This chapter presents an Aboriginal health systems framework for the organization of health services to Aboriginal communities. The term “Aboriginal health systems” is not commonly used in the Canadian health services literature. This is not surprising in that there are numerous reasons to query whether or not Aboriginal health systems actually exist. Firstly, there are multiple jurisdictions involved in health services to Aboriginal communities, a situation which is a classic impediment to the co-ordination, linkages and integration one would generally expect from a “system.” Secondly, Aboriginal communities have only in the past ten to fifteen years achieved any meaningful control over even a part of the health services within their territories or populations. Thirdly, Aboriginal health systems imply that the services delivered would be alternative or traditional rather than those that the mainstream system provides. Fourthly, Aboriginal suggests a homogenous milieu of First Nations, Inuit, Métis and other Aboriginal populations, a perception that is rejected out of hand by all Aboriginal groups.

Despite the challenges inherent in the statements above, Aboriginal health systems, be they First Nations, Inuit, Métis or a collaboration of all groups, do exist in many different forms across Canada. This chapter will highlight the contributions of different Aboriginal nations and communities in advancing a model of health service delivery that improves access to health care, contains costs, responds to local needs, uses resources effectively, emphasizes population wellness over individual health, and ultimately improves the health status of the population. These systems have been strengthened by self-empowerment realized through Aboriginal ownership and control of health services. They are founded on a holistic approach to health and wellness, much like the broad health determinants model strived for in other health systems. Traditional and Western health philosophies are synergistically combined to result in uniquely Aboriginal approaches to health services, and within the constraints imposed by multiple jurisdictions, the system is organized around multidisciplinary primary care. Integrated health service delivery in an Aboriginal context has many expressions, from
multi-community partnerships to the ability to pool funds from various sources into a single health envelope.

The Aboriginal health systems framework presented in this chapter is based on currently available knowledge obtained from the documented experiences of Aboriginal and non-Aboriginal health systems, and the outcomes of a series of meetings held to discuss First Nations, Metis, Inuit and urban health systems convened by the National Aboriginal Health Organization (NAHO). These discussions were followed by a synthesis discussion as part of a forum “Dialogue on Aboriginal Health: Sharing our Challenges and Successes” jointly sponsored by NAHO and the Commission on the Future of Health Care in Canada in June 2002. The authors recognize that there are Aboriginal health systems other than those summarized here. The framework is being presented to stimulate a needed debate on how other models or frameworks for Aboriginal health systems may continue to evolve.

The needs of Aboriginal populations with respect to health are vast, and will not be addressed by a single simplistic solution. There are many as yet unmet challenges in addressing the myriad of poor health issues in Aboriginal communities, whether they be rural, reserve or urban. These include health provider recruitment and training issues; ensuring access and restructuring services to focus on holistic population health; providing supportive technology, infrastructure and capacity development; and adapting existing health programs and services to meet the cultural, social, economic and political realities of different Aboriginal groups.

This chapter addresses in detail only one facet in the response to this complex array of health needs and concerns: the governance, funding and broad structure of the health system. It is our premise—supported by successful Aboriginal health systems across Canada—that only when meaningful control is vested in Aboriginal people themselves will effective, sustainable solutions to health issues become possible. Furthermore, the present, multi-jurisdictional patchwork quilt of health services, unless remedied, will limit the success of any system-wide health reform.

The definition of an Aboriginal health system used in this discussion is:

All organizations, institutions and resources that are devoted to producing health actions in an Aboriginal community, where the health action is defined as any effort, whether in personal care, public health services or through intersectoral or interjurisdictional initiatives, whose primary purpose is to improve health.¹

This is a broad definition—how to interpret it and realize Aboriginal health systems in terms of governance, system design and financing form the core of this chapter. The model advanced is one of integration, or as it was originally coined by Shortell and others in 1993, an organized delivery
system (ODS). They described ODS as “networks of organizations that provide or arrange to provide a coordinated continuum of services to a defined population and who are willing to be held clinically and fiscally accountable for the outcomes and health status of the population being served.” From this initial broad description, the concept of integrated health systems has emerged that are inclusive of all levels of care, from primary through tertiary, rehabilitative and continuing care, and focus specifically on the co-ordination of health services and collaboration among providers and provider organizations in service delivery.

At this point in time, health reform in Canada has not achieved a fully integrated delivery system, as provinces have geographically co-ordinated and integrated facets of health services into regional models with local governance. Commonly, either similar activities such as hospital services have been consolidated (horizontal integration) or a portion of various activities across the continuum of care have been brought under a common umbrella (vertical integration).

To preface this discussion of an Aboriginal health systems framework, an overview of major drivers in the Canadian environment that are supportive of devoluted, integrated health delivery models is provided, as is an overview of the benefits of integration and the barriers and challenges to its implementation.

Drivers for Health Service Integration

The drivers for integration in an Aboriginal context are economic—the need to find cost-efficiencies in a financially constrained system that can then be applied to priority health concerns. They are social, in that a system is required that will provide better health care and result in improved population health outcomes. They are also political in the sense that Aboriginal communities are seeking self-determination through self-government. In terms of health, this means control of all resources that are directed to health services for residents in their communities. The Royal Commission on Aboriginal Peoples (RCAP) recognized the need for a holistic approach to health services, which are Aboriginally controlled and based on a population health model. In their 1996 report, the commissioners proposed an integrated service delivery model that would bridge jurisdictions and individual ministries and be responsible for pooled resources from all sources, including federal, provincial, territorial, municipal and Aboriginal. This model would operate through a system of healing centres and lodges under Aboriginal control and situated in urban, rural and reserve settings.
A unified Aboriginal health policy focus was missing in the early years after RCAP that could sustain the momentum towards a reformed Aboriginal health system. In 2000, the National Aboriginal Health Organization (NAHO) was created as an Aboriginally run, non-profit corporation encompassing the health-related interests of all Aboriginal groups in Canada. Similarly to RCAP, NAHO has advanced an integrated system as a key element for health service change. In 2001, NAHO made submissions to the two national health care studies/commissions that were conducting consultations: the Standing Senate Committee on Social Affairs, Science and Technology, which was investigating the federal role in the health of Canadians (Kirby Report); and the Commission on the Future of Health Care in Canada (Romanow Report).

In both, NAHO stressed the need for permissive policy development at federal and provincial levels that would allow for the creation of integrated health system models, where communities, tribal councils or other groupings of Aboriginal people would control health funds from all jurisdictions and deliver health services based on the needs of the population.5, 6

This vision of an integrated health system supported by block funding was a common theme in community presentations at an Aboriginal Forum sponsored by NAHO and the Commission on the Future of Health Care in Canada in 2002. Its commissioner, Roy Romanow, provided his interpretation of this vision when he recommended in his final report that Aboriginal health funding be consolidated from all sources and be pooled into Aboriginal health partnerships that would manage and promote health services for Aboriginal peoples. These partnerships recommended by Romanow would have a broad mandate, encompassing all levels of health services, and recruitment and training strategies. Key elements of the Romanow partnership model include

- per capita funding based on the number of persons who sign up to be served by the partnership (capitation), where the funds are obtained from the consolidated budgets in each region, province or territory;
- operation through a fund-holder model where the partnership would have responsibility for organizing, purchasing and delivering health care services that are defined based on the scope of the partnership. This could vary from large regional health authorities to community or urban partnerships; and
- a not-for-profit community governance structure with a board comprising representatives of the funders (all Aboriginal and non-Aboriginal governments) and other individuals involved in establishing the partnership (key organizers, users and health care providers).7
The other major health study in this time period—that of the Senate Standing Committee led by Senator Michael Kirby—did not advance an Aboriginal-specific integration model but strongly supported the concept in the broader provincial and territorial health systems. In volume six of *Recommendations for Reform*, through its intensive examination of the federal role in the health of Canadians, strong support is given to regional health service delivery seen in many provinces. The regional health authority (RHA) model was praised by the Senate Committee as doing a “commendable job of integrating and organizing health services for people in their regions in the last decade in Canada.” The RHA model varies greatly throughout nine provinces (all except Ontario) and one territory (Northwest Territories) in terms of population served and services administered by the authorities. Not surprisingly, the consensus definition of an RHA is broad, and speaks of autonomous health organizations, defined geographic regions, mandate for administration of health services and governance that is generally appointed and has the responsibility for funding and delivering community and institutional services.

The Senate Committee observed that greater integration of health services is found through increased responsibility for decision making over the full range of health services, enhanced responsibility for planning and better control over the allocation of resources. These were all seen as appropriate roles for RHAs in the publicly funded health system of today and in the future. More specifically, the committee recommended that RHAs’ control over health services be extended to include physician services and prescription drug spending, and that RHAs should have the ability to choose between providers on the basis of quality and costs.

The integration of Aboriginal health systems was not specifically considered by the Senate Committee. Their major contribution in this area was to recommend that the federal government undertake, in collaboration with the provinces, territories and Aboriginal representatives of all groups, the development of a National Action Plan on Aboriginal Health to improve interjurisdictional co-ordination of health service delivery.

**Aboriginal Models of Health and Social Service Integration**

In Aboriginal health systems, integration has many expressions, spanning functional (financial and/or administrative) and clinical models. For example, some communities have financially and clinically integrated continuing care services where funding may be received from Health Canada, Indian and Northern Affairs Canada (INAC) and, in some cases, the provincial government. In five Health Transition Fund home care pilot projects in First Nations and Inuit communities, home care (Health Canada) and adult care
(INAC) were functionally and clinically integrated. Positive developments, which were linked to integration, included the increased professionalism and/or self-esteem of staff, improvements to the overall quality of care and appreciation by clients for this improved quality and accountability and a decreased number of complaints regarding services due to improved program management.\textsuperscript{11}

The Aboriginal Healing and Wellness Strategy (AHWS) in Ontario—which funds ten health access centres in rural and urban locations—features a primary care model that integrates Western and traditional medicine, is community-based and includes a multidisciplinary team comprising salaried physicians, different levels of nursing expertise (nurse practitioners, registered nurses and/or licensed practical nurses), a nutritionist, psychologist, traditional coordinator, diabetes educator and others. In the first phase of a longitudinal evaluation of the health access centres, components were identified that form the core of the centres’ effective, distinctive service delivery. These include a supportive environment where staff are role models, mentors and friends, and a marrying of traditional and Western approaches to care. Clinical interventions encompass cultural teachings and spiritual development in a holistic balance of the physical, mental, spiritual and emotional aspects of a person. Furthermore, the evaluation found that communities were empowered through the use of centres as community resources.\textsuperscript{12}

Administrative efficiencies can be an important outcome of financially integrating Health Canada and INAC health and health-related programs. In one tribal council (anonymous), the efficiencies realized from the dismantling of program stovepipes have been invested into ongoing, community-driven continuing education for all health and social employees. The common governance ensures that a system-wide focus is maintained and adjustments can be made quickly in response to new programming or health system needs.\textsuperscript{13}

Weeneebayko Health Authority in northern Ontario is in the process of developing an integrated health system. Hospital, physician, dental and some community health services are now being administered by the authority. It was created out of a vision that all provincial and federal health services and programs could be united under one board, which had fair and balanced representation from the communities. The authority receives funds from both the provincial (including funds for physicians who are then contracted from an academic centre) and federal governments. Both levels of government contribute to the hospital budget.

The Nisga’a Valley Health Board provides another model of a federal-provincial health resource integration. The remoteness and small size of its four member communities has meant that the system focuses on community
health, nursing stations and a diagnostic and treatment centre—the latter two provide 24/7 care. The board provides health services to all residents within its territory, including the non-Aboriginal population. All communities are capable of first response treatment. The system relies on a strong budgetary system, which clearly defines the scope of services funded and value for money on a program-specific basis. Benchmarks and goals are set and regularly evaluated.  

The Labrador Inuit Health Commission (LIHC) delivers Inuit-specific health programming to the seven Inuit communities of Labrador via a $13 million dollar health system that employs 120 people. It has responsibility for Health Canada’s community health programs and the non-insured health benefits (NIHB) program, as well as the province’s community and public health services. This scope is expected to expand when the Labrador Inuit land claim agreement-in-principle is successfully concluded. This agreement will include a provision for self-government that will facilitate the transfer of responsibility for provincial treatment centres and nurses to the LIHC. At this time, hospital and physician services are not being considered for transfer to the LIHC.  

Perhaps the most comprehensive examples of an integrated Aboriginal health system are the two regional health and social service boards established as a result of the James Bay and Northern Quebec Agreement (JBNQA). Both the James Bay Cree and the Inuit of Nunavik operate health systems under a provincially legislated authority. Under the terms of the JBNQA, federal funds for health flow to the Quebec government, which then funds the two regional boards in a manner similar to other regional boards in the province. In both the Crees’ and Inuits’ cases, the health authority has responsibility for hospitals (establishments), community-based nursing stations and health clinics in their respective territories.  

One observation of integrated health systems, particularly the provincial approach, is that there have been few evaluations that substantiate claims of improved access, more efficient use of resources and better health outcomes. In the AHWS evaluation of four health access centres, 87% of urban respondents and 64% of rural respondents reported that their centre had improved access to health care “a lot or a great deal.” A high level of satisfaction with the full range of services was reported, including emotional and mental health services, health promotion activities and spiritual guidance. This was attributed, in part, to the way the services are provided, the non-judgemental attitude of staff and their respect for cultural and spiritual beliefs.
The experiences of Aboriginal health systems with integrating health services have provided some general lessons:

- integration requires flexibility in designing Aboriginal/federal/provincial/territorial relationships and approaches;
- clinical integration is a priority in communities, particularly better communication mechanisms such as case management that bridges provincial and Aboriginal health care providers, or health and social service agencies that use a multidisciplinary team approach to holistically meet the needs of their clients;
- a primary objective of integration is to facilitate the organization of the community health system around primary care;
- the health governance structure is segregated from the administration of health services. Accountability to communities is achieved through a community-appointed board, dialogue between communities and the executive director, performance measures and/or annual community-based consultations;
- in northern areas of provinces, where Aboriginal people share primary care services with other residents, the most practical health systems are those that administer both federal and provincial services to all residents;
- devolving second- and third-level federal health services (such as nursing supervision or medical officer of health) to First Nations communities require multi-community partnerships in order to achieve the necessary economies of scale;
- alternative physician reimbursement mechanisms, such as salaries, facilitate integrated multidisciplinary care focussed on holistic, population-based health programs;
- administration of basic health services by individual communities will promote capacity development and should be a moderating force in the move towards centralization that often accompanies an integrated health system;
- innovative models are required for Aboriginal communities that are very small and that cannot find workable partnership arrangements; and
- the presence of multiple federal departments, each with their own multiple program funding arrangements presents real opportunities for administrative cost efficiencies when integrated financial agreements are struck. Health systems gain flexibility in designing programs and allocating resources based on existing and emerging needs.19, 20

Despite the stated advantages to Aboriginal health systems, which have integrated health and social services or are moving in this direction, this approach has been spotty across the country. In the absence of any formal...
federal or provincial policy that would support integration, change has often required a unique set of circumstances where officials from all jurisdictions have a good working relationship, and Aboriginal leadership have the vision and commitment to tackle system change. Altering long-established policies and practices of providers and gathering community support for change takes time. Particularly in larger communities, integration of services can lead to fears of job loss. Officials in government departments can also be entrenched in their beliefs, making it difficult to obtain buy-in from all government levels required. The federal government has not integrated its programs internally, which causes additional barriers to seamlessly combining programs and services at the delivery level. Auditor General Sheila Fraser, in her 2002 review of federal reporting and audit requirements in selected First Nations communities, found that a First Nation without multi-year funding arrangements may have to submit as many as 200 reports annually. She added her voice to the many First Nations and Inuit who have called for more co-ordinated and streamlined federal programming.

Existing provincial policies can hinder or create disincentives to integration. Through a federal, provincial and academic collaboration, Eskasoni First Nation embarked upon integrated primary care that sought to improve access and co-ordination of local health services. It has realized significant health system improvements over a three-year period, with reductions in physician, outpatient and emergency room visits, concurrent with the establishment of an interdisciplinary health team. However, the province will only provide primary care funding for physicians, with a small amount of overhead in the physician contracts that can be applied to nurse clinician or nurse practitioner positions. This has resulted in a ratio of three funded physician positions to one nurse clinician, and a heavy medical bias to the model. In additions, savings from the provincial hospital system, estimated to be $250,000 annually, from reduced outpatient and emergency room utilization are not recoverable by the community and cannot be reinvested into extending the integration model to further areas such as substance abuse and mental health.

Challenges to health service integration, which have been summarized by Howard et al., include medical model dominance and focus on the diagnosis of disease, role ambiguity and lack of trust among providers, lack of readiness to change, lack of education and training in multidisciplinary care and inadequate information systems. Although these issues have been summarized from many different health systems, they are universal to integration and often more acute in Aboriginal systems.

System redesign will take a high amount of management time and resources, and change cannot be implemented at the expense of existing service delivery. This means that, although savings may be created in the long term, resources will initially be required for community consultation, needs
assessments and community health plans, capital improvements, training, and project management. Furthermore, the financial health of the community may affect its ability to institute an integrated system. For example, if one program has a significant deficit, then financially merging programs may mean that existing funds from a second program are used to cover this deficit.

**Lessons from Other Health Systems**

In 1996, a World Health Organization study group identified the following positive impacts of integrated health services:

- cost-effective health services, including improved efficiency and productivity (such as better use of staff time and less duplication);
- cost-savings related to reduced training (i.e., one multi-purpose health professional versus many);
- improved health status that was credited to a holistic, client-empowered approach to care;
- improved satisfaction by users; and
- improved equity as responsibilities for health care are redistributed among the public, non-governmental and private providers as appropriate.²⁵

Integrated health service delivery in Canada is somewhat paradoxical, in that it is championed by many provinces as a key feature in their RHA models. However, some contend that in reality there is little integration occurring. Leatt et al., in a review of Canadian integrated health care, flatly stated that a RHA without responsibility for physicians and pharmaceuticals cannot provide integrated health care. Other hallmarks of integrated systems seen internationally are also missing in the Canadian context, for example, capitation for all practitioners with money following the consumer, membership defined by consumer choice through rostering, financial incentives to providers for good performance, system-wide and provider-specific information systems and a primary care focus.²⁶

In 2001, the B.C. Select Standing Committee on Health reported that regionalization based on boundaries has promoted a fragmented system with redundancies and duplications, poor co-ordination, competition among service providers for control of resources and little or no incentives for collaboration. Providers may place their own concerns over retaining autonomy and existing practices ahead of change directed at improving patient health.²⁷

Despite this, testimony to the Senate Standing Committee and related literature suggest that integration and co-ordination of institutions and organizations under a RHA model can provide greater efficiencies and higher quality of service, allow for the use of least costly providers commensurate
with accessibility and individual health goals, and enhance a RHA’s ability to respond to service demands through integrated responses such as home care, continuing care and acute care.28

Using geographic boundaries to define a system’s catchment population, such as regions, may impede natural population flows within the health system. Population in one region may seek both primary and secondary care across the boundaries if it is more convenient. In the Netherlands, geographic monopolies were replaced by roster-based systems of related, competitive, integrated organizations.29 This has direct relevance to Aboriginal health where secondary and tertiary care is often provided from institutions at distances far from the patient’s community.

Integrated systems can exist through networking of organizations without financial pooling of resources. These virtual networks have been proposed as a good intermediary step towards an ultimate governance model. In this approach, organizations that provide full continuum care can partner around common visions and goals as well as more practical issues of client flow, care protocols and information systems.30 In many respects, this has already happened out of necessity in Aboriginal health systems, when communities develop protocols with neighbouring communities, RHAs, hospitals and private providers for certain programs and services.

New Zealand has implemented a system of budget holding where purchasers and providers of services are separate. Maori organizations are involved in budget holding as health service purchasers to enrolled members. For example, in an urban environment where Maori are dispersed throughout the city, a Maori organization may have capitation contracts with physicians to provide primary care to people enrolled in the organization. Other organizations may hold funds for secondary care, which allow Maori to contract with specialists and hospitals on a performance contract basis. Other examples of budget holding include pharmacies, pathology services, disability services, community nursing services and traditional healers.31

There are significant dissimilarities between Maori and Canadian Aboriginal peoples in terms of relationship with the federal government, number of treaties, presence of Aboriginal governments and the recognition of the inherent right to self-government. As well, there is only one New Zealand health system under federal control. The success of Maori organizations with budget holding is likely due, in large part, to their guaranteed political representation in Parliament, as well as legislation that imparts a statutory obligation of district health boards to foster Maori capacity to participate in the health and disability sector, and to provide for their own needs. This includes exploring new health provider models if Maori communities have identified these as appropriate. Maori providers include Maori development organizations, Maori co-funding organizations.
and collectivities of Maori providers. Between 1993 and 2000, the number of independent Maori providers increased from approximately 20 to more than 2,000. These providers are seen as key players in reducing access barriers and improving the effectiveness and appropriateness of services to Maori.\(^{32}\)

Lessons from Australia’s experience with integrated delivery systems suggest that not everyone requires integrated primary health care—the most effective systems are those that service individuals and families that do. Nine co-ordinated care trials with over 16,000 participants were initiated in different parts of Australia in 1997. The interim evaluation results were inconclusive on many system outcomes, such as client health and well-being, service cost and use, and hospitalization.\(^{33}\) However, the trials did show that the most successful ones were those that were targeted to a specifically defined population. The Aboriginal trials were directed at reforming local health care systems and delivering locally based and managed comprehensive primary care services in a culturally appropriate manner. Significant progress was noted in improving health service access, health care planning and population health programs that address priority community needs—all of which was linked to the many partnerships among government, communities, health services and organizations.\(^{34}\)

### A Framework for Aboriginal Health Systems

**Organize the health system around multi-disciplinary primary care health service delivery and administration, featuring a single entry point and case management.**

Often integration has focussed on the higher levels of service delivery, bringing together hospitals, long-term care services, public health, rehabilitation and emergency services under common governance. This level of integration, while important, does not automatically ensure that a multi-disciplinary approach exists that is complementary to board level partnerships and can facilitate a seamless continuum of care at the patient level.

Many Aboriginal communities have a strong foundation in community health services from which to build a comprehensive integrated system. Generally speaking, this is less the circumstance in Métis communities. A criticism of international initiatives has been that little consideration has been given to co-ordinating services at the community and individual levels, providing consumers with information, or understanding their needs and
preferences.\textsuperscript{35} This is one area where many Aboriginal communities are well prepared. First Nations involved in Health Transfer, a financial mechanism to transfer control of federal health programs, have completed community health plans as part of the implementation process. The community health focus of urban Aboriginal health centres has also meant that extensive consultations were undertaken on grassroots health needs and service design of the centres.

**Establish a health authority that is accountable to the member Aboriginal communities.**

The characteristics of the legal entity that will serve as the service organization for the respective community will vary depending on the province, territory and other political-legal circumstances relevant to the population being serviced. A key element of success is the selection of a governing board based on the communities and groups that are members of the authority. In the Romanow model, seats are designated for major funders (federal, provincial/territorial), as well as key organizers, users and health care providers. While this may be considered, depending on the design of the system and perceived contributions of the partners and scope of services covered, there is equal consideration that such a model would not be consistent with Aboriginal interest in self-government and self-determination. An alternative may be to have ex-officio participation of major funders at the planning stages. In any case, Aboriginal directors must form the majority of voting members on the board. Governance design is a separate topic in itself; even so, it is fair to state that total membership, generally, should not exceed twenty as an absolute upper limit, which has been associated with effective board operation.

Establishment of a health authority board provides a distance between communities' political systems and the health service delivery system. A “neutral” governing body can act as a buffer so that health care does not become a political commodity, as well as provide the context for a non-political approach to decision making. The health authority board can ensure accountability through an appointment process of its directors—by member communities and/or community elections—and annual performance and financial reporting requirements. A performance orientation to governance should include the ongoing review of health status, service access, user/stakeholder satisfaction, cost-effectiveness of services, evaluation of partnership initiatives, collaboration and communication.
**Involve practitioners in the system planning and governance in order to instill a sense of ownership in the system.**

To facilitate staff retention and promote better system outcomes, various practitioners, viewpoints, and needs should be recognized in the administrative and organizational structure of the health system. Traditionally, physicians have provided a gate-keeper role in the health system; for example, they are fund holders in Britain and are often the administrative choices for program managers in Canadian hospitals. The exclusion of other health professional groups from administrative decisions that affect them has been criticized as contradictory to the notion of professional autonomy and independence of practice and thought to be a contributing factor to staff turnover and burnout. Aboriginal custom, which stresses consensus and consultation, provides the opportunity for a system management strategy that is broadly inclusive of all health professionals.

**Define the population to be served by the health authority.**

Both Aboriginal and non-Aboriginal individuals should be eligible to join the health authority. In rural and remote areas, the catchment population will initially be based on geography (e.g., partnerships of communities that share existing or potential client flows). Individuals would register with the health authority’s roster in order to receive services. This would ensure all persons are accounted for in the health authority’s budget. Rostering implies that individuals have a choice whether or not to join the health services. However, in rural and remote First Nations and Inuit communities, such a choice generally would not exist. The population base could not support two parallel systems—the status quo and the health authority. Rostering is more critical in urban populations, as the Aboriginal health authority would be a relatively small component of the provincial system, and persons interested in registering would be dispersed throughout the city and environs.

The entire continuum of services—from health clinics to diagnostic laboratories, outpatient care and hospital services—should be accessible by the covered population. The population size should provide sufficient economies of scale for extra human resource capacity to deal with unanticipated demand in areas such as palliative care, where the additional resources required to care intensively for one terminally ill person in the home can often overwhelm a small community health clinic.
**Structure the health authority to promote collaboration of the various service partners within the system and without.**

A number of health authorities may network or partner for certain health services, such as administration of the NIHB program, or for common goods and supplies purchased in bulk. The NIHB program client base should be a sufficient size (5,000 or higher) in order to provide a reserve pool of funds for catastrophic or unplanned events, such as epidemics. The philosophy of the health system should be to maximize networks, strategic alliances and other partnership arrangements in order to optimize patient care. Whereas integration based on ownership can produce economies of scale and ensure that a common information system and clinical practice guidelines be adopted, integration based on networks and contractual arrangements can provide flexibility, a quicker response to needs, build trust between organizations, and allow organizations to identify services they provide well and obtain others from partners.37

**Encompass a broad health and health-related spectrum in the health authority’s services.**

The scope of the system will include all federally and provincially/territorially funded health services as well as social programs that are closely linked to the health system. In a First Nations context, this would include the adult care, child care and family violence programs funded by INAC, and in other Aboriginal systems, comparable provincial or territorial programming. Clinical patterns of care are beyond the scope of this framework, except for the observations that the system would be inclusive of both Western and traditional approaches to care depending on the needs and expectations of the rostered population. For example, care models such as the Aboriginal Medicine Wheel Life Promotion provide a holistic way for practitioners to look at the entire person and his or her environment when providing care, and are complementary to an integrated service delivery model.38

**Develop sound community health plans through extensive consultation.**

Integrated systems should incorporate needs-based planning, utilize an evidence-based decision-making process, and be designed from the bottom up, not imposed as a standard template where community needs are squeezed into a generic model. This has been a perennial complaint of First Nations and Inuit communities who object to the imposition of standard national program criteria and elements on very diverse populations. One of the strengths of the health service reforms in New Zealand was the enabling of
communities to plan their system, for example, the primary care model being implemented is flexible to accommodate a variety of approaches with no preconditions detailing ownership, population served, or location of primary care organization.39

Visible expressions of the health system should be an integral part of the community fabric, such as the use of health clinic buildings for community events during off hours. In the AHWS, this is regarded as an important component of improving accessibility of health services and promoting the community’s capacity development and self-empowerment.

A critical support element will be the approach to organizational capacity building, including sufficient resources for personnel, information systems and capital requirements. Often a limitation in Aboriginal health systems today is the lack of availability of capital projects. In an integrated approach—such as was undertaken by Akwesasne in their health and social system development—all jurisdictions (Health Canada, INAC and the Ontario and Quebec governments) put a notional capital budget into a general capital fund that was used to build a single facility. This facility then provided an infrastructure that facilitated the integration of the various program areas under a common governance and administration.

The system should feature a common clinical information system or connected information infrastructure.

Development of health information systems and technological supports for distance care (telehealth) are ongoing in Canada, in both a general health context and specific to Aboriginal systems. Common patient records, either paper or electronic, facilitate the seamless provision of a continuum of care, reduce duplication of clinical efforts, improve diagnosis and improve the overall quality of care provided to patients.40 An integrated Aboriginal health system will provide the governance and administrative framework necessary for implementation of a system that is compatible with all service settings and protects patient confidentiality.

Provide practitioners with the skills for multidisciplinary care.

The community health plan should encompass health provider education to ensure that providers have the necessary training and tools to make the change to multidisciplinary service delivery. A review of the literature on implementation of multidisciplinary teams found a positive correlation between success measures (i.e., high levels of staff morale, better diagnosis and efficient, co-ordinated care), joint training and team building exercises.41
Provide funds based on capitation and a rostered population.

Capitation financing, which provides a set amount of money per enrollee, should use a formula that adjusts for the age and sex of the rostered population, and geographic variability in the cost of health goods and services. Other adjusters are population-specific, and for the Aboriginal population could include utilization and/or prevalence rates of diabetes and arthritis, functional disabilities, mental disorders/suicides, or other community-relevant health and social indicators. In practical terms, this may mean a number of capitation formulae comprising different funding authorities that are consolidated into the health authority’s budget. Although these funds are identified with different authorities, the health authority should have the flexibility to allocate resources in response to new or emerging health priorities.

The health authority’s budget should encompass the continuum of care for either the delivery or purchase of services. The capitation amount will include community health and health-related services in all disciplines, long-term care, public health, environmental health, physician services, hospital services (community, secondary and tertiary), the NIHB program for First Nations, and provincial/territorial health benefits for other Aboriginal groups. With respect to purchased hospital services, in the vast majority of cases where there is only one hospital that serves a primarily non-Aboriginal population, this hospital’s services will be purchased back. The inclusion of an Aboriginal element in the hospital budget process will provide opportunities for a long-term partnership, and the establishment of performance goals and measures by both parties. In a truly market-driven scenario, where there are multiple hospital choices (such as in urban areas), hospitals would compete for the Aboriginal health system’s business, thereby providing the means for an ultimate performance measure. This element of competition could be a long-term goal of the system depending on provincial willingness to consider movement of resources among hospitals, particularly if the majority of their catchment populations are not members of enrolled systems. In northern environments where Aboriginal people form the majority of residents, the hospital would likely become part of the health authority and would serve both the Aboriginal and non-Aboriginal population.

Financial incentives are often cited as a positive feature in integrated delivery systems. In Canada—under its publicly funded system—consumers cannot purchase improved services (a classic incentive), and the population mass in most Aboriginal systems will not support competition among providers. Therefore providers will not have to provide a better service to attract clients, another market-based incentive. On the other hand, in a capitation system, practitioners would no longer operate through fee for
service, thus removing incentives to provide unneeded services or referrals. A guaranteed per-person health budget through capitation financing will provide incentives for an Aboriginal health authority to find efficiencies that can be used to fund more and better health programs, and support practitioner incentives to recruit and retain qualified health providers.

**Conclusion**

The health systems framework advanced in this paper is founded on holistic, multidisciplinary primary care as the central component in a network of services spanning the care continuum and uninterrupted by jurisdictional boundaries or individual funding authorities. An integrated system takes time to vision, plan and implement, and experience suggests that it should be built gradually, starting with community-based health services. A holistic model of care encompasses an individual’s physical, spiritual, social, mental and emotional well-being at personal, family, community and nation levels. An integrated health system in Aboriginal communities should not simply be a larger version of the program silos that it seeks to remedy. This will require linkages of the health system with all facets of community services, including education and training, housing, social assistance, justice and employment programs.
Endnotes

1. This definition of an Aboriginal health system has been adapted from a general definition of health systems developed by the World Health Organization.


9. Standing Senate Committee on Social Affairs, Health of Canadians, 6: 69.


15. The NIHB program provides prescription drugs, optometry services, dental services, medical aids, and medical transportation to First Nations (Registered Indians) and Inuit.


38. This model has been developed by Judith Bartlett and is currently in use at the Aboriginal Healing and Wellness Centre in Winnipeg, Manitoba.


41. Howard et al., *Primary Health Care*, 23.