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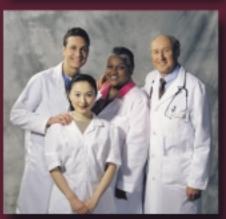
Aboriginal Health

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SYNTHESIS SERIES

Aboriginal Health

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This report is one in a series of 10 syntheses of HTF project results covering the following topics: home care, pharmaceutical issues, primary health care, integrated service delivery, Aboriginal health, seniors' health, rural health/telehealth, mental health, and children's health. The tenth document is an overall analysis. All are available electronically on the HTF website (www.hc-sc.gc.ca/htf-fass), which also contains information on individual HTF projects.

Executive Summary

he Health Transition Fund (HTF), a joint effort between federal, provincial, and territorial governments, was created out of the 1997 federal budget to encourage and support evidence-based decision making in health care reform. Between 1997 and 2001, the HTF funded approximately 140 different pilot projects and/or evaluation studies across Canada. In order to communicate research evidence from the projects to decision-makers, experts were employed to synthesize the key process and outcome learnings in each of nine theme or focus areas: home care, pharmacare, primary care/primary health care, integrated service delivery, children's health, Aboriginal health, seniors' health, rural health/telehealth, and mental health. This document summarizes the key learnings from 21 projects in the Aboriginal health theme area. It has been prepared by Aboriginal Health Consultants Madeleine Dion Stout and Gregory D. Kipling.

Aboriginal Health in Canada

Despite some improvement in their health status over the past 25 years, Canada's Aboriginal people continue to lag behind the general population in a number of areas. As a case in point, in 1991, Aboriginal men and women could expect to live 67.9 and 75.0 years respectively, compared with 74.6 and 80.9 years for Canada's non-Aboriginal population. In addition, Aboriginal people are often considerably less healthy throughout their lives. For example, a relatively large proportion of the Aboriginal population reports having a disability: 31 per cent in the case of First Nations, and 29 per cent in the case of Inuit. Another

area of concern is diabetes. While the incidence of this disease among non-Aboriginal Canadians has remained relatively stable in recent decades, its prevalence has increased rapidly among the Aboriginal population, which is now thought to suffer from it at a rate two to three times that of other Canadians. Aboriginal people are also believed to be at heightened risk of contracting a range of infectious illnesses, including sexually transmitted diseases (STDs) and tuberculosis, the latter of which has been largely eradicated among other sectors of the Canadian population.

Given the disparity in health status between Aboriginal and non-Aboriginal Canadians, it is not surprising that considerable resources have been allocated to Aboriginal health initiatives and research over the past quarter century. Between 1997 and 2001, the federal government's Health Transition Fund (HTF) allocated almost \$12 million for 21 studies dealing with Aboriginal people's health. The projects were undertaken in all regions of the country and encompassed five principal theme areas: children's health, home care, mental health, primary health care, and telehealth.

In addressing the health challenges facing the country's Aboriginal population, the initiatives were guided by one or more of the following objectives: improving Aboriginal people's health status and outcomes; removing barriers to Aboriginal people's access to the health system; and developing capacity in Aboriginal communities to plan, execute, and evaluate their own health programming. Key learnings and recommendations in each of these areas are summarized here.

Improving Aboriginal People's Health Status and Outcomes

Key lessons learned

- The requirement that people eligible for First
 Nations and Inuit Health Branch (FNIHB) benefits
 must see a doctor in order to be reimbursed for any
 health-related product has led to the overuse of
 physician services in some communities.
- The misuse of prescription drugs is a serious problem in some Aboriginal communities.
- Community health initiatives are most likely to be successful when they address a documented need within a well-defined target population.
- The health challenges facing Aboriginal people are multi-faceted, encompassing individual, social, economic, and political dimensions.

Recommendations

- Health Canada should initiate a consultation with Aboriginal governments and health stakeholders to identify options for increasing the cost-effectiveness of the FNIHB drug benefit plan. These options would include, but are not necessarily limited to, shifting responsibility for the approval of nonprescription drugs needed by FNIHB drug plan beneficiaries from physicians to nursing or administrative personnel, or introducing a nonprescription drug rationing system based on current consumption levels.
- Health Canada, in partnership with Aboriginal governments, provincial/territorial governments, and health stakeholders, should plan and execute a national public education program to raise awareness among Aboriginal youth regarding the dangers of prescription drug abuse.

- Health Canada, Aboriginal governments, provincial/territorial governments, and Aboriginal health organizations should prioritize the community health needs of Aboriginal community members and focus their interventions on groups found to be at high risk of poor outcomes and those groups most likely to derive long-term benefits, such as children and youth.
- Aboriginal health organizations should explore the feasibility of entering into partnerships with other community organizations to promote the personal development of health clients (e.g., through job placements or the pursuit of vocational training).

Removing Barriers to Aboriginal People's Access to Health Services

Key lessons learned

- Health service access barriers confronting
 Aboriginal people can be mitigated through the
 establishment of holistic service delivery
 frameworks in remote communities or the
 deployment of Aboriginal liaison workers as
 members of the primary health care team.
- Although telehealth initiatives were shown to improve clients' access to certain services, their impact on health outcomes and their costeffectiveness remain inconclusive.

Recommendations

 Health Canada, provincial/territorial health ministries, the National Aboriginal Health Organization, and other health stakeholders should undertake additional research on ways to enhance the effectiveness and efficiency of telehealth services.

- To promote greater Aboriginal use and knowledge
 of the health system, Health Canada,
 provincial/territorial health ministries, and
 Aboriginal health stakeholders should encourage
 physicians and other members of the health services
 team to spend more time with Aboriginal clients
 (e.g., by making greater use of house calls, by
 reducing individuals' caseloads, and by allowing
 greater flexibility in scheduling appointments.
- Health organizations with a significant number of Aboriginal clients should consider making greater use of Aboriginal health liaison personnel.
- Health Canada, in partnership with Aboriginal governments, provincial/territorial governments, and health stakeholders, should facilitate Aboriginal people's access to health careers. For example, they could expand scholarship opportunities and enhance the level of personal and professional support available to those already working in the field.

Developing Aboriginal Capacity in Health Programming

Key lessons learned

- The provision of adequate training and skillsupgrading opportunities to health personnel employed in Aboriginal settings was shown to improve service quality while increasing employee self-esteem, job performance, and professionalism.
- Professional supervision and leadership are vital to the success of community health projects.
- There are several conventional health indicators for which no Inuit data are available.

 Although community-based grassroots organizations can play an important role in meeting Aboriginal people's basic health needs, the lack of resources or personnel often results in difficulties in meeting deadlines or in fulfilling other, non-project-related responsibilities.

Recommendations

- Organizations funding community health projects in Aboriginal settings should consider allocating additional monies for staff training purposes.
- Health Canada, in partnership with Aboriginal governments, provincial/territorial health ministries, and health stakeholders, should explore the feasibility of creating a national centre to promote excellence in Aboriginal health management.
- Health Canada, in consultation with Aboriginal governments, provincial/territorial health ministries, and other health stakeholders, should allocate additional resources to support Aboriginal communities' collection, management, and use of local health data.
- Health Canada, provincial/territorial health ministries, and other agencies that provide funding to community-based health organizations working with Aboriginal clients should consider providing additional resources or expertise to strengthen their management or administrative capabilities.

Preface

n recent years, Canada's health care system has been closely scrutinized with a view to quality improvement and cost-effectiveness. Fiscal pressures and changing demographics are resulting in initiatives to explore how the efficiency of the health care system can be increased while ensuring that high-quality services are affordable and accessible. Within this context, there has been a need for more research-based evidence about which approaches and models of health care have been working and which have not. In response to this requirement for evidence, and on the recommendation of the National Forum on Health, the Health Transition Fund (HTF) was created out of the 1997 federal budget to encourage and support evidence-based decision making in health care reform.

A joint effort between federal, provincial and territorial governments, the HTF funded 141 pilot projects and/or evaluation studies across Canada between 1997 and 2001, for a total cost of \$150 million. Of that, \$120 million supported provincial and territorial projects and the remaining \$30 million funded national-level initiatives. The HTF targeted initiatives in four priority areas: home care, pharmaceutical issues, primary health care, and integrated service delivery. Various other focus areas emerged under the umbrella of the original four themes, including Aboriginal health, rural health/telehealth, seniors' health, mental health, and children's health.

The HTF projects were completed by the spring of 2001. In order to communicate research evidence from the projects to decision-makers, experts were employed to synthesize the key process and outcome learnings in each theme area. This document summarizes the key learnings in the Aboriginal health theme area. It has been prepared by Aboriginal Health Consultants Madeleine Dion Stout and Gregory D. Kipling.

Unique Nature of the HTF Projects

The HTF was quite different from other organizations that fund health-related research in this country, such as the Canadian Institutes for Health Research and its predecessor the Medical Research Council.

- It was a time-limited fund, which meant that projects had to be conceived, funded, implemented, and evaluated all in four years - a very short time in the context of system reform.
- It was policy-driven; policy-makers were involved in the project selection process, and wanted to focus on some of the outstanding issues in the four theme areas in the hope that results would provide evidence or guidance about future policy and program directions.

In order to encourage projects to address issues and produce results that would be relevant to decision-makers, the HTF developed an evaluation framework consisting of six elements (access, quality, integration, health outcomes, cost-effectiveness, and transferability). Each project was required to have an evaluation plan addressing as many of these elements as were relevant. In addition, all HTF projects were required to include a dissemination plan (for which

funding was provided) in order to ensure that results were effectively communicated to those best able to make use of them. In addition to these individual dissemination plans, the HTF Secretariat is implementing a national dissemination strategy, of which these synthesis documents are one element. This emphasis on evaluation (systematic learning from the experience of the pilot initiatives) and dissemination (active sharing of results) was unique on this scale.

Most national projects were selected by an intergovernmental committee following an open call for proposals, while provincial/territorial initiatives were brought forward by each individual jurisdiction for bilateral approval with the federal government. At both levels, applications came not just from academics in universities, or researchers in hospital settings, but also from non-traditional groups such as Aboriginal organizations, community groups, and isolated health regions. Groups that had rarely, if ever, thought in terms of research, evidence, evaluation, and dissemination began doing so, and these developments bode well for improved understanding and collaboration among governments, provider organizations, and researchers. The role of federal, provincial, and territorial governments in the selection process ensured that the projects delved into the issues that were of high concern in each jurisdiction. By the same token, there was considerable scope in the range of project topics, and the body of projects was not (and was never intended to be) a definitive examination of each theme.

This unique focus and selection process imparts specific features to the HTF body of projects. The projects that were funded represent good ideas that were put forward; they do not represent a comprehensive picture of all the issues and potential solutions in each of the theme areas. The relatively short time frame meant that many researchers struggled to complete their work on time and the results are preliminary or incomplete; some pilot projects might take a number of years to truly show whether they made a difference. This must be left to others to carry forward and further investigate. Perhaps the greatest value in the large body of HTF projects comes from the lessons we can learn about change management from the researchers' struggles and challenges as they undertook to implement and evaluate new approaches to longstanding health care issues.

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1. Setting the Context

1.1 Early Attempts to Address Aboriginal People's Health Challenges

espite some improvement in their health status over the past 25 years, Canada's Aboriginal people continue to lag behind the general population in a number of areas. For example, in 1991, Aboriginal men and women could expect to live 67.9 and 75.0 years respectively (Canada, 1996), compared with 74.6 and 80.9 years for non-Aboriginal Canadians (Canadian Criminal Justice Association, 2000). In part, this difference is due to an incidence of injury- and violence-related mortality in the Aboriginal population that is almost double that of non-Aboriginal Canadians (Canada, 1996). At the same time, the infant mortality rate among Aboriginal people, although it has fallen steeply in recent decades, continues to be significantly higher than that of the general population (Canada, 1996; PAHO, 1999).

In addition to experiencing higher mortality rates, Aboriginal people often have considerably poorer health throughout their lives. For example, a relatively large proportion of the Aboriginal population reports having a disability: 31 per cent in the case of First Nations, and 29 per cent in the case of Inuit (PAHO, 1999). Another area of concern is diabetes. While the incidence of this disease among non-Aboriginal Canadians has remained relatively stable in recent decades, prevalence rates have increased rapidly among the Aboriginal population, which is now thought to suffer from it at a rate two to three times that of other Canadians (Canada, 1996; PAHO, 1999). Aboriginal people are also believed to be at heightened risk of contracting a range of infectious illnesses, including sexually transmitted diseases (STDs) and tuberculosis, the latter of which has been largely eradicated among other sectors of the Canadian population (Canada, 1996; PAHO, 1999).

Given the disparity in health status between Aboriginal and non-Aboriginal Canadians, it is not surprising that considerable resources have been allocated to Aboriginal health initiatives and research over the past quarter century. In some areas, such as infant and maternal health, the Canadian government has been funding studies since the 1950s. However, much of the early work, which addressed issues as diverse as substance abuse, otitis media, and the health effects of contaminants in the north, tended to be highly technocratic and gave little credence to traditional Aboriginal approaches to health and healing.

Researchers examining Aboriginal health issues from the late 1970s onwards began to cast a critical eye on existing policies and structures. For example, Linehan (1992) and Lowell (1995) examined the effects of government policy on expectant and birthing mothers. The authors concluded that practices such as mandatory evacuation to southern hospitals for delivery are detrimental to the well-being of mothers and their families, as well as being wasteful of the expertise of traditional Inuit midwives. At a more general level, researchers have increasingly focused attention on patterns of Aboriginal usage of the formal health system, placing particular emphasis on the nature and scope of access barriers. While some have examined the impact of geographical isolation on access, others have highlighted problems related to racism on the part of health professionals or the lack of Aboriginal-specific programming in many health facilities.

1.2 Emerging Issues

Since the late 1980s, researchers have continued to deal with long-standing issues in Aboriginal health, while addressing a number of new or re-emerging concerns, such as injury prevention, tuberculosis, and HIV/AIDS. Also significant is researchers' and policy-makers' growing interest in health determinants and their recognition of the importance of capitalizing on knowledge already present within Aboriginal

communities. Thus, in the area of HIV/AIDS, for example, greater emphasis is being placed on making explicit the links between the high-risk behaviours rooted in Aboriginal people's socio-economic marginalization and their greater risk of contracting HIV.

Solutions currently being advocated are often more respectful of Aboriginal people's agency and the traditional healing practices of their communities. Thus, not only does the sweat lodge play an increasingly prominent role in Aboriginal mental health and addictions programming, but there is also a growing recognition of the importance of producing health promotion material that is in an Aboriginal language or that makes use of Aboriginal symbols and stories. Other projects informed by this holistic outlook have studied such problems as the high incidence of low birth weight and fetal alcohol syndrome (FAS) among Aboriginal children (Canada, 1995), Aboriginal susceptibility to diabetes and obesity (Martin & Bell, 1991; Evers, 1991), and dangerously high rates of smoking and substance abuse (Native Women's Association of Canada, 1996).

Underlying much, if not all, of this work is an implicit understanding that change is afoot in the way health care is delivered to the country's Aboriginal population. In 2001, responsibility for service delivery is being transferred from the federal government to Aboriginal communities. Aboriginal leaders and their government partners have recognized that it is a priority to establish local organizational structures and to ensure that health care workers and support staff are in place so that Aboriginal people have access to efficient, cost-effective, and high-quality health services in their communities. As well, some Aboriginal women have expressed fears about the implications of health services transfer for them, particularly in situations where a community's decision-making structures are monopolized by male leaders unconcerned with women's issues.

1.3 Future Directions

Interventions in the field of Aboriginal health have become increasingly complex over the past 25 years. Not only have these initiatives benefited from many practitioners' increased sensitivity to the ethical issues of working with Aboriginal communities, but their effectiveness has also been enhanced by decision-makers' access to a number of new data sources at the local, regional, and national levels. However, additional work is needed in some areas. For example, knowledge of health issues facing particular subgroups of the Aboriginal population, such as Métis and those living in urban settings, remains inadequate.

More generally, a number of emerging Aboriginal health issues (e.g., aging) warrant further investigation and research. Despite Aboriginal people's relative youthfulness, the proportion of the Aboriginal population over the age of 65 is increasing (Native Women's Association of Canada, 1997). Given the high incidence of diabetes and other chronic illnesses among Aboriginal men and women, continued population aging will undoubtedly heighten pressures on local health providers while generating new demands for attendant care and other specialized geriatric services.

Similarly, additional research is required in the area of traditional medicine. Although considerable anecdotal evidence suggests that it is enjoying a strong resurgence in many Aboriginal communities, few rigorous or wide-ranging studies have been undertaken. Accordingly, little is known about patterns of use, impact on individuals' well-being, or the relationship between traditional and "western" health systems (Shestowsky, 1993).

Also required is an exploration of matters of concern to Aboriginal people with disabilities. There is a serious lack of services for these individuals in many reserve or remote communities, and they are often forced to contend with significant discrimination in their daily lives. Finally, further research and education are needed regarding the sexual and reproductive health of Aboriginal youth. Teenage pregnancy and sexually transmitted diseases are much more common among Aboriginal young people than among non-Aboriginal youth. Researchers and policy-makers must address these problems in an innovative, non-judgmental fashion.

2. Overview of the HTF Studies

total of 21 Health Transition Fund (HTF) studies were reviewed for this synthesis (see Appendix A). Although the findings of all these projects have cross-regional implications for policy and practice, the majority of the projects were carried out in a particular site or region. As Table 1 makes clear, almost half were carried out in one of the western provinces; most were affiliated with the Battlefords Health District in Saskatchewan, Health Canada, and the Keeweetinok Lakes Regional Health Authority (KLRHA) in north-central Alberta. Meanwhile, considerably fewer projects were executed in the Maritime provinces (14 per cent), northern Canada (14 per cent), or the central provinces of Ontario and Quebec. Four projects (19 per cent of the total) were national in scope or involved multiple study sites in more than one region.

Table 2 provides information on the type of projects supported by the HTF in the area of Aboriginal people's health. The majority were pilot programs (16 studies); the remainder encompassed evaluations (four studies) and needs analysis projects (one study). In this context, pilot programs refer to initiatives that implement and evaluate options for health care reform, whereas evaluation studies evaluate existing

models of service delivery or recently completed projects for which evaluations do not exist. Finally, needs analysis projects identify and assess the health-related needs of a particular population in a systematic, methodologically rigorous fashion.

The HTF provided almost \$12 million in support of the 21 initiatives included in this analysis. The majority of projects received less than \$500,000 each, but at least three benefited from significantly larger funding allocations, ranging from \$1,421,000 to \$2,983,200. Two of the latter projects consisted of telehealth initiatives, while the third sought to identify ways of meeting Aboriginal people's home care needs across the country.

Table 1: HTF Projects by Region

REGION	NUMBER OF PROJECTS	PERCENT OF TOTAL
Maritime provinces (NB, NF, NS, PE)	3	14%
Central provinces (ON, QC)	1	5%
Western provinces (AB, BC, MB, SK)	10	48%
Northern Canada (North of 55 degrees)	3	14%
Cross-regional	4	19%
	21	100%

The projects were also characterized by significant differences in their duration and size. Many of the projects were undertaken in a single site, involved fewer than 50 participants, and were completed in less than 18 months, but other initiatives were considerably more ambitious, involving multiple sites, a large number of participants, and a time commitment exceeding two years.

	CHILDREN'S HEALTH	HOME CARE	HEALTH DETERMINANTS	PRIMARY HEALTH CARE	TELE- HEALTH	OTHER	TOTAL
Evaluation	0	1	1	0	1	1	4
Needs Analysis	0	1	0	0	0	0	1
Pilot Program	3	1	1	7	2	2	16
Total	3	3	2	7	3	3	21

Table 2: Project Type and Theme Area

If the studies under consideration involved a range of approaches and geographical settings, they were equally heterogeneous in the themes they addressed and the insights they offered. The projects have five principal theme areas: children's health, home care, health determinants, primary health care, and telehealth. Table 2 shows that the largest number of studies were in the area of primary health care, no doubt reflecting the particular nature of Aboriginal people's health concerns and the challenges they face in accessing mainstream health services. Meanwhile, three projects were carried out in each of the areas of children's health, home care, and telehealth (for a total of nine projects), while two focused on the determinants of health. The three "other" studies addressed service provision to individuals with severe mental health problems living in remote areas; prescription drug misuse in Aboriginal communities; and models of health care delivery in Inuit regions.

Although a range of Aboriginal populations were considered in the HTF projects and initiatives, the primary focus was on the health-related concerns of First Nations. Three of the studies addressed Inuit health challenges, and a number of researchers worked with groups of Aboriginal people who are historically under-represented in the Aboriginal health literature, most notably Métis, Aboriginal women, Aboriginal people living in urban centres, and Aboriginal people in conflict with the law.

3. Discussion of Significant Findings

3.1 Key Findings: Health Transition Fund Evaluation Criteria



boriginal people have been ill-served by the country's health system. They frequently come up against barriers when attempting

to access services, and the care they do receive is often of a poorer quality than that enjoyed by other Canadians. While recognizing that Aboriginal people's health problems are closely related to issues of poverty, racism, and marginalization, the HTF projects provide a range of insights into means of improving health outcomes and simultaneously enhancing the quality and cost-effectiveness of care.

3.1.1 Access

Aboriginal people's use of health services is often compromised by the existence of significant access barriers. These barriers fall into at least two distinct categories: those related to geography, and those grounded in culture and knowledge issues.

Turning first to geographical barriers, the HTF studies show not only that Aboriginal people living in rural and northern communities must travel long distances to see a specialist or obtain dialysis

treatment (NA402, AB301-19), but also that in some cases even non-specialized services are unavailable at the local level. For example, the lack of mental health resources in the Nunavik region has meant that hospitalization is the only option and that it is available only to individuals whose condition is so severe that they are wholly disoriented (QC434).

Researchers generally adopted one of two strategies to address these problems, supporting either the implementation of telehealth technology or development of local capacity. On the one hand, the establishment of a telehealth link between urban centres and remote or isolated communities achieved tangible results in a number of areas. For example, National Telehealth Community Care Pilot: The Nephrology Telemedicine Project (NA403), a distance education project in rural New Brunswick, used video conferencing to inform Aboriginal diabetes sufferers of the risks of chronic renal failure and to promote positive lifestyle changes. Meanwhile, the technology was also successfully employed in western Canada in the First Nations National Telehealth Research Project (NA402) to conduct speech, physical, and occupational therapy sessions with people living in remote Aboriginal communities. However, not only were these telehealth initiatives expensive to implement, but many participants reported feeling uncomfortable with the new technology or frustrated by its unreliability. The projects' small sample size also precludes any definitive assessment of the impact of telehealth on access barriers.

On the other hand, a number of initiatives sought to address geographical barriers by bringing services to remote communities through the creation of new infrastructure or development of local capacity. The Régie régionale de la santé et des services sociaux de Nunavik was particularly successful in this regard with Putting in Place an Integrated System for Persons with Severe and Persistent Mental Problems (QC434).

In consultation with local stakeholders, project personnel established a "re-integration centre" in Inukjuak for individuals with severe mental health problems. The centre was designed to provide 24-hour care in a structured milieu to individuals in need of short- or long-term residential care, respite care, crisis intervention, day programs, and community follow-up. Not only did the establishment of the centre add significantly to the range of locally available services, but the decision to hire Inuit staff also enhanced local skills and capacity while addressing concerns about cultural sensitivity.

Aboriginal people also face difficulties in accessing health services on account of barriers rooted in culture and knowledge issues. For example, individuals may be deterred from making use of a needed service by its lack of cultural appropriateness or by the absence of staff who speak an Aboriginal language. Furthermore, as was noted by personnel involved in the Battlefords Health District project *An Evaluation of Integrated Services for Families of Aggressive School-Aged Children* (SK324), even when individuals access services, the "service provision across sectors tends to be fragmented and lacks coordination" (p. 7).

Project leaders were often successful in mitigating the effects of these barriers by combining outreach activities and Aboriginal liaison personnel. In this context, outreach refers to initiatives that facilitate clients' use of services by delivering them in a less threatening environment and in a format that is more appropriate to clients' background and culture. For instance, in the *Born Healthy, Raised Healthy* project (SK323), the Battlefords Health District initiated a breastfeeding and nutrition support program that involved establishing a storefront centre staffed by health professionals who offered a range of services to pregnant women and new mothers. As a result of the project, breastfeeding initiation and duration rates increased among the

target population, which also valued the opportunity provided by the centre for social contact, self-esteem building, and improved infant bonding.

An alternative strategy centred on hiring liaison workers who could play the role of facilitators, helping Aboriginal clients negotiate the health and social services system and ensuring they access the services they require. The Battlefords Health District's First Nations Health Liaison Workers project (SK402) provides a particularly good example of this approach. Project leaders stated that the use of liaison workers resulted in fewer missed appointments and improved compliance with treatment programs, while providing health professionals with an opportunity to develop a better understanding of the needs of Aboriginal clients. The initiative also highlighted the challenges inherent in defining the liaison workers' precise role (i.e., should their mandate simply be to link clients with appropriate services, or should they act as case workers, whose responsibility includes both the identification and organization of services?). While the project report offers no definitive answer to this question, many of the Aboriginal clients saw the liaison workers in relatively expansive terms, treating them more as advocates and social workers than as mere knowledge brokers.

3.1.2 Health Outcomes

Canada's Aboriginal people tend to have poorer health outcomes than its non-Aboriginal people, partly because of high-risk behaviour and unhealthy lifestyle choices. These causes are rooted in structural factors such as poverty, low educational attainment, and societal discrimination. The differential impact of these unhealthy choices is clearly demonstrated in *What are the Client Characteristics and Their Perceived Barriers for Non-adherence to Immunization Schedules?* (AB301-20), a study of immunization rates among children living

in north-central Alberta. As the project leaders noted, under-immunization and, hence, the risk of contracting a serious childhood illness were most common when the primary caregiver was "single, Aboriginal, younger in age, with low levels of education and income" (p. 18).

In seeking to address problems like these, researchers achieved considerable success by targeting high-risk individuals and families with interventions that combined education and support in a non-threatening environment. An initiative to enhance child immunization rates within the Aboriginal and non-Aboriginal population of north-central Alberta led to a positive change in behaviour among 37 per cent of the target population (i.e., those found to be under-immunized) when the primary caregiver was contacted by a project team member, and a further 26 per cent made a change after a personal interview. In this way, the findings underscored the importance of personal communication between health care providers and caregivers deemed to be at high risk of under-immunizing their children, as a way of both improving immunization rates and dealing with myths and misconceptions.

As previously mentioned, the *Born Healthy, Raised Healthy* project (SK323) "markedly increased breastfeeding initiation and durations rates" (p. 6) by opening a storefront office staffed by a lactation consultant and outreach workers. Centre personnel supported high-risk mothers and their children by giving them information, involving them in parenting programs, and linking them with other community resources. It should be noted that the initiative's success may be partly due to its holistic approach: rather than seeking merely to promote breastfeeding within the target population, project managers also addressed food security and other health determinants by, for example, creating peer support groups and community kitchens.

Similarly, the *Healthy Families: Primary Health Care* Services to High Risk Families project (AB301-14) in Edmonton demonstrated the potential benefits of providing sustained support to first-time parents whose socio-economic background placed them at a higher risk of poor outcomes for their children. Involving an intensive program of home visits over a three- to five-year period, participants were provided with parenting education, skills development, and links to community resources. While acknowledging that the project evaluation was undertaken after only 18 months, this preliminary review documented positive outcomes in a number of areas. With its stress on voluntary participation and cultural sensitivity, the project was valued highly by participating parents; the majority indicated that their relationship with their child had improved because of the program. Moreover, not only did the number of infants being taken to hospital emergency departments decrease, but four mothers had previously apprehended children returned to them as a direct result of the support and knowledge they gained through the initiative.

3.1.3 Quality

Among the HTF projects under consideration, improvements in service "quality" were typically achieved either by adopting an alternative model of service delivery or by creating new opportunities for fruitful interaction between clients and health care providers.

The impact of changes stemming from the adoption of a new service delivery model was especially noticeable in the context of *A Tri-Partite Approach to Developing a New Model of Primary Care for Eskasoni First Nation* (NA305), a pilot program undertaken in co-operation with the Eskasoni First Nation in Nova Scotia. The initiative involved a series of fundamental changes to the local health system, including the establishment of a multidisciplinary primary care team, the consolidation of patient

records to facilitate access by team members, and the replacement of the existing fee-for-service approach to physician remuneration with a salary-based model. The project also entailed the integration of physician services and community-based programs, as well as the construction of a new health facility to house services from both within and outside of the community. The program elicited positive feedback from an overwhelming majority of clients (217 individuals, representing roughly 15 per cent of the community's adult population, completed questionnaires distributed by evaluators). In particular, most respondents stated that they believed their physician took the time to understand their health problem and that they felt comfortable sharing their concerns with their nurse or doctor.

Also significant in this regard was the approach adopted by the Régie régionale de la santé et des services sociaux de Nunavik in the project *Putting in Place an Integrated System for Persons with Severe and Persistent Mental Problems* (QC434). One of the reasons for this project's remarkable success was the decision made by project managers to break with past rehabilitative models in which individuals' aspirations were ignored, and instead to treat clients as full citizens with the potential for productive involvement in community activities.

Meanwhile, other studies found that improved client satisfaction was closely related to clients' ability to have meaningful interactions with health workers who were at once sensitive and knowledgeable. This is clearly demonstrated by the results of Battlefords Health District's *First Nations Health Liaison Workers* initiative (SK402), in which two First Nations liaison workers were hired to facilitate Aboriginal people's access to appropriate health services. Despite the lack of a systematic evaluation of project outcomes, evidence suggests that the Cree-speaking liaison staff were able to develop strong rapport with clients while helping service providers better understand the clients' health needs.

3.1.4 Integration

The integration and rationalization of services have long been proposed as means of improving outcomes while reducing inefficiencies and fragmentation in health care delivery. As the HTF studies demonstrate, successful integration requires extensive planning prior to project implementation, the establishment of effective communication channels between partner organizations, and a commitment to ensure that trained personnel are in place from the beginning. Conversely, attempts to integrate services are likely to fail when leadership is lacking or the roles and responsibilities of employees are poorly defined.

Among the projects under consideration, an initiative by the First Nations and Inuit Health Branch (FNIHB), First Nations and Inuit Home Care (NA108), is an example of relatively successful service integration. Involving the deployment of integrated home care services in five geographically diverse First Nations and Inuit communities, the project was executed only after an implementation plan based on an assessment of each community's home care needs had taken place. Following this process, managers took steps to integrate home care client assessment and case management and to ensure that professional supervision for front-line staff was available. In this way, employees were supported and made to feel they were part of the health care team while rendering them more accountable through the use of reporting mechanisms like time sheets and client care reports. Moreover, the establishment of a formal client assessment process resulted in a better matching of needs and resources.

In an initiative by the Battlefords Health District in the area of services for aggressive school-aged children (SK324), the development of an integrated service model was a central goal of the project. It entailed the creation of a management team that worked as "equal partners in the planning, delivering, and evaluating of services in support of the vulnerable children and families involved with this project" (p. 19). According to the authors of the report, the project's success in integrating service delivery was closely tied to the investment made in fostering "new relationships and behaviours in both a horizontal and a vertical direction and both across and within organizations" (pp. 19–20).

However, even in the context of the initiatives cited above, problems occurred in a number of areas. For example, managers encountered some difficulty in garnering support for the changes brought about by each project, while the high management costs inherent in successful service integration were highlighted as a concern by those associated with the FNIHB home care initiative.

Meanwhile, other project findings offer their own lessons regarding the difficulties of meeting integration objectives. In particular, efforts to integrate primary health care services in the Eskasoni First Nation (NA305) were compromised by the lack of strong leadership and by poorly defined roles and responsibilities of staff members in the participating organizations. These problems in turn led to interpersonal conflict, which was exacerbated by the physical separation of primary care staff and community health personnel.¹ Cultural differences also led to difficulties, for example between Aboriginal and non-Aboriginal personnel and between members of organizations with contrasting management or service philosophies. However, as those drafting the final project report

^{1.} When a new community health centre was built with financing provided by the federal and provincial governments, funding guidelines demanded that areas housing primary care personnel (funded by the province) and community health staff (funded by the federal government) be situated in two separate buildings. However, the two buildings shared a common wall that was to be replaced with a connecting door once construction was complete.

made clear, these problems could have been largely avoided if an experienced project manager had been in place at the outset of the initiative.

3.1.5 Cost-Effectiveness

Although many of the studies reviewed do not provide a comprehensive, quantitative assessment of cost-effectiveness, a number of them do highlight approaches that are likely to generate long-term savings in health costs. In general, the most successful interventions were those emphasizing an investment in early childhood health and development, the pursuit of service integration, or the more intensive use of lower-cost services.

Promoting healthy development at the beginning of a child's life contributes to improved health status during that individual's adult years (Working Group on the National Strategy on Healthy Child Development, 1998). Although the measurement of such effects requires longer-term evaluation than was undertaken in any of the HTF-supported projects, the Healthy Families: Primary Health Care Services to High Risk Families project (AB301-14) was nonetheless successful in generating savings in a number of areas. In particular, the project's emphasis on providing skills development, parenting education, and links to community resources led both to measurable impacts, such as a reduction in the number of emergency room visits by participating infants, and less tangible effects, including fewer apprehensions by child welfare agencies and an early return of those children who had been placed outside of the parental home. Indeed, a long-term evaluation of the American Healthy Families Programs, on which this initiative is modelled, cites a three- to six-dollar payback on each dollar invested.

Positive results were also achieved by initiatives pursuing service integration or the more intensive use of lower-cost services. This is seen in *A Tri-Partite*

Approach to Developing a New Model of Primary Care for Eskasoni First Nation (NA305). With this project's emphasis on integrating physician services and community-based programs and the use of a multi-disciplinary primary care team encouraged to work collaboratively, project managers projected a 40 per cent drop in emergency department visits for fiscal year 2000 (final figures were not available when the report was prepared). At the same time, the frequency of visits by Eskasoni residents to family doctors decreased from a high of 11 per year in 1997 to five in 1999.

A project that offered supportive housing and other community-based services to Nunavik residents with several mental health problems (QC434) achieved notable success in reintegrating clients into their respective communities by helping them acquire social skills and by providing employment opportunities. In this way, mentally ill individuals could continue to live in a familiar cultural milieu and benefit from local support structures. Given that hospitalization had previously been the only option when family members were no longer able to cope, the initiative may result in significant savings, in terms of both transportation expenses and hospital-based care expenses.

3.1.6 Transferability

As the findings of HTF-supported research demonstrate, successful project replication requires a clearly articulated framework, the flexibility to respond to local conditions and circumstances, and a commitment to a comprehensive evaluation process.

Among the initiatives reviewed, few placed greater emphasis on replication than the FNIHB's *First Nations and Inuit Home Care* project (NA108), carried out in partnership with five Aboriginal communities over 18 months beginning in late 1998. By emphasizing the development of a sturdy delivery structure, built upon a peer review and community

needs assessment process, along with the elaboration of a framework of essential services, the model lends itself to adoption by other communities. Moreover, it is flexible enough to allow for the addition of new components or the expansion of existing services in response to local needs and priorities. Information derived from the project has already been used by Health Canada managers to initiate home and community care programs in more than 600 Aboriginal communities across the country.

Though not field tested, the Quebec Native Women Association's *Grass-Roots Approach to Addressing the Home Care Needs of the Urban Aboriginal Population in Canada* (NA1022) also provides a number of insights regarding the design and delivery of services to Aboriginal people living off-reserve. Among the most significant of these is a detailed checklist of culturally appropriate program components, along with an evaluation framework that can be used to judge the capacity of Aboriginal-specific home care programs to meet client needs.

A number of other projects are also characterized by approaches or lessons learned that may usefully inform the activities of organizations and communities elsewhere. For example, the framework developed by Putting in Place an Integrated System for Persons with Severe and Persistent Mental Problems (QC434) to establish a "re-integration centre" in Inukjuak provides a basis for the creation of similar centres in other remote communities grappling with problems related to addictions or mental illness. In short, by staffing the centre with a multidisciplinary mental health team whose functions include community outreach, and by accepting both long- and short-term placements (such as for respite purposes), the project is able to meet a wide range of needs under a single roof.

Meanwhile, the *Transition to an Integrated Primary* Health Services Model project (SK330) - a University of Saskatchewan project to identify the health needs and concerns of low-income individuals in Regina and Saskatoon - proved highly successful, largely on account of its use of a participatory research methodology. The approach entailed asking members of the target population to develop and administer a "community-based health related strengths and challenges survey," after which they reviewed the findings within the communities and then finalized the results. By identifying gaps and overlaps in service delivery and by highlighting the degree to which community members are failing to respond to medical advice regarding chronic conditions, the initiative demonstrated its viability as a way of obtaining detailed information while empowering participants to make healthy choices in their lives.

Significantly, several HTF projects also provide information on barriers that must be taken into account if successful replication is to occur. In the first instance, northern communities taking part in the FNIHB's First Nations and Inuit Home Care project (NA108) indicated that they would require additional funding to cover the high cost of accommodation, staff wages, and travel in their region. As well, the lack of standardization in telehealth systems across provinces and territories was identified as a concern in the First Nations National Telehealth Research Project (NA402), effectively preventing interconnectivity among Aboriginal communities and decreasing the scope for technological transfer.

3.2 Other Findings

Communication

Lack of effective communication can affect a community health initiative in a number of ways. Most notably, it can lead to conflict and misunderstandings among project team members, as well as reducing the degree to which particular populations understand and respond to health-related messages and services. However, as HTF-supported researchers demonstrated, these problems can be mitigated by an early investment in the development of forthright, formalized channels of communication, and by working with client groups to ensure that project implementation occurs in a manner that is at once culturally and linguistically appropriate.

For example, the importance of communication among stakeholders was highlighted in An Evaluation of Integrated Services for Families of Aggressive School-Aged Children (SK324). Successful integration requires prompt action at the outset of the project to explain to clients how the initiative will affect them, while promoting an environment where project staff can "clarify information [or] offer new perspectives without being immediately judged by others" (p. 25). The establishment of formalized channels of communication both within and between organizations is also vital. In others words, project leaders must ensure that the roles and responsibilities of team members are clearly defined and that lines of accountability and reporting are both in place and respected.

Meanwhile, the Putting in Place an Integrated System for Persons with Severe and Persistent Mental Problems project (QC434) demonstrated the importance of culturally appropriate communication when Aboriginal people are among a project's target population. In their final report, researchers argued that an important element in the initiative's success was the effort made at the outset to prepare the communities, to jointly establish objectives and

procedures, and to clarify lines of accountability. Similarly, the fact that clients participating in the Battlefords Health District's First Nations Health Liaison Workers project (SK402) expressed satisfaction with the initiative was closely related to the fact that they were dealing with individuals who knew Cree and were familiar with their cultural and community realities.

At a more general level, researchers found that conventional health promotion messages are often not reaching marginalized populations, including Aboriginal people. This is one of the conclusions drawn by the authors of the Keeweetinok Lakes Regional Health Authority (KLRHA) study What are the Client Characteristics and Their Perceived Barriers for Non-adherence to Immunization Schedules? (AB301-20) on means of improving immunization rates among the region's non-compliant population. Faced with this situation, project leaders called for greater emphasis on personal contact with clients (either by telephone or in person), and for health professionals to provide more direction to at-risk patients while encouraging them to take responsibility for their own health.

In a similar vein, a University of Saskatchewan initiative Transition to an Integrated Primary Health Services Model (SK330), involving the implementation of a community-based health survey in downtown Regina and Saskatoon, found that project participants tended to be silent and unresponsive to medical advice. While the lack of monitoring precludes an assessment of whether the project had a lasting effect on participants' healthrelated behaviour, it highlights the extent to which a truly participatory approach, in which community members are made co-managers in the design, implementation, and finalization of the project, can generate greater citizen participation and engagement.

3.2.2 Mediating Structures

Many of the HTF reports referred to the importance of key actors, such as community leaders or liaison personnel, whose intervention or support had a significant impact on project outcomes. These individuals played the role of mediators, encouraging others to participate in the initiative, facilitating communication between project staff and community members, or helping to resolve conflicts and differences of understanding.

Health liaison workers, by acting as a bridge between Aboriginal clients and other members of the health services team, are a case in point. Not only has their use been advocated in the context of home care services delivery to Aboriginal people living in urban areas (NA1022), but their positive impact on project implementation was also highlighted by those involved in *Health for All* (AB301-18), a project carried out by Lakeland Regional Health Authority (LRHA) in co-operation with four Métis settlements. This initiative was characterized by considerable distrust among the stakeholders, and an Aboriginal liaison worker played an important role in explaining the project to Métis community members and securing their participation. The worker also acted as the principal intermediary between Métis leaders and the LRHA management team.

HTF project results also underscored the degree to which community leaders can influence the relative success or failure of a given initiative. For example, in *Diabetes Community/Home Support Services for First Nations and Inuit* (NA1012), a pilot program undertaken by the FNIHB to test the effectiveness of different home care models for Aboriginal diabetes sufferers and their families, researchers found that success was determined less by the particular model chosen than by its responsiveness to community needs, along with the support it received from the local leadership. In this regard, the authors of the

final report noted that the "level of [leadership] involvement is not as important as [their] recognition of the need and support for the program" (p. 28).

Similarly, stakeholders involved in the implementation of the *First Nations and Inuit Home Care* project (NA108) indicated that the "need for community and leadership participation and support was identified in every phase of the project" (p. 23). Although the evaluation process confirmed that leaders supported the initiative and believed in its importance, difficulty in obtaining time with the leaders to discuss home care issues was identified as a problem.

Health Human Resources

ealth sector managers in Aboriginal communities face many of the same human resources issues that their colleagues elsewhere in the country face. Yet, a number of special challenges identified in the project reports warrant consideration.

4.1 Management

Service integration or the introduction of a new delivery framework invariably generates a certain amount of stress and uncertainty among those affected by the changes, including clients and staff members. Project leaders, in dealing with these concerns, emphasized the importance of clear role delineation and the early adoption of human resources policies and supports. By the same token, the stress associated with the adoption of a new framework can be exacerbated by insufficient planning or a lack of professional supervision.

Thus, in the context of the Battlefords Health District project targeting aggressive school-aged children (SK324), professionals involved in the initiative stressed the need to define, in a clear and consistent manner, the roles and responsibilities of new staff employed in an integrated service delivery environment from the outset of the project. At the same time, the experiences of the pilot communities involved in the FNIHB's First Nations and Inuit Home Care project (NA108) suggested that comprehensive human resources policies and supports were an important element in project success. Such supports include a consistently applied personnel policy manual, clear job descriptions and expectations, vacation and sick leave benefits, and pension and health benefits.

As well, particular emphasis was placed on the importance of working with existing community health staff to redefine their roles in the new service delivery framework. This point was made by the author of the final report of the Tri-Partite Approach to Developing a New Model of Primary Care for Eskasoni *First Nation* (NA305) with reference to the impact of a decline in the number of individuals travelling outside of the community to see a physician:

This shift in access to primary care has achieved considerable economic savings for the Medical Transportation budget, but has created significant financial hardship for the 17 medical taxi drivers who, for years, had provided this service. In a community where unemployment is very high, the loss of this number of relatively well-paying jobs is significant.... In retrospect, greater care should have been taken to anticipate this consequence, and steps taken to prepare those who would be economically disadvantaged (p. 42).

Finally, competent supervision was also identified as a vital ingredient to project success. For example, according to the evaluator of the Eskasoni Primary

Care project, difficulties in integrating acute care and community health personnel were in large part due to the lack of a full-time administrator. Although many of the problems were cultural or structural, rooted in the physical separation of staff and contrasting organizational principles, there was a strong sense that these issues would be resolved once a health centre director was in place.

4.2 Cultural Sensitivity

In the face of research findings showing that Aboriginal people continue to experience a high degree of discrimination and racism at the hands of mainstream health care providers (Browne, Fiske, & Thomas, 2000), project leaders emphasized the importance of personal suitability when hiring personnel to work in Aboriginal health settings. along with the need to ensure that staff have undergone adequate cultural sensitivity training.

For example, the Régie régionale de la santé et des services sociaux de Nunavik (QC434) adopted a highly structured approach to staff selection to ensure that individuals with the right skills and competencies were brought together to work in the Inukjuak "re-integration centre" for people with severe mental health problems. In particular, project leaders established a staff selection committee that represented the diversity of stakeholder interests, including those of the local health centre and community. In turn, when considering the qualifications and background of external applicants, the committee paid special attention to the program objectives and community context, as well as to the candidate's experience in working with Aboriginal communities, skills in the context of a multidisciplinary team environment, and capacity to adapt to a new environment.

Meanwhile, the need for cultural sensitivity when dealing with Aboriginal clients was strongly voiced in a project report prepared by the Quebec Native

Women's Association (NA1022). The report argued that meeting the home care needs of urban Aboriginal people necessitates the training and hiring of Aboriginal staff in all areas, from home support to physician services, and that Aboriginal personnel are not available, other employees should be provided with appropriate cultural-awareness training.

4.3 Hiring and Retention

Problems related to staff shortages or difficulties in hiring and retaining qualified personnel were identified as issues in a number of the HTF studies. Project managers stated that more time and resources should be allocated to recruitment and that special measures may be necessary in remote regions to attract appropriate applicants. Such measures may include increasing wage and accommodation allowances or providing individuals with time to incorporate traditional practices (e.g., hunting) into their schedules.

As an example of the staffing challenges encountered in the North, the Inuit Tapirisat of Canada (ITC) noted in the Evaluation of Models of Health Care Delivery in Inuit Regions project (NA485) that while communities in this region have access to basic nursing services, the system is experiencing considerable strain because of shortages of personnel. However, as the findings of an aborted HTF-supported initiative in Nunavut (NV321) demonstrate, staff shortages are unlikely to be addressed merely by allocating additional resources to recruitment. This project, which was intended to ease workload pressures on physicians by expanding the role of nurse practitioners, was never launched, despite strong stakeholder commitment and the availability of extra funds, because managers were simply unable to hire a nurse practitioner for the position.

Meanwhile, those involved in the Lakeland Regional Health Authority's *Health for All* (AB301-18) reported a lack of applicants for the position of settlement nurse,² which they attributed in part to the professional isolation of the post. Nurses were expected to work primarily on their own and risked considerable loneliness, particularly if "the local community did not take the nurse under their wing and include them in community activities and link them up with other service providers" (p. 8). These findings prompted the report to recommend the hiring of an experienced nurse for such positions and to call on community leaders to take concrete steps to facilitate his or her integration into community life.

In the context of the FNIHB First Nations and Inuit Home Care initiative (NA108), northern communities taking part in the project highlighted the need for extra funds to cover staff wages and accommodation in recognition of the high cost of living in these areas. Employee burnout was identified as a concern by those involved in the development of the Nunavik re-integration centre (QC434), prompting a recommendation that health professionals involved in the initiative should "rotate" in and out of the community on a regular basis.

Project leaders also encountered difficulties in achieving a stable Inuit workforce. Employees were willing only to work part-time, in order to accommodate traditional activities and family responsibilities, while a number of individuals left because of personal crises and other problems. This led the final report to propose that a minimum of six to eight months be allocated to the recruitment

^{2.} Project leaders hired four settlement nurses to work halftime on each of the four Métis settlements in the Alberta Lakeland region. The nurses were to provide public health and home care services as part of a multidisciplinary health team.

process in small communities without experienced personnel, and that on-the-job training be provided as part of this process.

4.4 Training

Many HTF projects demonstrated the benefits of providing targeted training for both professional and non-professional health workers. Not only can such training lead to enhanced morale and job performance, it can also promote changes in staff practices that result in increased efficiencies or lower service delivery costs. The provision of adequate training was particularly crucial in the context of telehealth initiatives, both to ensure that staff were knowledgeable in the operation of the technology and that physicians and other client groups felt comfortable using it.

Thus, while at least one of the telehealth project reports noted that insufficient personnel training, combined with unreliable equipment, contributed to the initiative's lack of success in meeting patient needs in a consistent manner, another (NA402) highlighted the importance of offering health care providers a detailed orientation on the technology, including its strengths and weaknesses. The report authors stressed that such an orientation should address providers' liability concerns (e.g., as they relate to the technical quality of transmitted medical images).

Meanwhile, the *Diabetes Community/Home Support* Services for First Nations and Inuit project (NA1012) emphasized the value of providing education and training to front-line staff working in "nonprofessional" capacities. In particular, the project report argued that the training of care providers was one of the first and most critical steps in the

establishment of community-based diabetes services. This view was shared by those involved in the *First* Nations and Inuit Home Care project (NA108), who stated that the benefits of training programs for home support workers included improved services, along with increased self-esteem, improved job performance, and more professionalism among staff members. However, project leaders also noted a number of challenges, ranging from problems in finding affordable training in the community to the difficulties experienced by some prospective participants in meeting educational entrance requirements.

A pilot project by the Sisters of Charity of Ottawa Health Services, Improving the Effectiveness of Primary Health Care Through Nurse Practitioner/Family Physician Collaborative Models of Care (NA342), also showed how concrete benefits can be realized through a highly focused training program. Having developed a learning module designed to enhance "structured collaboration" between nurse practitioners and physicians, project staff field tested it at two intervention and two control sites in rural and remote parts of Ontario. The behaviour of nurse practitioners at the intervention sites changed significantly as a result of the training exercise: they referred fewer situations to physicians and took responsibility for the more complex care of patients. Although a similar change was not observed among physicians who completed the module, the initiative was nonetheless successful in showcasing an approach that might be used to empower nurse practitioners to play an even more prominent role in the primary health care team than they do already.

5. Cross-Sectoral Implications

hen the Lalonde Report, A New Perspective on the Health of Canadians, was first published in 1974, its observation that health status is a function of the interrelationship between lifestyle, environment, genetic endowment, and health services was groundbreaking. Although our understanding of the social and physical determinants of health has become more sophisticated over the past quarter-century, the central lesson of the Lalonde Report has remained fundamentally unchanged: good health is dependent on much more than access to physicians, hospitals, and other health services. Rather, health status is also shaped by factors such as lifestyle, environment, and human biology, necessitating research that is focused more broadly on the conditions necessary for individuals to live healthy, fulfilling, and productive lives. The findings of many of the HTF projects shed light on the impact these broader conditions have on Aboriginal health.

5.1 Education

Although research shows that Aboriginal women are more likely than their male counterparts to possess a university degree or to have pursued some post-secondary or secondary studies, the level of educational attainment among Aboriginal people in general nonetheless lags far behind that of the rest of the Canadian population (Canada, 2000). The health implications of this state of affairs are significant. As Health Canada's Second Report on the Health of Canadians makes clear, those with little formal education are more likely to be unemployed and poor, are characterized by higher rates of smoking and physical inactivity, and are less likely to rate their health status as "excellent" (Canada, 1999).

A number of HTF studies offered recommendations for enhancing individuals' educational experiences. For example, the Battlefords Health District's Evaluation of Integrated Services for Families of Aggressive School-Aged Children (SK324) demonstrated the usefulness of targeted interventions, such as integrated case management and the provision of family counselling at home, in school, and in other non-conventional settings, in addressing children's behavioural problems. Although a quantitative assessment of the project did not register a statistically significant change in the children's behaviour,3 the initiative received highly positive feedback from teachers, caregivers, and other social services professionals, who reported an improvement in study participants' abilities to perform at school and relate to others. In light of these findings, other organizations, including First Nations, school boards, and provincial and territorial governments, may wish to explore the feasibility of launching similar programs in their own jurisdictions.

5.2 Employment and Income

In general, Canada's Aboriginal people experience rates of poverty and unemployment significantly greater than those found in other sectors of the population. The incidence of low income is particularly high among certain groups of Aboriginal people, such as women, of whom 42.7 per cent were living below the poverty line in 1996 (Canada, 2000). From a health perspective, poor individuals suffer more illnesses and die at a younger age than do higher-income people (Canada, 1999).

^{3.} According to the final report authors, these results may be due to the small sample size or the short time frame of the project.

Economic development in Aboriginal communities must be seen as a critical element in any strategy to improve the health and well-being of Canada's Aboriginal population. For instance, studies such as those undertaken by the FNIHB with the Eskasoni First Nation (NA305) and the Régie régionale de la santé et des services sociaux de Nunavik in Inukjuak (QC434) identified the lack of job opportunities as a serious problem in both these communities. The Inukjuak initiative in particular showed how the provision of employment to those suffering from serious mental illnesses can, in combination with other resources, play a useful role in helping them stabilize their lives, achieve greater independence, and improve their quality of life.

Also noteworthy are project findings that point to a relationship between poverty and unhealthy lifestyle choices. For instance, the KLRHA's study of barriers leading to non-adherence in immunization schedules (AB301-20) showed that children of caregivers who were young, single, and Aboriginal with a below-average income and less than a grade 12 education were among the most likely to be under-immunized. Similarly, the Elizabeth Fry and John Howard Societies of Saskatchewan, in a project aimed at lowering recidivism rates among offenders in provincial correctional facilities (SK333), found that inmates had high levels of poverty and unemployment prior to their incarceration: 65 per cent of female participants indicated that they had been receiving social assistance, and 50 per cent of male participants stated that they had been unemployed when they began serving their sentence. These results highlight the complex nature of the health and social problems facing Aboriginal people as well as the need for multisectoral strategies to address these concerns.

5.3 Social Environments

Social alienation and communal and family violence are serious problems in many Aboriginal communities. The rate of suicide among Inuit men aged 16 to 30 is approximately ten times that of non-Aboriginal men in the same age category (Brann, 1996), and alcohol-related hospital admissions are three times higher for Aboriginal women than for their non-Aboriginal counterparts (Canada, 1996). At least three quarters of Aboriginal women have been the victims of violence at least once in their lives (Canada, November 1999).

The impact of these problems on the social fabric of Aboriginal society, not to mention their effects on the health and well-being of individuals and their families, is far-reaching. Self-government, reconciliation, and the recovery of Aboriginal culture, language, and traditions are fundamental components of the healing process, but they will take years to attain. Steps must also be taken over the short and medium term to address Aboriginal people's marginalization.

Two of the initiatives supported by the Health Transition Fund warrant particular attention in this regard: Healthy Families: Primary Health Care Services to High Risk Families (AB301-14) and Addressing Prescription Drug Misuse in First Nations Communities (NA408). In the first instance, a project undertaken by the Capital Health Authority to improve parenting skills and to foster personal development among low-income families in Edmonton was a remarkable success. Not only did parents' knowledge of their child's development increase as a result of the initiative, but the parents also reported an improvement in their relationship with their child. Although project evaluation continues, its achievements to date emphasize the benefits of a holistic approach involving a range of service providers, from health agencies to community-based organizations.

Meanwhile, First Nations governments, along with managers working in federal departments such as Indian and Northern Affairs Canada, may wish to consider the findings of the FNIHB initiative (NA408) to address prescription drug misuse in Red Bank First Nation in New Brunswick. Although the project was dogged by problems in a number of areas, its findings show how any attempt to overcome youth alienation and substance abuse is complicated by a wide range of factors, including the ease with which drugs can be obtained in the community, the lack of legal or social sanctions for prescription drug misuse, and community resistance to discuss or address the problem. By the same token, the project report also highlights the power of traditional practices, such as the powwow and sweat lodge, to promote healthy lifestyles among children, youth, and adults.

6. Implications for Policy and Practice

n attempting to address the health challenges facing the country's Aboriginal population, HTF projects were guided by one or more of the following objectives: to improve Aboriginal people's health status and outcomes; to remove barriers hindering Aboriginal individuals' access to the health system; and to develop capacity within Aboriginal communities to plan, execute, and evaluate their own health programming. Each of these objectives is important in its own right, but all three must form part of an integrated strategy to overcome the profound health inequalities that continue to divide Aboriginal from non-Aboriginal Canadians.

In the first instance, efforts to enhance Aboriginal people's health status must confront existing policies and practices that promote inefficiencies or are pernicious in their effects. For example, the requirement that people eligible for FNIHB benefits must see a doctor in order to be reimbursed for any health-related product, from prescription medicine to sunscreen, has led to the overuse of physician services in some communities. To deal with this situation, policy-makers may wish either to delegate responsibility for the approval of non-prescription drugs to nursing or administrative staff or to introduce a rationing system based on current consumption levels. At the same time, the results of an FNIHB initiative to address prescription drug abuse in Red Bank First Nation (NA408) emphasize the need to raise awareness of the dangers posed by the inappropriate use of such drugs, while encouraging community leaders and health providers to work together to institute a monitoring program that would identify those who may be misusing them.

Research funded by the HTF demonstrated that a project's success in improving participants' health outcomes was less a function of the size of its budget than of its ability to work with established community groups to address a documented need within a well-defined target population. This finding highlights the key role that grassroots Aboriginal organizations can play in the implementation of community-based health initiatives. Not only are these organizations knowledgeable about the needs of Aboriginal clients, their credibility as service providers helps to promote individuals' participation in the project. The finding also emphasizes the importance of focusing interventions on groups who have a high risk of poor health outcomes, such as diabetic elders in need of home support, or on those who are most likely to derive long-term benefits, such as children and youth. Particularly vital in this regard

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are initiatives that encourage young mothers to make positive lifestyle choices that promote healthy childhood development or that lead to adequate learning and recreational opportunities for Aboriginal youth.

At a more general level, the HTF projects served to highlight the multidimensional nature of many of the health challenges facing Aboriginal people. For example, mental illness is only one of several problems affecting residents of the Inukjuak reintegration centre in Nunavik (QC434). The other difficulties include substance abuse, few employment opportunities, and a family's inability to provide an individual with sufficient care. In situations such as these, community health planners must assess the health needs of Aboriginal clients holistically by placing them within their wider social and economic contexts. This approach (e.g., encouraging adolescent mothers to return to school or providing physically disabled individuals with job placements in local businesses) emphasizes the potential for fruitful partnerships between health organizations, educational institutions, and economic development bodies.

The elimination of health service access barriers for Aboriginal people was another key element in many of the studies reviewed. Project leaders adopted a variety of strategies to improve access, ranging from the establishment of holistic service delivery frameworks in remote communities to the more intensive use of Aboriginal liaison personnel; most problematic were initiatives that made use of telehealth services. This technology clearly demonstrated its potential to improve client access to specialist care while eliciting positive feedback from health personnel who had new opportunities for professional development and support, but its impact on health outcomes and the quality of care was ultimately inconclusive. Moreover, several clients indicated that they felt uncomfortable with the technology or were frustrated by its unreliability. Even though HTF projects were unable to

demonstrate telehealth's cost-effectiveness, there is a continued need for research in this area, particularly with a focus on health outcomes, cost-effectiveness, and inter-operability across provincial and territorial boundaries.

This is not to suggest that such research should be undertaken at the expense of other efforts to improve Aboriginal people's access to health services. In particular, a recurring theme in many of the initiatives was the importance of personal contact, along with that of culturally and linguistically appropriate forms of communication, in promoting Aboriginal use of the health system. Indeed, a strong case can made for a two-pronged approach to address the access challenge. First, policy-makers must take steps to promote face-to-face contact between health providers and their Aboriginal clients by, for example, making greater use of house calls, reducing individuals' caseloads, and allowing greater flexibility in the scheduling of appointments. Not only would this increased level of interaction lead to improved understanding on both sides, but it would also give care providers an opportunity to follow their clients more closely while promoting healthy lifestyle choices.

Second, findings showing that Aboriginal clients often feel more comfortable when dealing with Aboriginal health workers emphasize the need for the more intensive use of Aboriginal liaison personnel in mainstream health settings. Furthermore, additional efforts must be made to facilitate Aboriginal people's access to health careers, both by expanding scholarship opportunities and, crucially, by enhancing the level of personal and professional support available to those already working in the field.

Closely related to the challenge of recruiting sufficient numbers of Aboriginal health staff is the issue of capacity building. Although few of the HTF initiatives explicitly addressed the implications of transferring control over health care delivery from the federal government to First Nations, this is an ongoing process. The shift lends urgency to the task of ensuring that Aboriginal communities have the resources needed to plan, implement, and carry out their own health programming.

An important element in this process is the provision of adequate training and skills-upgrading opportunities to health workers and managers. In the field of home care, for example, the participation of front-line staff in training workshops was shown to improve service quality, while increasing employee self-esteem, job performance, and professionalism (NA108). The benefits of training are likely to be even more visible at the managerial level, given the critical importance of professional supervision and leadership to the success of community-based health projects. Thus, not only should budget allocations for such projects include a training component, but policy-makers may wish to consider developing a national program to foster excellence in Aboriginal health management. As well, the Inuit Tapirisat of Canada's observation that there are several conventional health indicators for which no Inuit data are available (NA485) highlights the need for additional investment in communities' capacity to collect, manage, and exploit local health data.

At a more fundamental level, the success registered by several of the HTF initiatives in addressing specific health issues, such as low breastfeeding rates or lack of home support, highlights the important role that community-based grassroots projects can play in meeting Aboriginal people's basic health needs. However, some community organizations involved in the planning and execution of such initiatives reported difficulties in meeting deadlines or in fulfilling other, non-project-related responsibilities. For this reason, not only must governments and funding agencies recognize the

need for flexibility when working with local organizations, they must also be prepared to offer these organizations support, in the form of additional resources or expertise, to ensure that they can carry out project activities effectively.

7. Conclusions and Recommendations

7.1 Enhancing Aboriginal People's Health Status and Outcomes

Key lessons learned

The requirement that people eligible for First Nation and Inuit Health Branch (FNIHB) benefits must see a doctor in order to be reimbursed for any health-related product has led to the overuse of physician services in some communities.

The misuse of prescription drugs is a serious problem in some Aboriginal communities.

Community health initiatives are most likely to be successful when they address a documented need within a well-defined target population.

The health challenges facing Aboriginal people are multi-faceted, encompassing individual, social, economic, and political dimensions.

Recommendations

Health Canada should initiate a consultation with Aboriginal governments and health stakeholders to identify options for increasing the cost-effectiveness of the FNIHB drug benefit plan. These options would include, but are not necessarily limited to, shifting responsibility for the approval of nonprescription drugs needed by FNIHB drug plan beneficiaries from physicians to nursing or administrative personnel, or introducing a nonprescription drug rationing system based on current consumption levels.

Health Canada, in partnership with Aboriginal governments, provincial/territorial governments, and health stakeholders, should plan and execute a national public education program to raise awareness among Aboriginal youth about the dangers of prescription drug abuse.

Health Canada, Aboriginal governments, provincial/territorial governments, and Aboriginal health organizations should prioritize the community health needs of Aboriginal community members and focus their interventions on groups found to be at high risk of poor outcomes and those most likely to derive long-term benefits, such as children and youth.

Aboriginal health organizations should explore the feasibility of entering into partnerships with other community organizations to promote the personal development of health clients, for example, through job placements or pursuit of vocational training.

7.2 Eliminating Barriers to Aboriginal People's Access to Health Services

Key lessons learned

Health service access barriers confronting Aboriginal people can be mitigated by establishing holistic service delivery frameworks in remote communities and by deploying Aboriginal liaison workers as members of the primary health care team.

Although telehealth initiatives improve clients' access to certain services, their impact on health outcomes and their cost-effectiveness remain inconclusive.

Recommendations

Health Canada, provincial/territorial health ministries, the National Aboriginal Health Organization, and other health stakeholders should undertake additional research on means of enhancing the effectiveness and efficiency of telehealth services.

To promote a greater Aboriginal use and knowledge of the health system, Health Canada, provincial/territorial health ministries, and Aboriginal health stakeholders should encourage physicians and other members of the health services team to spend more time with Aboriginal clients by, for example, making greater use of house calls, reducing individuals' caseloads, and allowing greater flexibility in the scheduling of appointments.

Health organizations with a significant number of Aboriginal clients should consider making greater use of Aboriginal health liaison personnel.

Health Canada, in partnership with Aboriginal governments, provincial/territorial governments, and health stakeholders, should facilitate Aboriginal people's access to health careers. For example, they could expand scholarship opportunities and enhance the level of personal and professional support available to those already working in the field.

7.3 Developing Aboriginal Capacity in Health Programming

Key lessons learned

Providing adequate training and skills-upgrading opportunities to health personnel employed in Aboriginal settings improves service quality and increases employee self-esteem, job performance, and professionalism.

Professional supervision and leadership are vital to the success of community health projects. There are several conventional health indicators for which no Inuit data are available.

Community-based grassroots organizations can play an important role in meeting Aboriginal people's basic health needs, but a lack of resources or personnel often results in difficulties in meeting deadlines or in fulfilling other, non-project-related responsibilities.

Recommendations

Organizations funding community health projects in Aboriginal settings should consider allocating additional monies for staff training purposes.

Health Canada, in partnership with Aboriginal governments, provincial/territorial health ministries, and health stakeholders, should explore the feasibility of creating a national centre to promote excellence in Aboriginal health management.

Health Canada, in consultation with Aboriginal governments, provincial/territorial health ministries, and other health stakeholders, should allocate additional resources to support Aboriginal communities' collection, management, and use of local health data.

Health Canada, provincial/territorial health ministries, and other agencies that provide funding to community-based health organizations working with Aboriginal clients should consider providing additional resources or expertise to strengthen their management or administrative capabilities.

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Appendix A: List of HTF Projects Relevant to Aboriginal Health

This appendix provides summary information on the HTF projects which were reviewed in the preparation of this document. For further information, please refer to the HTF website (www.hc-sc.gc.ca/htf-fass).

(NA108) First Nations and Inuit Home Care Recipient: First Nations and Inuit Health Branch, Health Canada

Contribution: \$1,421,600

This evaluation of an 18-month pilot project influenced the development and implementation of the new national First Nations and Inuit Home and Community Care Program. The project undertook to assess and find new ways to meet home care needs in five geographically diverse First Nations sites. The project resulted in considerable practical and valuable information that has already been used by senior decision-makers at Health Canada to initiate home and community care programs in over 600 First Nations and Inuit communities. Home care program managers and administrators will find the commentary on time lines, communication challenges, and infrastructure for program delivery highly relevant to their work and program development.

(NA305) A Tri-Partite Approach to Developing a New Model of Primary Care for Eskasoni First Nation

Recipient: First Nations and Inuit Health Branch, Health Canada

Contribution: \$465,133

This project designed, implemented, and evaluated a holistic model of health service delivery in Eskasoni, a First Nations community in Cape Breton, Nova Scotia. The project initiated the following elements: the continuing transfer of health care administration from the federal government to the local band; the change of physicians' services from a solo, fee-for-service model to the model of a multi-doctor, multidisciplinary clinic; the construction of a new health complex, housing services from both within and outside the community; the better utilization of physicians, hospitals, and prescription drugs; the

integration of doctor-based services with community health programs; and the establishment of links with the regional health centre. The model made improvements in the efficiency and effectiveness of programs. Although not all the data were available at the time of evaluation, during the first year, visits to the emergency department declined by 40 per cent; visits to family doctors declined from a high of 11 per year to four per year; and the cost of prescribed medicines decreased 7 per cent despite a 10 per cent increase in population.

(NA342) Improving the Effectiveness of Primary Health Care Through Nurse Practitioner/Family Physician Collaborative Models of Care

Recipient: Sisters of Charity of Ottawa Health Services

Contribution: \$745,695

This study systematically evaluated ways to improve "structured collaboration" between nurse practitioners and family physicians at two intervention and two control sites in rural and remote parts of Ontario. A learning module on collaborative practice was designed, pilot tested, and then introduced at the intervention sites. After completing the module, the participating health care providers (nurse practitioners and family physicians) selected five actions that could be undertaken in the study time frame to strengthen their own collaboration. The project found that changes occurred at the intervention site once an effort had been made to structure the collaboration. Whereas nurse practitioners assumed increased responsibility for curative activities, took on more complex care of patients, and referred fewer situations to family physicians, the physicians did not change their referral patterns – full collaboration, with a high level of twoway referral, was not achieved. Investigators believe that more time and experience is needed for that shift to occur. New, agreed-upon role guidelines were successfully adapted, and, at the comparison site, inhouse referrals to physicians increased during the study period.

(NA402) First Nations National Telehealth Research Project

Recipient: First Nations and Inuit Health Branch, **Health Canada**

Contribution: \$1,998,000

This project studied how telehealth might improve the access to health services in rural, isolated communities – terms that describe a third of all First Nations and Inuit communities. Five First Nations communities were chosen to pilot this two-and-a-half year telehealth project. The goals were for families to 'visit" distant hospitalized patients via video conferencing, for patients to be treated in their communities through electronic connections with health experts, and for isolated health staff to access training, information, and expertise. Costs were incurred through the introduction of technology and the need to service that technology (infrastructure costs averaged \$245,000 to \$305,000 per community). The technology raised legal and technical challenges regarding privacy and confidentiality, and it also introduced a need for training and technical support. Telehealth coordination required additional personnel with medical qualifications to facilitate communication with remote providers, a challenge in resource-constrained communities that are facing chronic nurse shortages. This study noted that telehealth "decreases efficiency" in terms of workload by increasing pressures on human resources at the local community level. It also increases the costs of certain allied health services. In order for First Nations and Inuit communities to connect with each other and participate in joint initiatives. telehealth equipment must be standardized and made interoperable. The report concludes that although this evaluation shows that telehealth can be successfully implemented in isolated First Nations communities, without the necessary human, financial, or technical resources, "there is a high risk of project failure."

(NA403) National Telehealth Community Care Pilot: The Nephrology Telemedicine Project Recipient: Beauséjour Hospital Corporation, Moncton

Contribution: \$2,983,200

This pilot study in northeastern New Brunswick had three components: a distance education project used video conferencing to inform First Nations people

with diabetes about the risks of chronic renal failure and appropriate lifestyle adjustments; a comparison of the effectiveness of distance versus on-site education of patients prior to dialysis; and supervised dialysis treatments delivered in satellite centres via video link and electronic transmission of data. The first two components of this project, using video conferencing for health education, were promising in receiving positive feedback from patients, but the results were inconclusive due to short time frames and small sample sizes. The third component marked the first time in Canada that telemedicine techniques had been applied to dialysis, and project organizers learned a great deal about planning and implementing complicated new technology and software. Although patients saved money by not having to travel and reported satisfaction with the distance consultation, costs were approximately 10 per cent higher per treatment for dialysis in satellite sites than they were at the hospital. Researchers said this difference might eventually disappear if more intensive use was made of satellite locations for other telemedicine applications.

(NA408) Addressing Prescription Drug Misuse in First Nations Communities

Recipient: First Nations and Inuit Health Branch, **Health Canada**

Contribution: \$165,200

The Red Bank First Nation initiated this two-year pilot project to deal with prescription drug misuse for drugs like Tylenol 3®, cough syrup with codeine, and Ritalin®, which are free, easy to access, and acceptable because they are doctor-prescribed. The project generated a process by the community itself, with the commitment of its political leadership, to address the problem. It devised a non-judgmental team approach, viewing prescription drug misuse as a problem belonging to the entire community. The project staged several focus groups with service providers, community members, and youth; in-depth interviews with community and health representatives exploring factors leading to, and perpetuating, the prescription drug misuse problem; informal meetings; a case study; many workshops; and a video tape. However, the report notes that the undertaking suffered from the absence of a concrete implementation model and from some community resistance.

(NA485) Evaluation of Models of Health Care Delivery in Inuit Regions

Recipient: Inuit Tapirisat of Canada, Ottawa Contribution: \$163.800

This study examined the way health care is delivered in the six disparate Inuit regions of Canada, among populations that have the highest suicide rate, lowest life expectancy, and highest birth rate of all Aboriginal peoples in Canada. Using a holistic, population health-based approach in interviews with 41 key informants and an evaluation of commentary from the Inuit Health Policy Forum, this report lays the foundation for a future analysis of models of health care delivery. It finds that mental health issues and suicide prevention are considered top priorities in all Inuit regions and that all communities have basic, front-line nursing services, although staff shortages are straining the system. Regional differences are evident with respect to physician care. There is a general need for an emphasis on prevention, education, and health promotion and a need for Inuit involvement at all levels of the system in order to integrate traditional knowledge and culture.

(NA1012) Diabetes Community/Home Support Services for First Nations and Inuit

Recipient: First Nations and Inuit Health Branch, Health Canada

Contribution: \$650,000

This pilot project was designed to address the needs of people with diabetes and their families and to develop home care models. Four First Nations and Inuit communities hosted the program. Each represented different geographical and cultural settings, from the semi-remote to semi-urban. Each community identified gaps in three areas: diabetes education services, adequate coordination of services; and care and treatment. In response to these issues, each community developed unique models of home care diabetes services. Researchers found that the education and training of front-line staff was one of the first and most critical steps in creating community-based diabetes services. Although it is too early to assess the project's impact on rates of diabetes complications, a trend in reduced hemoglobin A1c results was noted, which can reduce the risk of diabetes complications.

(NA1022) A Grassroots Approach to Addressing the Home Care Needs of the Urban Aboriginal Population in Canada

Recipient: Quebec Native Women Inc., Montreal Contribution: \$133,245

This research project sought to help health department officials prepare culturally appropriate home care programs and services for Aboriginal people living in cities and other off-reserve settings. The project undertook a literature review to explore the existence of culturally appropriate home care programs, consulted 120 Aboriginal women living offreserve in Quebec to identify home care-related needs, and received comments from more than 50 people in five friendship centres. The proposed model is an adaptation of Quebec's provincial home care model and Ontario's Life Long Care program. The most developed parts of the model are its principles, objectives, division of responsibilities, culturally appropriate program components, and framework for evaluation. The literature review contains some relevant details on the demographics and health status of Canada's Aboriginal people, Ontario's prototype home care program for those living off-reserve, and the role Aboriginal people play in setting health policy in Australia.

(AB301-12) Evaluation of the Healthy Okotoks Project

This project evaluated an existing community program, the Healthy Okotoks Coalition (HOC), which encourages citizen involvement and enhances the capacity of indigenous leadership to address local concerns. Researchers developed a set of outcomes and process measurement tools and tried to identify barriers, apply the findings to improve the processes, and develop a blueprint for evaluating future "Healthy Communities" projects. The study found that the HOC achieved 24 community changes that it believed had increased opportunities for healthy living, including a community garden, a skateboard park, increased awareness of fetal alcohol syndrome, and a youth curfew. However, the HOC did not extend itself into the community to the extent that members felt was necessary to be representative of community needs, particularly those of marginalized groups.

(AB301-14) Healthy Families Primary Health Care Services to High-Risk Families

This Capital Health Region project involved intensive home visits providing long-term services to families with their first child. It partnered with many community agencies, including public health centres, traditional healing societies, and child and family services to target families at risk of poor health outcomes for their children as a result of poverty or social factors. The project aimed to improve parenting by increasing parents' knowledge and use of community support and by assisting them in improving their personal development. It also sought to improve the child's health and development. The families involved expressed a high level of satisfaction with the services, as did staff and other stakeholders. The parents' knowledge of their children's development increased, and most parents said their relationship with their children improved because of the program. The study also noted a decrease in the number of infants being taken to emergency departments.

(AB301-18) Health for All (Métis Settlements and Lakeland Regional Health Authority)

This project set out to improve the overall health of residents in four Métis communities in east central Alberta by providing a "settlement nurse" to provide on-site, non-emergency programs and services. It took place in a context of long-standing mistrust and miscommunication on the part of both the Métis community and members of the regional health authority. A major challenge for this project was bridging cultural differences. A major success of the project was the establishment of a trusting relationship between the settlements and the Lakeland Regional Health Authority. The project also demonstrated the importance of the settlement nurse as a link to other services as well as a direct service provider. Although some community members reported that the settlement nurse helped them improve their health, health providers saw no changes in community knowledge as a result of health promotion efforts.

(AB301-19) Evaluation of the Usefulness of **Telehealth in Providing Enhanced Primary Health** Services to the Northern Geographically Remote Communities of Trout Lake, Peerless Lake, and Red **Earth Creek**

This project evaluated the effectiveness of an existing telehealth service in providing primary health care to three geographically remote communities. Telehealth services are thought to be useful because they may improve the quantity, continuity, availability, and accessibility of care in isolated communities. However, project staff and participants did not receive sufficient training in telehealth operations, and participants found there were not enough telehealth interactions to conclude whether or not this technology delivered quality care, was cost-effective, or increased access. Very little statistical or perceptual data was available to enable researchers to answer the original question of whether telehealth was useful or not. Project leaders concluded that "under the right conditions and guidance," telehealth might benefit the communities studied.

(AB301-20) What Are the Client Characteristics and Their Perceived Barriers for Non-Adherence to **Immunization Schedules and What Impact Will an Immunization Refusal Strategy Have on** Subsequent Adherence at Six (6) Months, Twelve (12) Months, and Eighteen (18) Months?

This project aimed to increase immunization rates in the Keeweetinok Lakes Regional Health Authority, a geographically large and culturally diverse region of 25,000 residents, almost 50 per cent of whom are Aboriginal. It hoped to increase immunization rates by inviting people who did not wish to update their child's immunizations either to sign a "refusal" form or to make an appointment for a subsequent immunization. It then followed up adherence at the 12-month, 18-month, and pre-school visit stage. Researchers found that parents' lack of knowledge about vaccines may be the most important single barrier to immunization. Lack of access to clinics was also a major factor. Other barriers to immunization included lack of child care and transportation problems. The project increased the region's immunization rates by about 20 per cent. The written refusal option was found not to be an effective strategy for dealing with under-immunization.

(QC434) Putting in Place an Integrated System for Persons with Severe and Persistent Mental Problems

Recipient: Régie régionale de la santé et des services sociaux de Nunavik, Kuujjuaq, Québec

Contribution: \$488,238

This pilot project tackled growing psychosocial problems and high suicide rates in Nunavik by housing, supporting, and employing people suffering from severe and chronic mental health problems who might otherwise be sent to Montreal. The project's integrated approach built on pre-implementation work: preparing communities, spelling out objectives and procedures, and clarifying accountability. During the nine months of the centre's operation, 12 clients were served and achieved greater independence. The majority managed to deal effectively with their addictions problems; only one client was hospitalized during the program. As a result of this project, there is now a new resource in Inukjuak, and the study concludes that the materials developed by the project might be useful in other isolated communities.

(SK323) "Born Healthy, Raised Healthy," a Breastfeeding and Nutrition Support Program Recipient: Battlefords Health District Contribution: \$191,733

This project aimed to improve maternal and infant health in the Battlefords Health District community by establishing a supportive breastfeeding and prenatal nutrition culture and improving client access to health care services. The targeted population included teen parents, single mothers, low-income families, and transient females. Many were Aboriginal people. Services were provided by a project coordinator/lactation consultant and outreach workers in a street-front outreach centre. This project increased the target population's ability to access services, improved their food security, addressed determinants of health such as social and physical environments, and created more community resources. The project was valued by clients and partners for its ability to make a positive difference in population health. Most importantly, clients who received support had higher rates of breastfeeding than did a sample of non-project mothers who selfreported their breastfeeding rates.

(SK324) An Evaluation of Integrated Services for Families of Aggressive School-Aged Children Recipient: Battlefords Health District

Contribution: \$171,600

This project provided mental health services to aggressive school-aged children by moving those services from institutions to schools, homes, and the community. In doing so, it hoped to integrate services and reach children who are traditionally overlooked. The study involved 13 children from "multi-problem" families; the majority were of First Nations ancestry. male, and living in single-parent families or extended families. Most lived in lower-income households, all exhibited aggressive or defiant behaviour, and many were felt to be at risk for criminal conduct. Mental health professionals and social workers involved teachers, school administrators, and families, and services were provided after-hours and in a variety of non-conventional settings. A qualitative review of the data concluded that 10 of the 13 children experienced a positive change in their behaviour, but these results could not be confirmed in a quantitative review.

(SK330) Transition to an Integrated Primary Health Services Model

Recipient: University of Saskatchewan Contribution: \$318,726

This study set out to learn how to shift health delivery services in core communities from a conventional "bio-medical" model to one that emphasizes integrated services, prevention, acute care, home care, and pharmacare. A "high participation" pilot research project was implemented in downtown Regina and Saskatoon, where rates of chronic disease are climbing, emergency department use is high, and clients are often unresponsive to medical advice. People living in the target communities developed and administered a health-related survey, and this "transformative action research" methodology inspired a high level of response to the questionnaire: 94 per cent in Saskatoon and 57 per cent in Regina (where modifications by the health district made the project less community-driven). As well, clients identified gaps and overlaps in services provided by the formal system and by non-profit agencies in Saskatoon and established a monthly health forum to raise awareness about community concerns. The

study already has had some practical impact: urban authorities quickly made physical improvements (e.g., installing better street lighting), but it was too early to determine a shift to health prevention.

(SK333) "New Directions" Project **Recipient: John Howard Society of Saskatchewan** Contribution: \$116,040

The Elizabeth Fry and John Howard Societies of Saskatchewan project asked if education programs teaching healthy lifestyles help reduce repeated relapses into crime among offenders and ex-offenders. The project offered information to and solicited answers from 144 male and female participants, both in and out of prison. Included was information on addictions, self-esteem, abuse and violence, anger management, sexuality, birth control, and release planning. None of the male participants completed the program.

(SK402) First Nations Health Liaison Workers **Recipient: Battlefords Health District** Contribution: \$263,181

Two First Nations health liaison workers were hired in this 18-month pilot project to assist 250 people on and off-reserve in accessing appropriate health services from 44 relevant community agencies. The workers were part of a multidisciplinary team in the Battlefords Family Health Centre, a newly created primary health services demonstration site designed to emphasize community-based services and illness prevention. The study found that the health liaison workers were not clearly linked with any particular health service provider and were uncertain about lines of authority and accountability. Clients, however, responded positively in accessing primary health services; they had fewer missed appointments and experienced better follow-through in health care programs. The liaison workers, as paraprofessionals who could speak Cree (the predominant language) and who knew the community, were seen as advocates. The workers also helped service providers better understand the multifaceted nature of clients' health needs, thus encouraging a more "holistic" approach to health.

