584 (February 16, 2019).

Assembly of First Nations. 2013. *A Transitional Discussion Document on the Social Determinants of Health*. Canada. http://health.afn.ca/uploads/files/sdoh_afn.pdf.

Barrington-Leigh, Christopher, and Alice Escande. 2018. "Measuring Progress and Well-Being: A Comparative Review of Indicators." *Social Indicators Research* 135(3): 893–925.

Bauer, Raymond A. 1966. "Social Indicators and Sample Surveys." *Public Opinion Quarterly* 30(3): 339.

Borrows, John. 2016. "Legislation And Indigenous Self-Determination In Canada and The United States." In *From Recognition to Reconciliation*, eds. Patrick Macklem and Douglas Sanderson. Toronto: University of Toronto Press, 474–505. http://www.degruyter.com/view/books/9781442624986/9781442624986-021/9781442624986-021.xml (February 12, 2019).

Bouchard, Karen, Adam Perry, Bobby Clark, and Thierry Rodon. 2019. "Measuring Well-Being in the Context of Modern Treaties:Challenges and Opportunities." *Northern Public Affairs*: 66–69.

Braun, Virginia, and Victoria Clarke. 2013. *Successful Qualitative Research: A Practical Guide for Beginners*. sage.

Burger, Julian. 2019. "After the Declaration: Next Steps for the Protection of Indigenous Peoples' Rights." *The International Journal of Human Rights* 23(1–2): 22–33.

Burton, Tony. 2018. "The Treasury Approach to the Living Standards Framework." *New Zealand Treasury*. https://treasury.govt.nz/publications/tp/treasury-approach-living-standards-framework-html (February 5, 2020).

Cairney, Sheree et al. 2017. "Interplay Wellbeing Framework: A Collaborative Methodology 'Bringing Together Stories and Numbers' to Quantify Aboriginal Cultural Values in Remote Australia." *International Journal for Equity in Health* 16(1): 68.

Cambou, Dorothée. 2019. "The UNDRIP and the Legal Significance of the Right of Indigenous Peoples to Self-Determination: A Human Rights Approach with a Multidimensional Perspective." *The International Journal of Human Rights* 23(1–2): 34–50.

Cameron, Kirk. 2019. "Resolving Conflict between Canada's Indigenous Peoples and the Crown through Modern Treaties: Yukon Case History." *New England Journal of Public Policy* 31(1): 12.

Camfield, Laura, Gina Crivello, and Martin Woodhead. 2009. "Wellbeing Research in Developing Countries: Reviewing the Role of Qualitative Methods." *Social Indicators Research* 90(1): 5–31.

Chaaban, Jad, Alexandra Irani, and Alexander Khoury. 2016. "The Composite Global Well-Being Index (CGWBI): A New Multi-Dimensional Measure of Human Development." *Social Indicators Research* 129(1): 465–87.

Chino, Michelle et al. 2019. "Improving Health Data for Indigenous Populations: The International Group for Indigenous Health Measurement." *Statistical Journal of the IAOS* 35(1): 15–21.

CIRNAC. 2011. *Instituting a Federal Framework for the Management of Modern Treaties*. Ottawa: Dept. of Indian Affairs and Northern Development. http://publications.gc.ca/collections/collection_2011/ainc-inac/R3-149-2011-eng.pdf (April 1, 2019).

Clarke, Victoria, Virginia Braun, and Nikki Hayfield. 2015. "Thematic Analysis." *Qualitative psychology: A practical guide to research methods*: 222–48.

Cooke, Martin et al. 2005. *The First Nations Community Well-Being Index (CWB): A Conceptual Review*. Ottawa: Strategic Research and Analysis Directorate, Indian and Northern Affairs Canada. https://central.bac-lac.gc.ca/.item?id=cwb_e&op=pdf&app=Library (February 12, 2019).

———. 2007. "Indigenous Well-Being in Four Countries: An Application of the UNDP'S Human Development Index to Indigenous Peoples in Australia, Canada, New Zealand, and the United States." *BMC International Health and Human Rights* 7(1). https://bmcinthealthhumrights.biomedcentral.com/articles/10.1186/1472-698X-7-9 (February 11, 2019).

Cooke, Martin, Daniel Beavon, and Mindy McHardy. 2013. "Measuring the Well-Being of Aboriginal People: An Application of the United Nations Human Development Index to Registered Indians in Canada, 1981–2001." 1: 24.

Cooke, Martin, and Erin O'Sullivan. 2015. "The Impact of Migration on the First Nations Community Well-Being Index." *Social Indicators Research* 122(2): 371–89.

Corntassel, Jeff. 2007. “Partnership in Action? Indigenous Political Mobilization and Co-Optation during the First UN Indigenous Decade (1995-2004).” *Human Rights Quarterly* 29(1): 137–66.

———. 2012. “Re-Envisioning Resurgence: Indigenous Pathways to Decolonization and Sustainable Self-Determination.” *Decolonization: Indigeneity, Education & Society* 1(1): 16.

Cummins, Robert A. 2018. “Subjective Wellbeing as a Social Indicator.” *Social Indicators Research* 135(3): 879–91.

Denis, Jeffrey S, Gérard Duhaime, and David Newhouse. 2017. “Indigenous Conceptions of Well-Being: Rejecting Poverty, Pursuing Mino-Bimaadiziwin.” *Journal of Aboriginal Economic Development* 10(2): 124–146.

Department of Indian Affairs and Northern Development, Ottawa (Ontario). 1997. *Gathering Strength: Canada’s Aboriginal Action Plan*. ERIC Clearinghouse.

Dockery, Alfred Michael. 2010. “Culture and Wellbeing: The Case of Indigenous Australians.” *Social Indicators Research* 99(2): 315–32.

Dokis, Carly A. 2010. “Modern Day Treaties: ‘Development’, Politics, and the Corporatization of Land in the Sahtu Dene and Métis Comprehensive Land Claim Agreement.” 30: 32–59.

Édouard, Roberson, and Gérard Duhaime. 2013. “The Well-Being of the Canadian Arctic Inuit: The Relevant Weight of Economy in the Happiness Equations.” *Social Indicators Research* 113(1): 373–92.

First Nations Centre. 2007. *Understanding Health Indicators*. Ottawa: National Aboriginal Health Organization. https://achh.ca/wp-content/uploads/2018/07/Guide_Community_FNC_HealthIndicatorsInformationResource.pdf (April 9, 2020).

Flanagan, Tom. 2019. *Specific Claims and the Well-Being of First Nations*. Fraser Institute.

FNHA. 2019. *Health and Wellness Planning: A Toolkit for BC First Nations*. British-Columbia, Canada: First Nations Health Auhority. https://www.fnha.ca/WellnessSite/WellnessDocuments/FNHA-Health-and-Wellness-Planning-A-Toolkit-for-BC-First-Nations.pdf (February 10, 2020).

———. 2020. “First Nations Perspective on Health and Wellness.” *First Nations Health Authority*. https://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/first-nations-perspective-on-wellness (February 10, 2020).

FNIGC. 2018. *National Report of the First Nations Regional Health Survey - Phase 3: Volume 1*. First Nations Information Governance Centre.

Gilbert, Jérémie, and Corinne Lennox. 2019. “Towards New Development Paradigms: The United Nations Declaration on the Rights of Indigenous Peoples as a Tool to Support Self-Determined Development.” *The International Journal of Human Rights* 23(1–2): 104–24.

Gordon, Janet, and Kimberly Matheson. 2018. “An Holistic Approach to Promoting Resilience and Bimaadiziwin among First Nations Youth in Communities in Northwestern Ontario.” *Northern Public Affairs*: 6.

Greenwood, Margo, Sarah De Leeuw, and Nicole Marie Lindsay. 2018. *Determinants of Indigenous Peoples' Health: Beyond the Social*. Canadian Scholars.

Grove, Natalie, Mark Brough, Condy Canuto, and Annette Dobson. 2003. "Aboriginal and Torres Strait Islander Health Research and the Conduct of Longitudinal Studies: Issues for Debate." *Australian and New Zealand Journal of Public Health* 27(6): 637–41.

Guimond, Éric, Erin O'Sullivan, and Jean-Pierre Morin. 2013. *Community Well-Being and Treaties: Trends for First Nation Historic and Modern Treaties.* Gatineau, Canada: Strategic Research Directorate, Aboriginal Affairs and Northern Development Canada. https://central.bac-lac.gc.ca/.item?id=R3-182-2013-eng&op=pdf&app=Library (February 12, 2019).

Health Canada. 2015. *First Nations Mental Wellness Continuum Framework.* https://central.bac-lac.gc.ca/.item?id=H34-278-1-2014-eng&op=pdf&app=Library (September 30, 2019).

Indigenous and Northern Affairs Canada. 2015. "The Community Well-Being Index: Report on Trends in First Nations Communities, 1981-2011." https://www.aadnc-aandc.gc.ca/eng/1345816651029/1345816742083 (April 1, 2019).

ITK. 2014. *The Social Determinants of Inuit Health in Canada*. Ottawa, ON (Canada): Inuit Tapiriit Kanatami. https://www.itk.ca/wp-content/uploads/2016/07/ITK_Social_Determinants_Report.pdf.

———. 2018. *Inuit Statistical Profile 2018*. Ottawa, Canada: Inuit Tapiriit Kanatami. https://www.itk.ca/wp-content/uploads/2018/08/20191125-Inuit-Statistical-Profile-revised-1.pdf.

———. 2019. *Arctic and Northern Policy Framework: Inuit Nunangat*. Ottawa, Canada: Inuit Tapiriit Kanatami. https://www.itk.ca/wp-content/uploads/2019/09/20190907-arctic-and-northern-policy-framework-inuit-nunangat-final-en.pdf.

Jackson Pulver, Lisa et al. 2010. "Indigenous Health: Australia, Canada, Aotearoa, New Zealand and the United States: Laying Claim to a Future That Embraces Health for Us All."

Kant, Shashi, Ilan Vertinsky, Bin Zheng, and Peggy M. Smith. 2014. "Multi-Domain Subjective Wellbeing of Two Canadian First Nations Communities." *World Development* 64: 140–57.

Kenny, Alison. 2014. *Measuring Aboriginal Community Wellbeing: A Review of Methodological Approaches and Analysis of AANDC's Practices*. Implementation Branch, Treaties and Aboriginal Government Sector, AANDC.

Kolahdooz, Fariba, Forouz Nader, Kyoung J. Yi, and Sangita Sharma. 2015. "Understanding the Social Determinants of Health among Indigenous Canadians: Priorities for Health Promotion Policies and Actions." *Global Health Action* 8(1): 27968.

Kral, Michael J. et al. 2011. "Unikkaartuit : Meanings of Well-Being, Unhappiness, Health, and Community Change Among Inuit in Nunavut, Canada." *American Journal of Community Psychology* 48(3–4): 426–38.

Kral, Michael J., and Lori Idlout. 2012. "It's All in the Family: Wellbeing Among Inuit in Arctic Canada." In *Happiness Across Cultures*, eds. Helaine Selin and Gareth Davey. Dordrecht: Springer Netherlands, 387–98. http://www.springerlink.com/index/10.1007/978-94-007-2700-7_26 (February 11, 2019).

Krieger, Tobias et al. 2014. "Measuring Depression with a Well-Being Index: Further Evidence for the Validity of the WHO Well-Being Index (WHO-5) as a Measure of the Severity of Depression." *Journal of Affective Disorders* 156: 240–44.

Kulchyski, Peter, and Warren Bernauer. 2014. "Modern Treaties, Extraction, and Imperialism in Canada's Indigenous North: Two Case Studies." *Studies in Political Economy* 93(1): 3–24.

Kwiatkowski, Roy E., Constantine Tikhonov, Diane McClymont Peace, and Carrie Bourassa. 2009. "Canadian Indigenous Engagement and Capacity Building in Health Impact Assessment." *Impact Assessment and Project Appraisal* 27(1): 57–67.

Linton, Myles-Jay, Paul Dieppe, and Antonieta Medina-Lara. 2016. "Review of 99 Self-Report Measures for Assessing Well-Being in Adults: Exploring Dimensions of Well-Being and Developments over Time." *BMJ Open* 6(7): e010641.

Lucas-Carrasco, Ramona. 2012. "Reliability and Validity of the Spanish Version of the World Health Organization-Five Well-Being Index in Elderly: Validity of the Spanish WHO-5 in Elderly." *Psychiatry and Clinical Neurosciences* 66(6): 508–13.

MacDonald, Cathy, and Audrey Steenbeek. 2015. "The Impact of Colonization and Western Assimilation on Health and Wellbeing of Canadian Aboriginal People." *International Journal of Regional and Local History* 10(1): 32–46.

Maggino, Filomena, and Marco Fattore. 2014. "Multidimensional Analysis" ed. Alex C. Michalos. *Encyclopedia of Quality of Life and Well-Being Research*: 4173–75. https://doi.org/10.1007/978-94-007-0753-5_1868.

Manning, Matthew, Christopher L. Ambrey, and Christopher M. Fleming. 2016. "A Longitudinal Study of Indigenous Wellbeing in Australia." *Journal of Happiness Studies* 17(6): 2503–25.

McDonald, Chris, Ana I. Moreno-Monroy, and Laura-Sofia Springare. 2019. *Indigenous Economic Development and Well-Being in a Place-Based Context*. . OECD Regional Development Working Papers. https://www.oecd-ilibrary.org/urban-rural-and-regional-development/indigenous-economic-development-and-well-being-in-a-place-based-context_bf4514b6-en (February 9, 2020).

Michalos, Alex C., and Kenneth C. Land. 2018. "Replies to Our Commentators." *Social Indicators Research* 135(3): 1057–78.

Ministry of Social Development. 2016. *The Social Report 2016 - Te Pūrongo Oranga Tangata*. New Zealand: Ministry of Social Development.

Mitrou, Francis et al. 2014. "Gaps in Indigenous Disadvantage Not Closing: A Census Cohort Study of Social Determinants of Health in Australia, Canada, and New Zealand from 1981–2006." *BMC Public Health* 14(1): 201.

Mowbray, Martin. 2007. *Social Determinants and Indigenous Health: The International Experience and Its Policy Implications*. Commission on Social Determinants of Health.

Nathenson, Sophia. 2014. "Indigenous Health Disparities" ed. Alex C. Michalos. *Encyclopedia of Quality of Life and Well-Being Research*: 3227–29. https://doi.org/10.1007/978-94-007-0753-5_1447.

NCCAH. 2012. *The State of Knowledge of Aboriginal Health: A Review of Aboriginal Public Health in Canada*. Prince George, BC: National Collaborating Centre for Aboriginal Health. https://www.ccnsa-nccah.ca/docs/context/RPT-StateKnowledgeReview-EN.pdf.

———. 2019. *The United Nations' Sustainable Development Goals (SDGs) and Indigenous Peoples in Canada*. Prince George, BC: National Collaborating Centre for Aboriginal Health (NCCAH). Report summary. https://www.nccih.ca/495/Report_summary__The_United_Nations_Sustainable_Development_Goals_and_Indigenous_Peoples_in_Canada.nccih?id=256.

NCCIH. 2020. "About Our Work." *National Collaborating Centre for Indigenous Health*. http://www.nccah-ccnsa.ca/en/ (February 16, 2020).

Noll, Heinz-Herbert. 2018. "Social Monitoring and Reporting: A Success Story in Applied Research on Social Indicators and Quality of Life." *Social Indicators Research* 135(3): 951–64.

Nozal, Ana Llena, and Fabrice Murtin. 2019. *The Economy of Well-Being Creating Opportunities for People's Well-Being and Economic Growth*. Organisation for Economic Co-operation and Development (OECD). SDD WORKING PAPER.

Nymand Larsen, Joan, and Nordic Council of Ministers, eds. 2014. *Arctic Social Indicators: ASI II: Implementation*. Copenhagen: Nordic Council of Ministers.

O'Connell, Emily, Tia Greenaway, Trevor Moeke, and Sacha McMeeking. 2018. "He Ara Waiora/A Pathway Towards Wellbeing (DP 18/11)." https://treasury.govt.nz/publications/dp/dp-18-11-html (February 10, 2020).

OECD. 2013. *OECD Guidelines on Measuring Subjective Well-Being*. OECD. https://www.oecd-ilibrary.org/economics/oecd-guidelines-on-measuring-subjective-well-being_9789264191655-en (April 13, 2020).

———. 2018. "Measurement of Economic Performance and Social Progress." *Organisation for Economic Co-operation and Development*. https://www.oecd.org/statistics/measuring-economic-social-progress/aboutthehigh-levelexpertgroup.htm (February 4, 2020).

———. 2019. "Measuring Well-Being and Progress: Well-Being Research - OECD." http://www.oecd.org/statistics/measuring-well-being-and-progress.htm (April 1, 2019).

Orkin, Kate. 2014. "Data Collection Methods." In *Encyclopedia of Quality of Life and Well-Being Research*, ed. Alex C. Michalos. Dordrecht: Springer Netherlands, 1430–32. https://doi.org/10.1007/978-94-007-0753-5_664.

O'Sullivan, Erin, and Mindy McHardy. 2004. *The Community Well-Being (CWB) Index: Disparity in Well-Being Between First Nations and Other Canadian Communities Over Time*. Gatineau, Que.: Strategic Research and Analysis Directorate Indian and Northern Affairs Canada.

O'Sullivan, Erin, and Sacha Senécal. 2014. "Aboriginal Community Well-Being Index" ed. Alex C. Michalos. *Encyclopedia of Quality of Life and Well-Being Research*: 1–5. https://doi.org/10.1007/978-94-007-0753-5_3740.

Papillon, Martin. 2008. “Aboriginal Quality of Life under a Modern Treaty: Lessons from the Experience of the Cree Nation of Eeyou Istchee and the Inuit of Nunavik.” *IRRP Choices* 14(9): 28.

———. 2012. “Adapting Federalism: Indigenous Multilevel Governance in Canada and the United States.” *Publius: The Journal of Federalism* 42(2): 289–312.

Parlee, Brenda, and John O’Neil. 2007. “‘The Dene Way of Life’: Perspectives on Health From Canada’s North.” *Journal of Canadian Studies* 41(3): 112–33.

Pega, Frank, Nicole Valentine, Don Matheson, and World Health Organization. 2010. *Monitoring Social Well-Being to Support Policies on the Social Determinants of Health: The Case of New Zealand’s “Social Reports/Te Pũrongo Oranga Tangata.”* Geneva: World Health Organization. http://www.who.int/social_determinants/corner/SDHDP3.pdf (December 12, 2019).

Pendakur, Krishna, and Ravi Pendakur. 2018. “The Effects of Modern Treaties and Opt-In Legislation on Household Incomes in Aboriginal Communities.” *Social Indicators Research* 137(1): 139–65.

Penney, Chris, Erin O’Sullivan, and Sacha Senécal. 2013. *The Community Well-Being Index (CWB): Examining Well-Being in Inuit Communities, 1981-2006*. Gatineau, Que.: Aboriginal Affairs and Northern Development Canada. http://www.deslibris.ca/ID/234940 (February 12, 2019).

Peterson, M. J. 2010. “How the Indigenous Got Seats at the UN Table.” *The Review of International Organizations* 5(2): 197–225.

Productivity Commission. 2020. “Overcoming Indigenous Disadvantage.” *Overcoming Indigenous Disadvantage*. https://www.pc.gov.au/research/ongoing/overcoming-indigenous-disadvantage (February 9, 2020).

Reading, Charlotte, and Fred Wien. 2013. *Health Inequalities and Social Determinants of Aboriginal Peoples’ Health*. Prince Geaorge, B.-C.: National Collaborating Centre for Aboriginal Health. http://lfs-ubcfarm.sites.olt.ubc.ca/files/2018/02/Reading-C.L.-Wien-F.-2009.pdf.

Richmond, Chantelle A. M., and Catherine Cook. 2016. “Creating Conditions for Canadian Aboriginal Health Equity: The Promise of Healthy Public Policy.” *Public Health Reviews* 37(1): 2.

Richmond, Chantelle A.M. 2009. “The Social Determinants of Inuit Health: A Focus on Social Support in the Canadian Arctic.” *International Journal of Circumpolar Health* 68(5): 471–87.

Russell, Dan. 2000. *A People’s Dream Aboriginal Self-government in Canada*. Vancouver [B.C.]: UBC Press. Accès via dèsLibris http://www.deslibris.ca/ID/404328.

Saku, James, and Robert Bone. 2000. “Modern Treaties in Canada: The Case of Northern Québec Agreements and the Inuvialuit Final Agreement.” *The Canadian Journal of Native Studies* 20(2): 283–307.

Sangha, Kamaljit K. 2019. “Failure of Mainstream Well-Being Measures to Appropriately Reflect the Well-Being of Indigenous and Local Communities and Its Implications for Welfare Policies.” (3): 14.

Sasakamoose, JoLee et al. 2017. “Miýo-Pimātisiwin Developing Indigenous Cultural Responsiveness Theory (ICRT): Improving Indigenous Health and Well-Being.” *International Indigenous Policy Journal* 8(4). https://ojs.lib.uwo.ca/index.php/iipj/article/view/7527 (July 9, 2019).

Senécal, Sacha, Erin O'Sullivan, Eric Guimond, and Sharanjit Uppal. 2008. "Applying the Community Well-Being Index and the Human Development Index to Inuit in Canada." *Aboriginal Policy Research Consortium International (APRCi)* 4: 25.

Smith, Diane. 2016. "Governing Data and Data for Governance: The Everyday Practice of Indigenous Sovereignty." In *Indigenous Data Sovereignty*, eds. Tahu Kukutai and John Taylor. ANU Press. http://press-files.anu.edu.au/downloads/press/n2140/pdf/ch07.pdf (July 12, 2019).

Smith, Lisa M. et al. 2015. "Evaluating the Transferability of a U.S. Human Well-Being Index (HWBI) Framework to Native American Populations." *Social Indicators Research* 124(1): 157–82.

Smith, Veronica S. 2013. "Data Dashboard as Evaluation and Research Communication Tool: Data Dashboard as Evaluation and Research Communication Tool." *New Directions for Evaluation* 2013(140): 21–45.

Statistics Canada. 2018. "Census Subdivision: Detailed Definition." https://www150.statcan.gc.ca/n1/pub/92-195-x/2011001/geo/csd-sdr/def-eng.htm (April 17, 2019).

Steffler, Jeanette. 2016. "The Indigenous Data Landscape in Canada: An Overview." *aboriginal policy studies* 5(2): 149–64.

Stiglitz, Joseph, Amartya Sen, and Jean-Paul Fitoussi. 2009. "The Measurement of Economic Performance and Social Progress Revisited." *Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris*.

Summers, J. Kevin, Lisa M. Smith, Linda C. Harwell, and Kyle D. Buck. 2017. "The Development of a Human Well-Being Index for the United States." In *Quality of Life and Quality of Working Life*, ed. Ana Alice Vilas Boas. InTech. http://www.intechopen.com/books/quality-of-life-and-quality-of-working-life/the-development-of-a-human-well-being-index-for-the-united-states (April 12, 2020).

Taylor, John. 2008. "Indigenous Peoples and Indicators of Well-Being: Australian Perspectives on United Nations Global Frameworks." *Social Indicators Research* 87(1): 111–26.

Te Puni Kōkiri. 2019. "An Indigenous Approach to the Living Standards Framework (DP 19/01)." *New Zealand Treasury*. https://treasury.govt.nz/publications/dp/dp-19-01-html (February 10, 2020).

Tonon, Graciela. 2014. "Qualitative Methods." In *Encyclopedia of Quality of Life and Well-Being Research*, ed. Alex C. Michalos. Dordrecht: Springer Netherlands, 5255–57. https://doi.org/10.1007/978-94-007-0753-5_2339.

Topp, Christian Winther, Søren Dinesen Østergaard, Susan Søndergaard, and Per Bech. 2015. "The WHO-5 Well-Being Index: A Systematic Review of the Literature." *Psychotherapy and Psychosomatics* 84(3): 167–76.

Trevethan, Shelley. 2019. *Strengthening the Availability of First Nations Data*. Ottawa, Canada: Indigenous Services Canada & the Assembly of First Nations. https://www.afn.ca/wp-content/uploads/2019/05/NCR-11176060-v1-STRENGTHENING_THE_AVAILABILITY_OF_FIRST_NATIONS_DATA-MAR_25_2019-FINAL_E.pdf.

University of Waterloo. 2012. "The Canadian Index of Wellbeing Framework." *Canadian Index of Wellbeing*. https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/framework (February 24, 2020).

White, Sarah C., Stanley O. Gaines, and Shreya Jha. 2012. "BEYOND SUBJECTIVE WELL-BEING: A CRITICAL REVIEW OF THE STIGLITZ REPORT APPROACH TO SUBJECTIVE PERSPECTIVES ON QUALITY OF LIFE: Beyond Subjective Well-Being." *Journal of International Development* 24(6): 763–76.

Wien, Fred et al. 2019a. "First Nation Paths to Well-Being: Lessons from the Poverty Action Research Project." *Global Health Promotion* 26(3_suppl): 6–16.

———. 2019b. "First Nation Paths to Well-Being: Lessons from the Poverty Action Research Project." *Global Health Promotion* 26(3_suppl): 6–16.

Wingert, Susan. 2013. "Well-Being in First Nations Communities: A Comparison of Objective and Subjective Dimensions." : 23.

Yap, Mandy, and Eunice Yu. 2016. "Operationalising the Capability Approach: Developing Culturally Relevant Indicators of Indigenous Wellbeing – an Australian Example." *Oxford Development Studies* 44(3): 315–31.