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TELEMENTAL HEALTH IN CANADA: A STATUS REPORT

Prepared By

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October 2004



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La présente publication est aussi disponible en français sous le titre : *Télesanté mentale au Canada : rapport sur la situation actuelle.*

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Cat.: H21-236/2004E-HTML

ISBN: 0-662-38777-5

HC Pub. No.: 1228

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iii
ACKNOWLEDGEMENT.....	v
1.0 INTRODUCTION	1
2.0 METHODOLOGY.....	1
3.0 MENTAL HEALTH AND THE TELEHEALTH POTENTIAL.....	2
4.0 ENVIRONMENTAL SCAN	5
4.1 SERVICE REQUIREMENTS	5
4.2 TELECOMMUNICATIONS REQUIREMENTS.....	6
4.3 RANGE OF SERVICES.....	6
4.4 GEOGRAPHIC REACH	7
5.0 GROWTH AND INTEGRATION OF TELEMENTAL HEALTH.....	8
6.0 FIRST NATIONS AND INUIT COMMUNITIES.....	10
7.0 POLICY AND FUNDING ISSUES.....	11
7.1 POLICY	11
7.2 FUNDING.....	12
8.0 LESSONS LEARNED.....	13
8.1 PLANNING.....	14
8.2 IMPLEMENTATION PROCESS	14
8.3 EVALUATION.....	15
8.4 FINANCIAL RESOURCES	15
8.5 BENEFITS	17
8.6 HUMAN RESOURCES.....	17
8.7 CHANGE MANAGEMENT.....	17
9.0 CONCLUSION	18
ANNEX 1: JURISDICTIONAL ACTIVITIES.....	20
YUKON	20
NORTHWEST TERRITORIES.....	21
NUNAVUT	22
BRITISH COLUMBIA.....	22
ALBERTA.....	24
SASKATCHEWAN.....	24
MANITOBA.....	25
ONTARIO.....	26
QUEBEC.....	29
NEW BRUNSWICK	30

NOVA SCOTIA	30
PRINCE EDWARD ISLAND	31
NEWFOUNDLAND & LABRADOR	32
FEDERAL GOVERNMENT – VETERANS AFFAIRS CANADA	33
ANNEX 2: ACTIVITIES IN FIRST NATIONS AND INUIT COMMUNITIES	34
ANNEX 3: INTERVIEW QUESTIONNAIRE	36
ANNEX 4: BIBLIOGRAPHY	39
ANNEX 5: REFERENCES	44

EXECUTIVE SUMMARY

This study is intended to provide a status report on, and lessons learned from the current practice of telemental health in Canada, defined as the application of telehealth methods to access or deliver mental health services, including promotion and prevention, diagnosis, treatment, rehabilitation and recovery across institutional and home and community settings.

Key informants interviewed in the course of this study are confirming that the use of information and communications technologies to access and deliver mental health services is one of the most common and successful telehealth applications in Canada today.

They view telehealth as strategic tool, capable of improving the access to and quality of mental health services at the local or community level. They foresee a great potential for rural and remote communities in particular, where serious shortages of health professionals are felt. Almost all forecast an expansion of telemental health services in the near future.

Telemental health services generally involve using videoconferencing to connect health professionals with hospitals or clinics to provide care to clients, manage shared care with local providers, or conduct case conferencing.

The feasibility and benefits of providing telemental health services to patients and providers have been demonstrated repeatedly in this country and abroad, but as for many other telehealth applications, its economic impact remains to be shown. This is largely due to the fact that the services still are not fully imbedded in the daily care processes, and cannot therefore be properly assessed within a regular budgetary framework.

Since 1996, there has been gradual but sustained growth in the number of sites offering telemental health services, the number of providers involved, the number of clients served and the range of services offered. There is also a steady movement towards their integration in care delivery at both local and regional levels. All provinces and territories have been experimenting with telemental health, and some have already embarked in program implementation.

Significant obstacles remain however. Inadequacies of telecommunications infrastructures and shortages of human resources constrain development in rural and remote areas. Managing change presents a significant challenge, when introducing the technology in work practices and business plans, for instance. Policies governing the provision of health care are designed for face-to-face care. Jurisdictions have started adjusting these policies, but some work remains to be done. Current reimbursement and licensure policies, for instance, can make it difficult to remunerate providers, in turn making it a challenge to attract professionals. In addition, current financial processes are often not suited to multiple-partner arrangements characteristic of telehealth programs.

Location of equipment and installations, proper training, lack of strategic approaches are also important factors limiting growth. These barriers keep telemental health, like many other telehealth applications, from reaching the critical mass necessary to fully integrate mainstream health care.

This situation can change. The determination of many jurisdictions to expand the clinical use of telehealth and adapt system-wide policies to this end, as well as the emergence of new external funding sources, such as Canada Health Infoway Inc., promise to create a significantly more favourable environment for telemental health. In carrying forward this agenda, it will be important to consider seven basic lessons articulated by the key informants. Some of these lessons learned have also been highlighted in the evaluations of telemental health/telehealth initiatives projects that supported under the Canada Health Infostructure Partnerships Program now completed:

1. Careful planning is critical to the success of telehealth/telemental health services.
2. Uptake is always gradual and a project can take several years to fulfill its potential.
3. Evaluation should be built into every telemental health care program/ initiative, and be adequately funded.
4. Despite limited evidence on cost-effectiveness, there seems to be real economies of scale.
5. Telemental health has demonstrated benefits to clients and providers, but patients are more easily converted than providers.
6. Telemental health presents a way to address shortages of mental health professionals, but these same shortages can constrain its growth.
7. A comprehensive, multi-faceted strategy for managing change is crucial to success.

ACKNOWLEDGEMENT

The Health and the Information Highway Division of Health Canada wishes to thank the thirty-four key informants who provided much of the qualitative data for this paper (Winter 2003/04). Represented among these interviewees were all federal, provincial and territorial jurisdictions, First Nations and Inuit communities, as well as the perspectives of physicians and directors, managers and coordinators of telehealth programs/initiatives.

1.0 INTRODUCTION

This study presents a status report on and lessons learned from the current practice of telemental health in Canada. This practice is defined as the application of telehealth* methods for access to or delivery of mental health services, including promotion and prevention, diagnosis, treatment, rehabilitation and recovery across institutional and home and community settings.

The purpose of this document is to increase knowledge about these new approaches to health service access and delivery supported by information and communications technologies, at a time when much attention is being paid to the modernization of the Canadian health care system, especially following the release of the Romanow and Kirby reports on the Canadian health care system.

Implementation of telehealth, including telemental health, involves much more than technology, and its potential to support health care modernization is deemed considerable. To discuss these emerging possibilities, this paper addresses in Section 3 the place of telemental health as an application within the telehealth environment. Section 4 presents an overview of the Canadian landscape, i.e. the general configuration of these services, the technology used, the geographic reach, and the types of services provided. In Section 5, we examine the progress of telemental health in the health care system. Issues unique to Aboriginal communities are presented in Section 6. Barriers to use and development are addressed in Section 7, and, finally, Section 8 draws some of the lessons learned from experiences gained over the recent past.

2.0 METHODOLOGY

This study is based mostly on information provided to the Health and the Information Highway Division, Health Canada, by thirty-four (34) key informants from across Canada during interviews. Interviewers completed 30 of the 34 interviews, and received one written response. The interviews lasted from 30 to 60 minutes, and questions examined:

- the role of primary health care in public health;
- a sample of exemplary models in Canada or internationally that link primary health care and public health functions;
- reactions and descriptions of an enhanced role for primary health care in health surveillance, health promotion, chronic disease prevention, immunization and basic primary prevention screening activities;

* Telehealth is the use of information and communications technology (ICT) to deliver health services, expertise and information over distance. (Glossary of Telehealth Related Terms, Acronyms, and Abbreviations. U. of Calgary, Fac. of Medicine. <http://www.fp.ucalgary.ca/telehealth/Glossary.htm#M>). Note that for the purpose of this paper, the services involving the use of the plain old telephone system (POTS) have been excluded.

- ways that primary health care and public health could ideally work together with a common goal to improve the health of Canadians;
- the greatest opportunity for primary health care to complement the work of public health; and
- building the capacity of primary health care to support public health: barriers and facilitators.

The interviewers took detailed notes. Informants received a copy of the interviewers' notes within one week after the interview to review for accuracy. Minor revisions were made. Data were analyzed using an open coding style in which the interviewer coded the notes and identified key words or phrases that stood out as potentially significant. These terms were developed into categories to capture and summarize the qualitative information. Findings were then incorporated into the larger paper where appropriate. The study also draws on:

- the second 'Survey of Telepsychiatry* Activity in Canada 2003', sponsored by the Canadian Psychiatry Association and conducted by the Alberta Mental Health Board;
- peer-reviewed Canadian articles (1997-2004);
- grey literature on Canadian telehealth/telemental health initiatives, including project evaluations of the Canada Health Infostructure Partnerships Program (CHIPP); and,
- information gathered from various Canadian websites.

There are a few factors that might affect the accuracy of this status report. First, there is no standardized method of recording telehealth statistics. Second, there is no consensus on terminology. For example, because the field is still maturing, the concept of telehealth "site" may differ from jurisdiction to jurisdiction. Third, it is also important to note that the level and type of services, as well as the number of points of services available, at least in some jurisdictions, change quite rapidly. Therefore, the statistics and other information provided might only reflect the situation at the time the interviews were conducted (late 2003 to early 2004).

3.0 MENTAL HEALTH AND THE TELEHEALTH POTENTIAL

The need for mental health care is significant in Canada. Indeed, statistics drawn from the 2002 Canadian Community Health Survey (CCHS) administered by Statistics Canada show that, "as many Canadians suffer from major depression as from other leading chronic conditions, including heart disease, diabetes or a thyroid condition."¹ Timely access to mental services is critical for consumers, who face barriers such as lack of integration of mental health services with other health care services,

* Whereas telepsychiatry usually refers to the use of videoconferencing (see this term in section 4.1) mainly for the provision of psychiatric services, telemental health covers other types of telehealth services, including those provided by social services.

shortage of mental health professionals; regional disparities and cross cultural diversity. As a result, demand often exceeds supply.² A Health Canada study³ estimated that the direct and indirect health care costs of mental disorders reached a minimum of \$14.4 billion in 1998. Furthermore, according to Bill Wilkerson, president of the Canadian Business and Economic Roundtable on Mental Health, “mental ill health” in the labour force costs Canada about \$33 billion a year in lost business production alone. This does not include the costs of treatment and health care.⁴

The last ten years have seen advances in information and communications technologies (ICTs) that are providing the foundation for a rapid rise in the numbers of telehealth projects intended to contribute to the renewal of the Canadian health care system, and Canada is being recognized as a world leader in this domain.⁵

In the mid-1990s, acknowledging the potential of ICTs for the health sector, the federal government became an important contributor through funding for development of telehealth in Canada. It is estimated that since 1997 the federal government has invested over 1.5 billion dollars in a wide variety of health care related projects involving the use of ICTs⁶, including telehealth. Among the many funding programs established by the federal government to support innovation in health, the Health Infostructure Support Program (1998-2000), the Health Transition Fund (1997-2001), and the Canada Health Infostructure Partnerships Program (2001-2004) have been key to the development of telehealth applications and programs in Canada. Health Canada’s Primary Health Care Transition Fund (2002-2006) provides also support to new initiatives, and Canada Health Infoway Inc. (*Infoway*)* will be working with provinces and territories to expand the use of telehealth, giving priority to rural and remote areas.

As a result of provincial, territorial and federal efforts, every jurisdiction in Canada now provides telehealth services (see Annex 1 for an overview of telehealth initiatives).

Among the many application and services carried out through telehealth, telemental health is one of the most popular. A reason for this is that telemental health is the simplest form of telehealth service, relying mainly on verbal and non-verbal communications. For these reasons, telemental health services were part of early telehealth initiatives, with pilot projects in Alberta, Ontario, and Newfoundland in particular. Where telehealth networks are in place, e.g. Alberta, Newfoundland & Labrador, telemental health is often part of the range of teleservices available.

* Canada Health Infoway Inc. is an independent corporation mandated to accelerate the development and adoption of electronic health information systems with compatible standards and communications technologies on a pan-Canadian basis, with tangible benefits to Canadians.

Provincial/Territorial Telehealth Activities as of March 31, 2004

Jurisdictions	Estimated # of sites	Telehealth Programs/Networks	Telehealth Call Centres
BC	120	Shared Provincial Access Network for British Columbia (SPAN/BC), HealthNet/BC	<i>BC Health Guide</i>
Alberta	Over 200	Alberta Health and Wellness Telehealth Program	<i>Health Link</i>
Saskatchewan	18	Telehealth Saskatchewan	<i>Health Line</i>
Manitoba	24	MBTelehealth	<i>HealthLinks</i>
Ontario	Over 164	NORTH Network, Videocare , Care Connect	<i>Telehealth Ontario</i>
Quebec	128	Child Telehealth Network, Mother-Child Network, Eastern Quebec Telehealth Network	<i>Infosanté</i>
Nova Scotia	53	Nova Scotia Telehealth Program	
New Brunswick	27	Wellness Network, Government Network	<i>TeleCare New-Brunswick</i>
Prince Edward Island	2	Queen Hospital site, Richmond Centre site	
Newfoundland and Labrador	72	Telehealth and Educational Technical Resource Agency	
Yukon	9	Yukon Telehealth Network	
Nunavut	15	IIU Network	
Northwest Territories	11	Western NWT Health Network	

Providing access to and delivery of mental health services at a distance with the support of emerging information and communications technologies (ICTs) may offer a new avenue to address gaps in service delivery. After over 40 years of experimentation with service provision at distance, the literature has documented the feasibility of telemental health, and many benefits have been demonstrated. For instance, telemental health initiatives have shown their ability to bring psychiatric services into seriously underserved rural and remote communities, markedly improving accessibility and reducing waiting time for specialist services. Since telecommunications can be less time-consuming than travel, telemental programs can stretch scarce specialist resources. According to the Canadian Mental Health Association⁷, telemental health could help to address the uneven regional distribution and quality of mental health services, as it can facilitate interdisciplinary educational services and encourage the sharing of care among distant specialists and community providers. As for many other telehealth applications, cost-effectiveness of these new mental health care delivery approaches remains limited.

Still the return on investment could be significant in improved accessibility to quality care and increased empowerment of patients, providers and communities.⁸

4.0 ENVIRONMENTAL SCAN

As a new mode of care delivery, telemental health is being used to support both existing models of care, and new approaches such as the shared care* model. In some remote communities, telemental health is the only way for people to receive mental health services without leaving their communities.

To provide a clear picture of telemental services in Canada, this section is broken down into the following sub-sections:

- Facilities configuration;
- Telecommunications requirements;
- Range of Services; and
- Geographic reach.

4.1 Service Requirements

Telemental health services can cover a wide range of services, including promotion and prevention through Web-based applications and telecare lines, diagnosis, treatment, recovery, but the current most developed applications involve the use of videoconferencing** to access and deliver mental health care at a distance in real-time, two-way, interactive sessions. These applications impose a certain basic human resources and site configuration.

There is generally a need for a telehealth coordinator and technical support at both the provider and receiver videoconferencing points. Typically, coordinators are allied health professionals, but well-respected persons may be playing this role in some First Nations and Inuit communities, for instance.

Telemental health sites are found most commonly in mental health organizations (hospitals, community clinics), and sometimes in psychiatrists' offices and university-based psychiatry departments. Telemental health services are also provided through multi-purpose telehealth sites located in rural and tertiary care hospitals.

* A process of collaboration between professionals (family physician and psychiatrist for instance) that enables responsibilities for care to be apportioned according to the treatment needs of the patient at different times in the course of a mental health problem and the respective skills of the psychiatrist and the family physician.

** Real-time, two-way transmission of digitized video images between two or more locations, employing telecommunications vehicles to bring people at physically remote locations together for meetings (or clinical sessions). Each individual location in a videoconferencing system requires a room equipped to send and receive video and audio data, including cameras and microphones.

The location of the videoconferencing equipment is an important issue in mental health, in particular to facilitate access by patients and providers. Telemental health requires that the sites allow for complete privacy and confidentiality. In particular, the receiver (patient) site must be appropriately designed with soundproof and, in some cases, windowless rooms, wireless headsets and microphones, and distributed cameras to accommodate posture and movement visualization by the provider, as well as viewing of drawings and other manuscript material. Other requirements include a childproof room for child psychiatry sessions⁹, as well as, in certain instances, quick access to assistance in order not to leave the patient alone should an accompanying care provider have to step out.

According to key informants, these requirements are not always met. In fact, a large number of telehealth sites are used for many different purposes, including, education, administration, and other telehealth applications. Also, funding for the required telehealth infrastructure may not be sufficient. One key informant indicated that videoconferencing equipment had been found in open spaces in some First Nations communities due to lack of funding to adapt rooms for telemental health services.

4.2 Telecommunications Requirements

The quality of video and audio signal, which is always a concern for effective verbal interaction and observation, is determined by the bandwidth and reliability of the transmission medium. According to Urness and Delday¹⁰, most of the 18 Canadian telepsychiatry programs surveyed use Integrated Service Digital Networks (ISDN) supporting a transmission speed of 384 kb/sec. Key informants mentioned that this older type of network is more costly to operate (\$68/hour in the Yukon) than an Internet Protocol (IP) network, which uses ordinary telephone lines.

The availability of proper telecommunications infrastructure to support the effective delivery of telemental health services in rural and remote areas remains an issue, especially in the territories and First Nations and Inuit communities where land-line connections often do not exist. In this latter circumstance, it is necessary to use wireless technologies such as satellite communications. However, satellite transmissions are also very expensive (\$500/hour in Nunavut) and vulnerable to weather. They also can result in delays of up to a second in conversational interchanges.

4.3 Range of Services

Clinical Services: Telemental health services have tended more than other telehealth services to emphasize (in terms of overall quantity of sessions) the provision of clinical, as opposed to educational and administrative services.¹¹

As noted by the U.S. Office for the Advancement of Telehealth, telemental health technologies can support “a full range of mental health services, including pre-admission and discharge planning, assessments and evaluations, case management, medications management, family visits, psychotherapy, court commitment hearings and

family and consumer support groups.”¹² Canadian telemental health programs have supported all of these clinical services, but more often telemental health has been used for planned care. Recent initiatives in Alberta and New Brunswick are also extending telemental health into urgent/emergency care.

According to the second CPA Telepsychiatry Survey, the three most popular categories of service were case management, shared care and follow-up care.¹³ More than half the programs surveyed also supported videoconference visits between patients and their families.¹⁴

Telemental health services in Canada also offer sub-speciality services for “brain injury, schizophrenia, culture/language specific needs, mental health assessments, substance abuse, personality, mood and eating disorders, behaviour modification and developmental behaviour.”¹⁵

In British Columbia, Alberta, Quebec and Ontario, telemental health programs have also supported some forensic psychiatry. A recent survey of Canadian psychiatrists revealed that few had actually conducted such assessments at distance; however, 55% stated that they would use videoconferencing for this purpose if the appropriate legislation, clinical services and administrative backup were in place.¹⁶

In terms of clientele, telemental health has been provided to all age groups, with a slightly higher emphasis on children and adolescent that may be due to the reported shortage of child psychiatrists in remote and rural areas. Interestingly, some children and adolescents have expressed a preference for videoconferencing sessions over face-to-face care.¹⁷

Educational Services: British Columbia, Saskatchewan, the Northwest Territories, Yukon and Nunavut have reported that education services constitute their main telemental health focus. In the area of professional development, the University of British Columbia-based Centre of Telehealth at the Mental Health Evaluation and Community Consultation Unit has recommended telemental health for “single sessions for professionals, multi-session courses leading to certificates, small-group supervision of a practice and expert consultation on specific intervention techniques in relation to specific clinical challenges.”¹⁸ It is important to note that the line between clinical and educational services is often blurred, with telemental health being frequently used to coach and mentor primary health-care providers.

4.4 Geographic Reach

Telemental health services transcend local, regional, provincial/territorial and even international boundaries. And Canada is no exception.

Regional Services: Though funding and administrative support frequently comes from provincial/territorial health ministries or jurisdictional telehealth programs, regional health authorities (RHAs), which are responsible for health care delivery in all

provinces except Ontario, usually determine whether they will provide telemental health services, based on their own needs assessments. Because of the enormous mental health needs and the vast geographic areas for which RHAs are responsible, many have been involved in telehealth partnerships and have given priority to telemental health services.

Provincial Services: While RHAs play a strong leadership role in the development of services, leadership has also been demonstrated at the provincial/territorial level. For instance, the Alberta Mental Health Board (AMHB) has developed a provincial telemental health program offering inter-regional services. Although Alberta has recently integrated the delivery of mental health services into the mandates of its RHAs, the AMHB is providing governance of the provincial telemental health program. Similarly, Saskatchewan Health has worked with the province's health regions to develop a provincially coordinated telemental health program.

Cross-border Services: Cross-border telemental health services in Canada are offered both at the national and international levels, for clinical as well as educational purposes. The number of clinical services provided via telemental health on a cross-border basis is however very limited in comparison to the number of educational services. This is due to the need to develop clinical telemental health services in a manner that respects regular referral patterns, as well as the normal practice of jurisdictions to give priority to their own respective needs in mental health service delivery.

Nevertheless, all jurisdictions do make use of cross-border clinical services to improve access to specialized care. For example, in order to gain access to treatment for eating disorders, Prince Edward Island maintains a link with an Ontario clinic. To gain access to specialized treatments for autism, Newfoundland & Labrador operates a link with a Quebec clinic. Nunavut maintains a similar relationship with Manitoba and Ontario for access to psychiatry services, while British Columbia provides general and specialist psychiatry services in the Yukon. Residents from Northern Ontario have also traditionally received services from Winnipeg instead of Toronto, because of the shorter distance to access psychiatry services. Those key informants who reported international linkages, pointed generally to knowledge brokering sessions among professionals.

5.0 GROWTH AND INTEGRATION OF TELEMENTAL HEALTH

Two questions come to mind when looking at the evolution of telemental health services. Is the availability of such services increasing? And are they being integrated in the health system as routine care processes. In both respects, the picture is mixed.

According to the second telepsychiatry survey,¹⁹ while the number of telepsychiatry programs in Canada has increased, the total number of clinical consultations has slightly decreased – from 2,545 consultations in 2001 to 2,424 in 2002. The authors attribute this decrease in activity to various operational factors, including the

limited availability of consultants, expiration of time-limited funding, and local administrative factors.

Key informants in at least nine jurisdictions reported growth in the range of services offered, the number of people served and/or the number of rural sites in place. Jurisdictions that did not report growth pointed to high staff turnover, serious change management challenge, and medico-legal and funding issues as barriers to growth and integration. The lack of centralized (i.e. jurisdictional) approach to the organisation of telemental health services was also reported as a factor in slower-than-expected growth.

For those who have experienced some form of growth, a crucial factor of success, according to the key informants, has been the work of champions*, and strong support at the administrative, senior management and political levels.

This very dependence on champions points to the reality that telemental health programs have not become integrated within the health care system. The key informants confirmed this conclusion, pointing out that the use of telemental health services has not grown significantly, and that the volume of activity is still small compared to face-to-face care. In some jurisdictions, providers' involvement is limited to only a few professionals. For example, in Saskatchewan only two psychiatrists and one psychologist provided telemental health services for the entire province at the time of the interviews.

By way of contrast, it should be emphasized that at the local level, genuine integration has been reported. Remote specialists, outreach programs, local organizations and community mental health professionals collaborate in the use of videoconferencing as part of a routine care process. In a very real sense, local communities are leading the way. There has also been integration reported at the regional level, particularly in Alberta, New Brunswick and Ontario. Indeed, according to a recent "state of science" review by the University of Calgary, "Telemental health, through the Alberta Mental Health Board initiative, is the most integrated telehealth application in Alberta".²⁰

In most instances, telemental health services are used to complement face-to-face care, and are not necessarily recommended as a substitute for it.^{21 22} But there are instances where it might be the only way to bring the services to a specific area. For this reason, key informants recommend that telemental health be developed and implemented not in isolation, but as an integral part of the continuum of care.²³ In this way, telemental health would have the potential to act as a catalyst for reform,^{24 25} particularly primary health care reform, according to key informants from many jurisdictions.

* Champions refer to those individuals or organizations who have actively taken upon themselves to promote telemental health in their respective jurisdictions

6.0 FIRST NATIONS AND INUIT COMMUNITIES

In spite of a huge need for mental health services, telemental health in First Nations and Inuit communities has been limited to only the few initiatives described in Annex 2. Many factors explain this situation, including:

- serious shortage of service providers and high staff turnover;
- absence of information and communications infrastructures and telemental health framework in aboriginal communities;
- lack of funding;
- absence of capacity to pursue the implementation of successful pilot and demonstration projects; and
- cultural issues.

Despite this, telemental health services in First Nations and Inuit communities could be growing at a fast pace if the right opportunities could be fostered. For example, in the course of the largest First Nations telemental health project, the Ontario Keewaytinook Okimakanak Telepsychiatry Pilot Project (KO Project), both patients and providers expressed high satisfaction with telemental health services and a desire for more. Evaluation of the project led to a series of recommendations about the importance of taking a strategic approach to the creation of telemental health programs in Aboriginal communities. The project is now being integrated with the services of the Nodin Centre and expanded from 6 to 24 sites with the assistance of Health Canada's Primary Health Care Transition Fund.

Among other recommendations, the evaluators of the KO Project advised proceeding with caution with telepsychiatry programs because the economic burden is often transferred between stakeholders and can fall more heavily on First Nations communities. For this reason, the KO evaluators called for negotiations with Health Canada to access a portion of the savings from telemental health as well as a search for new funding sources to support the purchase of capital equipment.

With respect to clinical services, the evaluators recommended that the use of videoconferencing equipment be extended to support other telehealth and community-based programs. They also saw a need to increase the range of telemental health services for children and to employ telepsychiatry services in the support and training of community mental health workers. They argued that the scope of telemental health services and the selection of providers should be broadened to include social workers, family counsellors, psychologists, spiritual counsellors, traditional healers and others. These recommendations are consistent with the views of the key informants.

The Primary Health Transition Fund is also supporting the expansion of Nunavut's Ikajuruti Inungnik Ungasiktumi (IIU) telehealth network, which also provides telemental health services. A new federal/provincial telemental health initiative for First Nations is under way in New Brunswick under the auspices of Regional Health Authority 3. In Alberta, the experience of First Nations communities in Treaty 7 has convinced

chiefs in Treaty 6 and Treaty 8 to consider introduction of telehealth services for their communities. However, as some of the key informants pointed out, these new initiatives do not appear to be guided by a concerted effort and seem to be based more on a “project approach” than a strategy that takes account of the recommendations made in the KO project evaluation.

7.0 POLICY AND FUNDING ISSUES

Unresolved policy and funding issues are generally regarded as key inhibitors to the growth and mainstreaming (full integration into the health care system) of telemental health. Still, these policy issues are not considered as ‘road blocks’.

7.1 Policy

In order to advance the implementation of telemental health services, project/program managers have learned to work around some remaining policy barriers, most notably reimbursement, licensing and standards.

Reimbursement: Most jurisdictions now have policies to reimburse physicians for telehealth (including telemental health), but these are generally considered inadequate for attracting service providers to telemental health. For example, as indicated by the key informants, in Alberta, physicians receive the same fee for a telehealth session as for face-to-face care, when in reality a telehealth session takes longer, according to key informants. Saskatchewan’s physician payment schedule does include payments to compensate physicians for delays caused by technical problems. In Newfoundland, child psychiatry is the only telemental health service for which there is any fee-for-service reimbursement. In Manitoba, the fee schedule omits case conferences. In Quebec, the legislation specifically provides that telehealth is not an insured service. In British Columbia and Ontario, there are no fee-for-service provisions for patient/provider consultation through videoconferencing. In order to recruit service providers, project and program managers have attempted to mitigate the impact of inadequate fee-for-service policies by using contract agreements, salaried physicians and session fees paid out of project/program budgets.

Licensing: In some jurisdictions, respecting normal referral patterns has helped minimize cross-border licensing requirements because providers offering face-to-face care are licensed in the patient’s jurisdiction. Another workaround has been to target recruitment efforts on psychiatrists who are already licensed to practice in more than one jurisdiction. It is also possible to grant “privileges” to professionals acting as consultants from a remote location, e.g. providing access to resources of a particular organization for the provision of care without going through formal application. Some restrictions usually apply though, such as no admitting or prescribing privileges. These kinds of arrangements seem to have worked because of the low volume of clinical activities during this early stage of development.

Standards: Many informants emphasized the need for developing clinical standards for telemental health sessions. Both the Quebec government and the Atlantic Telemental Health Committee are now working to develop such standards

Many informants see also a real need to adopt system policies such as reimbursement and licensing requirements, so that telehealth becomes more “user-friendly” to providers. Within jurisdictions, positive attitudes toward telehealth services and a desire to increase the use of clinical applications have stimulated continuing efforts to address these policy issues.

7.2 Funding

Many jurisdictions now see telemental health services as important to primary health care reform, though funding for implementation remains an issue. Several telehealth/telemental health services started as pilot/demonstration projects have now secured program funding, but limited health system financial capacity continues to hold up growth and integration of telemental health services. Most key informants consider their respective telemental health initiatives to be in a transition from project to program status. Many are currently working on policies at the operational and system levels, as they continue to search for sources of funding to stimulate increased clinical utilisation and expand services or sustain new initiatives.

Key informants from the territories indicated that in their jurisdictions, operational sustainability remains a problem because of high telecommunications costs for connections to multiple sites and southern providers. Several other key informants reported that limited resources available at the site for telehealth coordinators and technological support affected utilization of existing infrastructure.

Many key informants indicated that utilization would improve if they had the resources to increase the number of videoconferencing sites. Thus, plans for the expansion of telehealth networks exist in many jurisdictions. Many provinces aim at developing a videoconferencing capacity in all regional health authorities. In the territories, the goal is to connect all communities.

Suggestions for dealing with funding include review of current funding processes and the development of a funding stream dedicated to and designed for telehealth. Such funding, it is argued, is needed to prevent the diversion of funds from telehealth to other areas as a result of short-term pressures and ensure that the funding mechanisms are effective in supporting telehealth. Some of the key informants pointed out deficiencies in some of the existing funding programs. For example, under Alberta’s population-based funding formula for Regional Health Authorities, the costs incurred by the provider and receiver sites are not captured. The key informants viewed this arrangement as a real disadvantage, as more than one organization is usually involved in the delivery of a telehealth service and one or more organizations may not receive proper compensation for their role.

With respect to external funding for network expansion, the funding landscape has changed significantly with the end of both the CHIP and health programs from CANARIE Inc.* Infoway, which received new federal funding for telehealth under the 2003 federal Budget, has created a telehealth program for strategic investment to support expanded applications in rural and remote communities, but few projects/initiatives are yet underway. Under this program, jurisdictions will be expected however to assume responsibility for costs such as “operating costs, networking infrastructure, maintenance and enhancement of hardware, software systems and servers, etc.”²⁶

8.0 LESSONS LEARNED

In drawing lessons from telemental health past activities, it is important to recognize the complexity of implementing and delivering telehealth services, and the difficulty of generalizing about them, since they have only recently been moving from a project (experimental) to a program (mainstream) base delivery.

This complexity derives in part from the fact that introducing these services generally requires significant organizational change, including the creation of virtual organizations that require the development of partnership agreements, and new kinds of policies, procedures, protocols, guidelines and standards. In addition, telehealth networks and programs across Canada are at different stages of development. Some are newborn and still seeking long-term funding to ensure sustainability, while others are fully functioning programs with permanent funding. The telehealth equipment itself is used for many different purposes in order to achieve economies of scale and raise utilization in small communities. This reality increases the challenge of achieving a proper balance between clinical, educational and administrative applications.²⁷

In the next few pages some of the lessons learned by key informants and others in establishing and operating telehealth projects/programs, telemental health services in particular, are discussed.

* CANARIE Inc. (Canada's advanced Internet development organization) is a not-for-profit corporation supported by its members, project partners and the Federal Government. Its mission is to accelerate Canada's advanced Internet development and use by facilitating the widespread adoption of faster, more efficient networks and by enabling the next generation of advanced products, applications and services to run on them.

8.1 Planning

Careful planning is critical to the success of telemental health services.

One of the key informants saw planning as representing 80% of the work on these initiatives. Accordingly, in case where project depended heavily on time-limited grant funding (which has been mostly the case till recently), it was not always possible to achieve this level of planning.

In the planning process, it is essential to assess community readiness. Plans must be responsive to local community needs, resources and culture. They should respect existing referral patterns and specifically call for change management strategies. Such plans may differ fundamentally from one another, depending on whether a telemental health program is intended to serve a rural community, a suburban neighbourhood or an Aboriginal community.

Before the equipment is installed, it is necessary to ensure staff buy-in by involving care providers in planning, and reaching agreement on a wide range of policies, procedures, protocols and guidelines.

At their most basic level, plans must provide for selection of compatible equipment located as close as possible to patients and mental health care providers. If telemental health is to be a main application, plans should call for a proper environment and recognize that an all-purpose telehealth facility may not always be appropriate.

8.2 Implementation Process

Uptake is always gradual and a project can take several years to fulfill its potential. Given that the provision of services through telehealth involves a genuine paradigm shift, it should come as no surprise that it can take time for these new kinds of service models to grow and be mainstreamed. It is advisable to start small and allow for growth as comfort with the technology, applications and processes increases.

Some suggest that not much can be expected during the first two years of operation. Indeed, according to one expert, it may take up to three to four years before telehealth becomes integrated into routine health care delivery. More specifically, it is estimated that it takes as much as a full year to select, buy and install the equipment, after which new staff, particularly telehealth coordinators, must learn their roles and providers must be enrolled (persuaded to participate).²⁸ The need for this “handholding and incubation time” is also reported by *Project Outreach* in Ontario. The experience from this project suggests that “after ‘buy-in’, it takes 6 to 12 months for a site to mature to the point where it can produce approximately 3 hours of telepsychiatry per week”.²⁹

As can be seen, implementation involves far more than simply installing the equipment. Ongoing efforts are necessary to recruit and train staff, provide technical support, promote the service, and identify and support champions. Several of the key

informants said that proceeding at a deliberate pace can prevent costly mistakes, such as technical problems that make it more difficult to bring providers on side. It also takes time to develop partnerships and nurture the collaboration among organizations that is so critical to the success of multi-partner enterprises such as a telehealth network.³⁰

8.3 Evaluation

Evaluation should be built into every telemental health program/initiative and be adequately funded. The Canadian literature on telemental health, as well as key informants, emphasize the importance of ongoing evaluation to support:

- Implementation;
- improvements in program quality and accountability;
- proper evolution of programs from stage to stage;
- development of strategies to increase clinical utilisation; and
- development of evidence of economic value.

According to Hailey *et al.*, the lack of resources for evaluation poses real difficulties, especially at the local level.³¹ For this reason, it is important that resources for evaluation be integrated with program funding.

Better funding for evaluation may also lead to needed improvements in evaluation tools and techniques.³² As shown below, some argue that current measures of economic value are inadequate. Others see a need for more concerted efforts at the national level to demonstrate the impact on health outcomes.³³ Still others see a need for different evaluation requirements at different stages of a project.³⁴

In light of the considerable need for strong evidence to guide development of telemental health services, some work is underway to support the development of a more consistent data collection process. For example, the University of Calgary is leading a consensus exercise to develop telehealth outcome indicators.* The Canadian Institute for Health Information (CIHI) is spearheading development of Management Information System Guidelines for telehealth. A Canadian synthesis of evaluation strategies** may also help inform the evaluation processes.

8.4 Financial Resources

Despite limited evidence of economic value, costs are not out of line and there seems to be real economies of scale. Due to complexity and multiple uses of telehealth networks, as well as the many different methodologies used to determine their economic value, there is a lack of reasonably good data on the relationship between costs

* For more information see: <http://www.md.ucalgary.ca/Medicine/Centres/TeleHealth/NTOIP/index.jsp>.

** This project undertaken by Prof. Jean-Paul Fortin from Université Laval, Québec, is described in the Canadian e-Health Initiatives database available at: <http://209.217.71.106/cgi-bin/starfinder/0?path=hihinit.txt&id=webber&pass=ANON&OK>.

and effectiveness of telemental health services. As a consequence, it is very difficult to extend cost studies into an evaluation of economic impact.

A recent “state of science review” of the socio-economic benefits concluded that fair to good evidence exists to support investment in telemental health services.³⁵ According to the review, “in some cases, telepsychiatry is the only feasible/economic way of delivering mental health services to rural and remote places.”³⁶

The Alberta Mental Health Board (AMHB), which has placed great emphasis on the evaluation of its evolving program, considers the costs reasonable. It determined in 2001 that the breakeven point – the point at which costs would be compensated for by savings (including travel) – would occur at 348 consultations per year, but at only 224 per year if the network was also used for administrative purposes.³⁷ Because of findings such as these, the “state of science review” by the University of Calgary stated, “Telemental health, a proven and sustainable telehealth application, should be expanded.”³⁸

A 2001 study in Newfoundland & Labrador found that the cost of child psychiatry per patient was \$419.17 – slightly less than the patient’s travel costs.³⁹

In the British Columbia/Yukon telemental health project, the variable cost of regular outreach was \$111.00 per hour, while telehealth expenses ran at \$33.00 per hour. The evaluators estimated that at the current, fairly low service level, fixed and variable costs for outreach and telehealth would balance out at 163 hours per year of telehealth activity, and that higher activity levels would favour telehealth. The evaluators cautioned that both types of services would probably continue to be offered because telemental health is used to complement face-to-face care.⁴⁰

The same issues were examined from a slightly different perspective in the evaluation of the KO Project. Attendance at a one-hour face-to-face psychiatric session by a patient with an escort requires 36 hours of travel time, at an estimated cost of \$2,716.00 (including referral assessment, travel, accommodation, care services and costs borne by the home community). A one-and-a-half-hour telepsychiatry session in the home community would take only two hours, would not require an escort and would cost on average \$710.00 per session (including cost of referral assessment, professional fees, depreciation of the equipment and an appropriate* share of telecommunications charges).⁴¹

In addition to the broad questions of costs, savings and effectiveness, it is also important to consider who benefits from the savings resulting from telemental health and who should pay for these new services. This issue was raised in the KO Project evaluation, as well as in the Newfoundland study.⁴²

* The notion of appropriate share of telecommunications costs may be variable, since it is dependent on the communities’ ability to enable multiple users with the available connectivity and facility structure.

8.5 Benefits

Telemental health has demonstrated benefits to clients and providers, but patients are more easily converted than providers. Although in some initial pilot studies some patients and providers expressed a preference for face-to-face sessions,^{43 44} recent studies reveal a very high satisfaction on the part of the clients and providers. For instance in the KO Project evaluation study, 95% of First Nations respondents indicated that they would use telemental health sessions again. In the NORTH Network Phase II evaluation study, 97% of survey respondents felt that they were comfortable talking with their specialist through telehealth. However, many providers still prefer to perform face-to-face initial consultation^{45 46} to establish a therapeutic relationship and initial teleconsultations were reported least frequently in the CPA telepsychiatry survey.⁴⁷

Patients identify benefits such as increased access to specialists, greater access to on-going care, reduction in wait time for treatment, significant savings in money and time from work and school, improvements in privacy, choice and control over the therapeutic situation.^{48 49 50 51 52 53 54}

Providers involved in telehealth see benefits such as facilitated case consultation, improved communication and relationships with other health professionals, improved opportunities for professional education,⁵⁵ greater continuity and follow-up of care, more flexibility in work patterns, and better networking with community health workers.⁵⁶ However, many providers are unfamiliar with telemental health and remain anxious about its effectiveness and their capacity to use it effectively. It has been pointed out that professionals are still learning how best to use the technology and how to adapt their skill sets to the delivery of care through telehealth.⁵⁷

8.6 Human Resources

Telemental health represents a way around shortages of mental health professionals, but these same shortages can constrain its growth. Telemental health can be a useful tool for overcoming high staff turnover and a shortage and inconsistent availability of mental health care providers in rural and remote areas. However, the very viability and potential for growth of a telepsychiatry program, for instance, can also be constrained by these same factors. For example, in Newfoundland & Labrador, the departure of a child psychiatrist resulted in the discontinuation of the telepsychiatry program. NORTH Network in Ontario also expressed concerns over its ability to sustain the growth of its popular telepsychiatry program because of the overall shortage of psychiatrists in the province.

8.7 Change Management

A comprehensive, multi-faceted strategy for managing change is crucial to success. In addition to a technological network, telehealth requires an efficient and effective “people network”.⁵⁸ This is particularly true for telemental health, which, more than other telehealth applications, depends on a team approach. Many key informants

pointed to the enormity of the change management challenge and the lack of concerted efforts to address it.

Much can be learned from Ontario's NORTH Network, one of the most successful telehealth networks in Canada. It has developed an effective change management strategy to facilitate providers' involvement. The strategy is based on eight elements:

- local leadership at every site;
- enhanced regional communication;
- adaptation to First Nations communities;
- maintenance of existing referral patterns;
- communication and promotion;
- payment of fee-for-service practitioners;
- training; and
- turnkey technology management.⁵⁹

With respect to local leadership and communication/promotion, both evaluators and other key informants emphasized the essential role of the telehealth coordinators. They expressed particular concern about the limited time available from telehealth coordinators in many rural/remote communities where the role is often a part-time responsibility for a busy nurse.⁶⁰ In addition to increasing resources for telehealth coordinators, evaluation reports recommend more active marketing of telehealth services to raise community awareness and get providers' buy-in.

In the view of evaluators and key informants, training is another critical and too often neglected element of a change management strategy. Some suggest that training in the workplace needs to be more customized, clinically oriented and designed to compensate for high staff turnover in rural and remote areas. To encourage greater acceptance by physicians, some key informants perceived a serious need to integrate telemental health training into university programs and psychiatry residency programs.

9.0 CONCLUSION

The high demand for mental health services, the shortage of mental health professionals and the Canadian government's search for innovative approaches to renew the health system have all influenced the development of telemental health services over the last decade. Telemental health is clearly one of the most popular and successful telehealth applications today. Although few large-scale initiatives have been implemented yet, telemental health services have slowly spread across the country and are starting to be integrated into local and regional services.

Yet much work remains to be done if we are to ensure full integration of telemental health into a health care system designed for face-to-face care. The challenges are numerous: providers must be attracted to this new mode of service delivery; system-wide policies must be adjusted to make telemental health more

“provider-friendly”; infrastructure needs to be improved in rural, remote and First Nations and Inuit communities; and the number of sites increased to promote utilization by mental health providers. Also, central (i.e. jurisdictional) management approaches to telemental health services may be needed as the services continue to grow and funding to support growth and evaluations will have to be ensured.

There are opportunities as well. Governments are increasingly positive about telehealth and want to see it is utilized for the delivery of clinical services. *Infoway* represents an important new source of funding to foster developments on a pan-Canadian basis. This climate is created a real opportunity for collaboration to promote full integration of telehealth, including telemental health services, into health care delivery. Such collaboration should focus on:

- aligning funding priorities to support growth for telemental health services;
- promoting telemental health as a tool to support self-care, early screening, intervention and shared care approaches consonant with primary health care reform;
- developing Canadian standards and clinical practice guidelines, and sharing best practices;
- ensuring First Nations and Inuit communities benefit from these new type of services; and
- designing effective change management strategies, including appropriate clinical training and marketing of services.

As one key informant put it “telemental health works, patients and providers love it. It now needs to be nurtured and integrated into business plans as a tool to help address issues of access, quality of care and savings.”

ANNEX 1: JURISDICTIONAL ACTIVITIES

Provincial and territorial governments, with their responsibilities for the delivery of health care services, have jurisdiction over most of the telemental health services in Canada. Key informants who were interviewed in the course of this study provided much of the information presented in this section on provincial and territorial activities.

Yukon

The Yukon Telehealth Network* began in 2001 as a project under the CHIPP to provide health information and other telehealth services to six Yukon communities. In September 2003, the network became a program supported by the Yukon Department of Health and Social Services, though long-term program funding has not yet been secured.

The network delivers a variety of telehealth services, including, since 2002, telemental health services, implemented under the CHIPP BC/Yukon Telemental Health project.

As of January 2004, there were nine Yukon telehealth sites (one satellite-based and eight land-based). The provincial government purchases Telemental health services under contract agreements that facilitate reimbursement of providers from other jurisdictions. Session fees ensure reimbursement for a resident psychiatrist.

Telelearning is heavily used in the Yukon, but clinical activity is limited. Approximately 70 direct clinical telepsychiatry consultations are held each year, mainly for follow-up care and case consultation for both adults and children, according to the key informant.

Two psychiatrists (one child and one geriatric psychiatrist) provide outreach services to the Yukon from British Columbia. The Yukon also receives educational services from Alberta, Saskatchewan and B.C. Mental health educational services are received from B.C.'s Mental Health Evaluation and Community Consultation Unit and from Alberta.

Obstacles/Future Directions: Because telemental health is comparatively new in the Yukon, change management has emerged as a major concern. Other important barriers to further integration of telemental health services into the health care system are:

- a weak telecommunications infrastructure, which has created technical difficulties and interfered with staff buy-in;
- the high cost of telecommunications; and

* Web site address: <http://www.hss.gov.yk.ca/prog/cn/telehealth.html>.

- the absence of sustainable funding (services are currently funded under the limited mental health budget).

The Yukon is in the process of adding one more site for the fall 2004. Four communities will then remain to be connected (two with no connection and two with inadequate bandwidth).

Northwest Territories (NWT)

In 1998, the Territorial Department of Health and Social Services established the Western NWT Telehealth Network (WestNet Telehealth) to provide scheduled telehealth services in orthopedic, internal medicine and urgent and emergency X-ray consultations in Yellowknife, Fort Smith and Inuvik. Since then, the network has been expanded to offer a range of telehealth and social services, including telemental health. The pilot for telemental health services ended three years ago, and this service is now the largest component of WestNet Telehealth.

As of January 2004, there were eleven satellite-based telehealth sites nine different communities. Three of these sites (two receiver and one provider) focused exclusively on telemental health services, according to the key informant.

Tele-education is the most frequently used telehealth application, but a wide variety of clinical services is offered on an as-needed basis. Last year, services provided by social workers were the most utilized services. Currently, child and adolescent psychology is experiencing the fastest growth. According to NWT government's 2002-2003 statistics, nine patients received psychiatry services, 71 received social services, and 52 service providers attended educational sessions offered by the Alberta Mental Health Board.

The NWT's government supports both pan-Canadian and pan-international cross-border activities, particularly in specialty areas. At present, most of these cross-border services come from Alberta. The government is considering signing an agreement to receive emergency telemental health services from Australia.

Obstacles/Future Directions: Mental disorders are the most prevalent health problems in the NWT, outdistancing both diabetes and cardiovascular disease combined. For this reason, telemental health is considered integral to the territorial health system and central to ensuring the successful introduction of telehealth into new communities. It is expected that utilization will further increase when all 33 communities are connected under the present five-year expansion plan. An important obstacle to further integration is the high cost of telecommunications, because of its dependence on a satellite-based network.* Other barriers include the lack of adequate telehealth infrastructure and a shortage of qualified staff. Reimbursement policies for physicians are not considered an issue because all NWT physicians are on salary.

* The ratio of telecommunication cost to equipment cost is 10 to 1. The average telecommunication cost for providing one hour of telehealth services is about \$500.

Nunavut

In 1999, Nunavut started providing telemental health services as part of a pilot project for the Ikajuruti Inungnik Ungasiktumi (IIU) Telehealth Network. This project was funded under the Health Infrastructure Support Program (HISP). A grant under the CHIPP helped underwrite growth in the early 2000s.

As of January 2004, there were 15 satellite-based telehealth sites in Nunavut, with some telemental health services offered through each site. According to the 2003 CPA telepsychiatry survey, tele-education, with about 180 sessions held in 2001-2002, is the most frequently used telemental health application in Nunavut.

In the case of clinical activity, the volume of services fluctuates, depending on the availability of staff. For example, there was minimal telepsychiatry activity last year because of a shortage of staff. Telecounseling provided by mental health workers, social workers and allied health professionals is the main type of telemental health service. The network also enables family visitation.

Although the majority of telemental health services provided to Nunavut residents originates from sites within the territory, there are some cross-border activities as well. For example, Nunavut receives some specialized services from Ontario's Centre for Addiction and Mental Health and Manitoba's Selkirk Mental Health Centre. Nunavut's reliance on other jurisdictions to provide specialty services to its population makes it favorable to finding pan-Canadian solutions for telehealth policy-related issues, such as licensure and reimbursement of service providers. Currently, there are several temporary arrangements in place to deal with these problems. For example, service providers from Ontario can bill the Nunavut government directly and those from Manitoba have a contractual agreement. There is no reimbursement policy in place with other jurisdictions.

Obstacles/Future Directions: Although mental health is a high priority for the Nunavut government, telemental health services are not fully integrated into the primary health care delivery system. The main obstacles to further growth and integration are the high costs of operating a site (\$5,700.00 per site operating 20 hours per month), high staff turnover of approximately two to three years, and technical difficulties due to inadequate infrastructure. The Nunavut government's goal is to have its 25 communities connected to telehealth services. It has received \$2.7 million in funding from the Aboriginal envelope of the Primary Health Care Transition Fund to add seven more telehealth sites. The search for new funding to connect the remaining three communities continues. It is expected that greater clinical utilization will occur as the number of communities connected increases.

British Columbia

In British Columbia, a large focus of mental health and addictions care has been to support self-care and understanding of mental health among the population. This

emphasis was carried over into telemental health, for which planning began in 1997 in the Peace Liard Region, with implementation launched in 2000. Since 2003, telemental health services have expanded to provide a variety of services, including information for health workers, consumers and families.

The overall responsibility for telehealth lies with the Provincial Health Services Authority, but delivery of health services is much decentralized. As such, it is up to each individual Regional Health Authority to decide where or if to invest in telemental health programs.

The B.C. Ministry of Health has provided funding for 42 telehealth sites providing mental health services throughout the province. As of January 2004, 32 sites were operated by RHAs. All of these sites have the capacity to provide or receive telehealth services.

The main provider of telemental health services in B.C., contracted by RHAs, is the Centre for Telehealth at the Mental Health Evaluation and Community Consultation Unit (Mheccu) at the University of British Columbia. Telemental health services provided by Mheccu involve mainly psychological services and are mostly focused on education and coaching of service providers.

One of Mheccu's major undertakings was the BC/Yukon telemental health project, funded under the Canada Health Infostructure Partnerships Program. This initiative now continues with funding from different sources, including project funding from the BC/Yukon project for Concurrent Disorders, funded under the Primary Health Care Transition Fund. Mheccu also collaborates with the Alberta Mental Health Board on education and evaluation activities. It is also involved in some international cross-border activities, including knowledge-brokering sessions with mental health experts from Australia, New Zealand and the United States.

British Columbia's Children's Hospital and the B.C. Cancer Agency also provide some telemental health services.

Obstacles/Future Directions: At present, the number of clinical services delivered via telemental health programs is quite low, and the B.C. government is now advocating a greater clinical utilization. However, British Columbia has no overall telehealth strategy. One of the main obstacles to growth has been identified as reimbursement of physicians. Although some providers now receive salaries or payments under contracts, "project" funds in most cases have to be used for this purpose. Other obstacles are technical, such as inadequate infrastructure and poor access to broadband networks, especially in rural and remote communities.

Alberta

Since 1996, telemental health services have been a priority in Alberta. The Alberta Mental Health Board (AMHB),* a health authority reporting to the Minister of Health and Wellness, has developed, managed and delivered the largest telehealth program in the province, based on the shared care model. Some regional health authorities, such as the Calgary and Chinook authorities, have also developed their own programs.

Since April 2003, the delivery of mental health services, including telemental health services, has been integrated into the mandate of the nine new regional health authorities. The Alberta Mental Health Board has retained governance of the telemental health program.

The province now has a sizable telehealth network that delivers telemental health services within regions and across regions with more than 200 telehealth endpoints (Alberta's equivalent of a receiver site). Although in theory they all have the capacity to receive telemental health services, not all offer these services. Key informants predict that with the devolution of mental health services, most regional health authorities will eventually have the capacity to offer this service. During 2002/03, 836 direct clinical consultations and 44 indirect (case review) sessions were delivered by the AMHB.⁶¹

Although cross-border clinical services occurred on a very limited basis in Alberta, the AMHB, through Ponoka Hospital, does provide cross border education and training to other jurisdictions such as Saskatchewan, British Columbia, the Yukon and Northwest Territories.

Obstacles/ Future Directions: Key informants from Alberta felt that although the telemental health program is well established, the services are still not fully integrated in the health system. There is still room for increased clinical utilization and implementation in community mental health clinics. It is expected that the integration of mental health services into the mandate of RHAs will lead to further integration.

Saskatchewan

In 1999, Saskatchewan Health funded the Northern Telehealth Network pilot project that resulted in the creation of a permanently funded telehealth network in Saskatchewan. Health Canada provided additional funding through its Health Infostructure Program.

In 2001, Saskatchewan Health announced the expansion of the network to include additional northern communities and new sites in the southern part of the province. The network was renamed Telehealth Saskatchewan** and received additional

* Web site address: http://www.amhb.ab.ca/programs/prog_telemental.html.

** Web site address: http://www.health.gov.sk.ca/ps_telehealthsask.html.

one time funding from Health Canada under the Canada Health Infostructure Partnership Program. The provincial health ministry in partnership with the province's regional health authorities operates the network over to the provincial government's wide area network known as CommunityNet, linking all health care facilities.

As of March 2004, there were 17 telehealth sites. Telehealth services in Saskatchewan are mainly educational. The same is true for telemental health: in 2001-2002, some 130 educational sessions related to mental health were delivered.⁶²

On the clinical front, a key informant indicated that 80% of the telemental health services provided is in telepsychiatry, and 20% in telepsychology. Two psychiatrists (one child and one adult psychiatrists) and one psychologist (on a part-time basis) are involved in delivery of these services. According to the CHIPP evaluation report, 23 child psychiatry sessions were recorded in 2003, in comparison to one for psychology, one for social work and four for anxiety disorders. Child psychiatry is reported as the most popular service and was identified in the pilot study as the most successful clinical application. Demand for telemental health services is considered relatively stable, with potential for increase.

The Southend First Nations Community piloted a successful telemental health service under the First Nations and Inuit Telehealth research project supported by the Health Transition Fund. But the services are now limited to some educational services due to funding problems. The Southend site participates in programming provided by Telehealth Saskatchewan.

Cross-border activity has mostly involved educational services, mainly from Ponoka Hospital in Alberta. Some clinical services have also been received from Toronto's Hospital for Sick Children, Edmonton and Winnipeg.

Obstacles/Future Directions: The main barriers to growth and integration have been identified as lack of provider awareness and inadequate IT infrastructure, e.g. bandwidth, in some communities. The government's current goal is to increase utilization of existing sites by more active promotion. As the Action Plan for Saskatchewan Health Care recommended that the number of telehealth sites be increased, the province would like to pursue the expansion of its network to 27 sites, but only if new funding becomes available.

Manitoba

The Manitoba Telehealth Network (MB Telehealth)* established in 2001 with a two-year, shared-cost initiative involving Manitoba Health and Health Canada's CHIPP, provides services such as televisitation, teleconsultations, tele-administration and tele-education in various health disciplines, including mental health. Prior to establishing this network, there was a limited amount of telemental health services available in Manitoba. For example, in the 1990s, fly-in psychiatrists providing services to small

* Web site address: http://www.mbtelehealth.ca/about_overview.php.

communities would use telemental health to complement their face-to-face practice. Manitoba's telehealth program focuses on patient care, and mental health has been identified as one of its high medical priorities.⁶³

Manitoba has used both land-lines and satellites to link its telehealth sites. As of January 2004, there were 24 such sites (hospital based), 4 in Winnipeg and 20 in the rest of the province.* At least eight of these had the capacity to provide telemental health services.⁶⁴

The Selkirk Mental Health Centre and the Winnipeg Regional Health Authority provide most of the clinical and educational services and are currently working on a shared care pilot project to extend psychiatry services to rural and remote areas. Clinical services include adult psychiatry and psychology, as well as child and geriatric psychiatry. Manitoba also plans to provide some child/adolescent telepsychiatry services in the near future.

Telemental health services were established in the Berens River First Nations Community under a Health Transition Fund telehealth project. Services were discontinued due to lack of continuity in staff and satellite problems requiring an infrastructure upgrade. Some telehealth services to First Nations are now delivered through the provincial Northern Medical Clinic program and Norway Hospital.

Manitoba does engage in some cross-border activity with Ontario's NORTH Network, mostly for clinical purposes - mainly in psychiatry - but also for educational purposes and to a lesser extent with Alberta, Saskatchewan and some First Nations communities. The Selkirk Centre also has clinical link to Nunavut; however, given the recent expansion of the Nunavut network, this link has not been fully exploited.

Obstacles/Future Directions: Significant obstacles to further integration of telemental health into health care delivery in Manitoba have been: the lack of a centralized approach for telemental health services, lack of regional coordination, lack of training for psychiatrists, and selective telehealth reimbursement policies. Manitoba has a fee-for-service reimbursement policy for telehealth, but it is limited to direct consultations. Other obstacles have been the lack of integration with First Nations health services, and poor infrastructure for telehealth in First Nations communities. As well, the evaluation of MB Telehealth, carried out under the auspices of CHIPP, noted that telemental health has the potential to play a larger part in prevention.

Ontario

Ontario began providing telemental health services in 1996. At that time, five medical hubs provided most of the outreach services, education and research in mental health. These were university schools of medicine and their affiliated research hospitals in London, Hamilton, Toronto, Kingston and Ottawa. In project outreach, funded under the CHIPP, four hubs came together with the Chippewas of the Thames

* Web site address: http://www.mbtelehealth.ca/map_man.php.

first nation to provide telepsychiatry services. Between October 1, 2001 and September 30, 2002, the project provided 3,920 patient interventions, including 872 patient visits and 3,048 case discussions by multidisciplinary teams.⁶⁵

Funding for Project Outreach ended in 2002. This initiative has now been incorporated into the three regional telehealth programs, i.e. NORTH Network, VideoCare and CareConnect, that had also received support from CHIPP.

The five major telehealth programs now delivering telemental health services in Ontario are:

- NORTH Network, which provides services in northern and central Ontario;
- VideoCare, which serves southwestern Ontario;
- CareConnect, which provides services in eastern Ontario;
- the Pediatrics Telepsychiatry Program, which provides services aimed at children and adolescents; and
- the Psychiatric Outreach Program.

The NORTH Network,* based at the Sunnybrook and Women's College Health Sciences Centre, has been providing patient consultations and continuing education to northern and rural communities in Ontario since 1998 and to the Keewaytinook Okimakanak First Nations communities since 2001. It was the largest telehealth project funded under the CHIPP.

As of January 2004, NORTH Network operated 100 telehealth sites capable of providing or receiving telehealth services in 70 specialty areas. The number of sites is forecasted to grow to 150 by year-end. According to the 2003 CPA telepsychiatry survey, at least seven of these sites provided mental health-related services in 2001-2002. In 2003, the NORTH Network provided 1,273 psychiatric consultations (1,075 adult and 198 child/adolescent), according to the key informants. This volume of activity makes telemental health one of the leading applications on this network.

VideoCare,** also known as the Southwestern Ontario Telehealth Network (SWOT-N), uses Internet Protocol (IP) technology to support a 43-site videoconferencing network across southwestern Ontario. Based at the London Health Sciences Centre and initiated in 2001 with the support of the CHIPP, this telehealth program provides a variety of clinical mental health services to all age groups, particularly adults. St. Joseph's Hospital acts as the regional mental health referral centre. VideoCare also offers educational services and sub-specialty services, including treatment for mood and eating disorders. According to the key informants, 40% of all the network's telehealth activities are telemental health related.

* Web site address: <http://www.northnetwork.com/webportal/NorthNetworkPortal/>.

** Web site address: <http://www.lhsc.on.ca/isan/videocar/videocar.htm>

CareConnect,^{***} based at the Sisters of Charity Health Services in Ottawa, was first established in 2001 as the Eastern Ontario Telehealth Network, a CHIPP project. As a new program, it has recently integrated the Kingston-based Telepsychiatry Network of Southeastern Ontario. The program provides telehealth services to patients residing in southeastern and eastern Ontario. It links 27 partners at 36 sites to offer consultation and educational services in 16 specialty areas. At least seven of these sites offer telemental health-related services. CareConnect partners provided 175 direct patient consultations in psychiatry and mental health in 2003, according to the key informants. CareConnect's vision is to eventually connect with Community Care Access Centres and long-term care facilities.

The Pediatrics Telepsychiatry Program, funded by the Ministry of Community and Social Services, provides clinical services and education through a partnership between the Toronto Hospital for Sick Children and the University of Toronto. This program delivers services to 14 children's mental health agencies and to other organizations delivering children and youth services.

The Psychiatric Outreach Program coordinates clinical service, education and support to communities throughout Ontario, particularly in remote and rural communities, or those communities that are considered under-serviced in terms of mental health care services. It provides services such as televideo consultations. There are two programs under the Psychiatric Outreach Program: the University of Toronto Psychiatric Outreach Program (in partnership with the Centre for Addiction and Mental Health), and the Ontario Psychiatric Outreach Program (in partnership with the University of Ottawa Northern Ontario Francophone Psychiatric Outreach Program, the University of Western Ontario Extended Campus Program and the Northern Academic Health Sciences Network).

Service providers in Ontario also provide a significant number of clinical and/or educational telemental health services to Saskatchewan, Manitoba, Prince Edward Island, Quebec, Nunavut and some First Nations communities.

Obstacles/Future Directions: Despite the high volume of telemental health activities in Ontario, these services have only achieved partial integration into the provincial health care system, with government funding being limited to hospital based sites. The key informants identified inadequate funding for mental health in general, and for telehealth receiver sites in particular, as well as issues related to change management as obstacles toward further integration and uptake of telemental health services in Ontario. The Ontario government, through its Telemedicine Networks of Ontario initiative, is now working closely with NORTH Network, VideoCare and CareConnect to create a "network of networks" in Ontario. The intention is to ensure greater efficiency and interoperability across the three networks as well as the sharing of best practices.

^{***} Web site address: <http://www.careconnect.org/index.asp>.

Quebec

Quebec's *Réseau de télécommunication sociosanitaire* (RTSS) has two distinct addressing paths that support telehealth services: one for diagnostic imaging and the other for videoconferencing (bandwidth between 384Kb/s to 512 Kb/s) managed by the *Service national de visioconférence*. The purpose architecture is to have bandwidth guaranteed and protected at all times. Telehealth services have been deployed in more than 100 health care organizations (90% of them with access to videoconferencing equipment), 21 currently providing telemental health services and training.

Telehealth in Quebec evolved from the grass roots leadership of cardio-pediatricians in the absence of provincial strategic direction. After publication of a report to the *Table ministérielle en télésanté*, the *Ministère de la Santé des Services sociaux* created the *Centre de coordination nationale en télésanté* (CCNT) to develop a set of clear principles and guidelines for selecting telehealth projects that would improve accessibility of telehealth services in rural and remote regions. The committee identified four priority areas: telepathology, teleradiology, telehomecare and videoconferencing (which, among other purposes, is intended to support telemental health services). Quebec's health system is now divided in four (4) health regions, each within a *Réseau universitaire intégré de santé* (RUIS). An Inter-RUIS Telehealth Committee is supporting the CCNT, and telehealth teams made up of health care providers are being set up in each RUIS.

For the most part the provision of telemental health services has been a comparatively recent development in Quebec, and more project-based than an established program in different parts of the province. The more established *Réseau mère-enfant*, based at Sainte-Justine hospital in Montreal, has for some time offered telemental health services to the *Centre de santé de la Basse Côte Nord*. It has been reported that all major psychiatric institutions in the province have telemental health projects, including an important initiative with the Louis-H.-Lafontaine hospital in Montreal for the development of a telepsychiatry network.

Because of the large number of people with mental health problems calling *Infosanté*, the province-wide tele-triage service, the Quebec government has begun pilots in several regions for *Infosocial*, a teletriage service using mental health care providers instead of nurse generalists. On the basis of the results of these pilots the government will determine the feasibility of implementing a provincial program.

Obstacles/Future Directions: For the videoconferencing projects to become more user-friendly, sustainable and integrated into the health care system, it will be necessary to resolve a number of change management concerns, as well as legal and policy issues, especially with respect to reimbursement for service providers. Telehealth services are presently identified as non-insured services in the Quebec legislation. The current provincial telehealth action plan calls for legislative and legal adjustments to facilitate the use of telehealth services, development of standards and investments to upgrade the infrastructure of the RTSS and to implement telehealth projects. RUIS telehealth teams

will have to identify needs, propose business plans, provide services in remote and rural regions, in order to create a better, more defined care delivery structure.

New Brunswick

The New Brunswick Department of Health and Wellness provides telemental health services in collaboration with Regional Health Authority 2 (RHA2), one of the eight RHAs in New Brunswick. RHA 2 piloted two initiatives that launched telemental health services in the province: the first offered planned services that started in 2000; the second, involved emergency services, started in 2002.

New Brunswick, unlike many other jurisdictions, does not have a central telehealth program/network. The province's recently established Office of E-health is developing a provincial telehealth strategy, and has identified telemental health as one of three telehealth priorities. Telemental health is also part of the province's Primary Health Care Reform Plan.

Although eight RHAs have videoconferencing equipment, clinical telemental health services are not delivered through these sites due to their location. RHA 2 uses a computer based-system equipped with the Interactive Real-Time Imaging and Data (IRIS) system to deliver approximately 70 direct telemental health consultations per year, according to the key informant. Telemental health services are mainly clinical. Two hospitals and two community mental health clinics participate in the program linking Saint John with the St. Stephen area.

RHA 3 is involved in a recent telehealth initiative that has started with addiction services and was developed in partnership with the First Nations and Inuit Health Branch of Health Canada. According to the key informants, other RHAs are also interested in providing telemental health services, but do not yet have the required equipment.

Obstacles/Future Directions: The main obstacle to further integration of telemental health services in New Brunswick is lack of funds to support and enhance the network, and expand the programs to all RHAs. There are also change management issues, including resistance by providers, and current physician reimbursement policies. Although telemental health services are gaining momentum in New Brunswick, their integration into health care delivery is limited to the St. Stephen area. The province plans a provincial rollout of telemental health services if new funding is secured. The province is also collaborating with the Atlantic Telemental Health Committee to develop standards of practice for telemental health.

Nova Scotia

The Nova Scotia Telehealth Network (NSTN)* operated by the Department of Health, started providing telehealth services in the province in 1996 through a pilot

* Web site address: <http://www.gov.ns.ca/health/telehealth/default.htm>.

project. In 2000, it began supporting the delivery of telemental health services. It is now a provincial program with its own budget.

As of January 2004, the NSTN used 53 videoconferencing sites in 42 health care facilities throughout Nova Scotia. The program runs a telemental health clinic for adult and pediatric psychiatric consultations with a reported 350 telemental health consultations per year in Nova Scotia. A partnership is currently in place to provide mental health services to a youth justice facility.

The Isaac Walton Killam (IWK) Health Centre in Halifax provides child psychiatry consultations to various remote sites within the province. Its psychology department initiated various research projects to increase access to services through the Internet for less critically ill clients.

Nova Scotia provides telehealth services to the other Atlantic Provinces, including child psychiatry services to New Brunswick and Prince Edward Island. It also has a cross-border link with Ontario and a few other jurisdictions.

Obstacles/Future Directions: The use of videoconferencing for telemental health is in the early stage of being integrated into the health care system in Nova Scotia. Although both Nova Scotian and out-of-province providers receive reimbursement for the provision of telehealth services, the absence of reciprocal licensure and reimbursement agreements with other jurisdictions, physicians' resistance and the shortage of providers were identified as obstacles to growth and mainstreaming of telemental health services in Nova Scotia.

Prince Edward Island (PEI)

Although PEI does not have a province-wide telehealth program/network,* there are two telehealth sites that have the capacity to offer telemental health services, which are located at:

- the Queen Elizabeth Hospital in Charlottetown; and
- Richmond Centre, a Charlottetown community mental health clinic.

The former is a general telehealth site that has since the late 1990s been able to receive and provide a variety of telehealth services, including telemental health. The Richmond Centre site started operating in 2003 and is a receiver site for mental health services.

According to the key informant, the Richmond Centre provides approximately 20 to 30 direct and indirect teleconsultations per year.

* PEI does, however, have a province-wide health information network called, the Island Health Information Network (IHIS), that serves as an information resource for patients/clients and service providers.

Cross-border service provision is important to PEI. It receives some of its child psychiatry services from the IWK Health Centre in Nova Scotia. Ontario provides some adult services related to eating disorders. Before establishing these telehealth sites, there were only two alternatives: either patients had to be flown to Halifax and other out-of-province centres for treatment or specialists had to be brought in. PEI is an active member of the Atlantic Telemental Health Network, which is an interprovincial body established to develop telemental-related policies, procedures and service standards, as well as to work collaboratively with other Atlantic provinces on telemental health projects.

Obstacles/Future Directions: Telemental health services are to some extent integrated into the operation of Richmond Centre's community mental health services, but they are not integrated into the overall provincial health care system. The province is undertaking several initiatives to expand the use of telemental health services. For example, telemental health has been incorporated into the province's overall mental health strategy. Both the Telehomecare and Primary Care Re-design programs are planning to have telemental health components. The province is also planning to expand the number of its telehealth facilities by establishing at least one multi-functional telehealth site in each of its four health regions in the next five years. PEI supports cross-border activities, particularly in the specialty areas. Although it has a fee-for-service contract with some jurisdictions, reimbursement of the service providers is an issue that needs to be dealt with. Inadequate infrastructures, shortage of funding and limited staff experience have been identified as the main obstacles toward further integration of telemental health services in the province.

Newfoundland & Labrador

Newfoundland & Labrador are unique in providing telehealth services through a university-based organization, the Telehealth and Educational Technical Resource Agency (TETRA)* at Memorial University. TETRA was established in 1975 to facilitate the use of information technology and telecommunications in non-urban, remote and isolated areas. It offers various telehealth services, including audio and videoconferencing. It is the main provider of telemental health services in the province.

As of January 2004, TETRA had 72 sites, including satellite-based sites, with the capacity to provide and/or receive telehealth services. Although most of the activity has been in the area of research and education, there are clinical mental health services in the area of child psychiatry. A recent educational project is the Interdisciplinary Mental Health Demonstration Project. A teleconsultation program involving mental health assessments is also taking place along the Labrador coast.

Though the province had approximately 100 direct child/adolescent psychiatry sessions in 2001-2002, none occurred in 2003 due to the departure of the child psychiatrist. With the arrival of a new specialist, this clinical activity has recently resumed.

* Web site address: <http://www.med.mun.ca/telemed/>.

Cross-border activity has been reported with Quebec to support a specialized behavior management program for autistic children. As a member of the Atlantic Telemental Health Network, Newfoundland & Labrador are also working with other Atlantic provinces to develop standards of practice for telemental health.

Obstacles/Future Directions: Although Newfoundland & Labrador were the first jurisdiction to implement telehealth services and one of the first to pilot telepsychiatry services, clinical telemental health services do not seem to be well integrated into the health care system, given the limited number activities reported by the key informants. One obstacle may derive from the current telehealth fee-for-service reimbursement policy, which has been limited to child/adolescent psychiatric services (this policy is now under review). It has also been suggested that further research be undertaken to find out why providers have had slow uptake of this mode of service delivery. Opportunities for future growth and integration may arise as a result of the current restructuring of mental health services in Newfoundland & Labrador.

Federal Government – Veterans Affairs Canada

Veterans Affairs Canada (VAC) has developed a mental health strategy in response to needs of Canadian Forces members and Veterans with psychological injuries as a result of their military service. Initiatives ultimately target improvement in timely access to enhanced treatment services for affected Canadian service personnel across the nation.

A Telemental Health Initiative focusing on utilization of existing provincial/territorial telehealth networks will assist VAC in improving client access to psychological services. VAC staff is working closely with the Telehealth Educational Technology Resource Agency (TETRA), of Memorial University in Newfoundland, to develop a telehealth service option for VAC clients living in rural or remote areas. Eligible clients could choose to use a local videoconferencing set up to connect with their mental health provider rather than travel long distances for face to face appointments.

Obstacles/Future directions:

The complexity of altering policies/processes across multiple disciplines with providers practicing in any of the nations' provinces/territories impacts on the pace of new service development. Replication of this service delivery process is planned nationally as local need and resources warrant. Standards for service delivery are in developmental stages. Opportunity exists for telelearning, coaching and mentoring processes via the VAC supported network of mental health clinics developing nationally. These clinics focus on the needs of affected Canadian service personnel.

ANNEX 2: ACTIVITIES IN FIRST NATIONS AND INUIT COMMUNITIES

Health Canada is responsible to ensure that health services are available and accessible to First Nations and Inuit communities. To facilitate the provision of telehealth services, Health Canada has funded the development of an Aboriginal Health Infostructure Blueprint and Tactical Plan in response to recommendations by the Advisory Council on Health Infostructure in its final report, *Canada Health Infoway: Paths to Better Health* (1999). The plan has been submitted to aboriginal organizations for consideration, but no funding has been allocated for its implementation.

Generally, the provision of telehealth services to First Nations and Inuit communities involves taking advantage, to the extent possible, of existing provincial/territorial telehealth networks and telecommunications infrastructures. As a consequence, according to one of the key informants, most telehealth initiatives and services arise from collaboration between First Nations and Inuit communities and different levels of government.

Health Canada owns 546 health care facilities providing health services to First Nations and Inuit people, and 89 telehealth sites. Only 42% of these facilities possess satellite links and only 5% have access to broadband. The telecommunications infrastructure in many of First Nations and Inuit communities is currently inadequate to receive telemental health services.

Despite these challenges, a number of communities have developed the capacity to receive and/or provide telemental health services. These communities can be found in different parts of Canada. The major recent projects that have emerged to serve these communities include:

- Keewaytinook Okimakanak (KO) Telehealth Project was initiated under the leadership of the KO First Nations Tribal Council and Industry Canada's SMART Communities Program. The network uses videoconferencing equipment and a broadband communication network operated by K-Net Services (the information and communications technology branch of the tribal council) to improve access to health professionals and programs in six First Nations communities located in northwestern Ontario. Since 2000, the KO Project has been collaborating with Ontario's NORTH Network on a pilot to provide telepsychiatry services to two of its six communities: the First Nations of Poplar Hill and North Spirit Lake. Video, telecommunication and digital information technologies were used together to create real-time, audio-visual links between First Nations clientele within their home communities and mental health service providers in Ontario and Manitoba. This project is currently being expanded to 24 sites with the support of the Primary Health Care Transition Fund.

- The Native Mental Telehealth Project uses telehealth technology to provide mental health services, including addiction treatment, to residents of the Akwesasne Mohawk community overlapping the Quebec-Ontario border on the St. Lawrence River. Funded by CANARIE Inc., the project includes an Aboriginal healer in the encounter between First Nation patients and traditional psychiatrists located in Ottawa. The CANARIE Inc. funding for this project ended in March 2004.
- The Alberta First Nations Telehealth Project, is a federal Government On-Line (GOL) initiative, aimed at redefining health care service delivery to First Nations communities in the Alberta Region. The project has developed a technical infrastructure within 41 Alberta First Nations communities. Videoconferencing equipment has been installed in 21 health centres in order to support telehealth applications and the development of telehealth programs, including access to training in the areas of mental health and addiction. Telemental health educational sessions are now available to all bands in Treaty 7.
- Federal/Provincial Telehealth Project in New Brunswick is a new partnership to test innovative funding arrangements for telehealth services. This telehealth project will provide addiction services and eventually telehomecare services. The telehealth sites will link three provincial health facilities, one hospital emergency room and the Toby community.

Obstacles/Future Directions: There is great demand for mental health services within First Nations and Inuit communities. Key informants from various jurisdictions emphasized the need to extend telemental health services to these communities. One of the key informants, however, felt that it is important to establish solid mental health programs in these communities before bringing in telemental health services. The main barriers to delivering telemental health are:

- lack of funding for sustainability;
- lack of access to information and communications technologies, particularly advanced telecommunications infrastructure; and
- cultural issues.

Although the Aboriginal Health Infrastructure remains a work in progress, two factors have created a climate favourable to a more concerted approach and new partnerships. The first is the priority placed by the federal government on health care for Aboriginal people. The second is the desire of many communities to bring telehealth services into their communities as a means of increasing access to services and delivering programs adapted to their cultures and languages.

ANNEX 3: INTERVIEW QUESTIONNAIRE

KEY INFORMANTS INTERVIEWS TELEMENTAL HEALTH IN CANADA

Name of respondent: _____
Province/Territory: _____
Position Title: _____

Introduction

Health Canada's Office of Health and the Information Highway is currently preparing a paper on telemental health in Canada. The goal of the study is to increase decision makers' knowledge on how telemental health is helping service delivery by describing the current status of telemental health in Canada, presenting the experience to date, and assessing the extent to which it could be further integrated.

For the purpose of this paper, telemental health is defined as the use of information and communications technologies in mental health services. It covers telehealth applications for direct delivery of mental health services including telephone triage services, but excluding traditional telephone services (POTS), which have long been part of the mainstream delivery system.

The methodology for this study includes a review of the published and grey literature as well as interviews with key informants based on this questionnaire. The specific objectives of the key informant interviews are to:

- validate the information collected; and
- obtain additional information to inform the analysis and conclusion of the study.

Validation of Information Collected

Q.1.1 Earlier, you were provided with a summary of telemental health activities in your jurisdiction, collected from various sources solely for the purpose of this interview. In your opinion, does this summary accurately reflect telemental health activities in your jurisdiction?

Trend

Q.2.1 Are there specific trends in telemental health in your jurisdiction?

Q.2.2 What future do you foresee for telemental health in your jurisdiction?

Policies

- Q.3.1** Are there policy issues which affect the growth and integration of telemental health services in your jurisdiction? If yes, what are those policy issues?
- Q.3.2** Does your jurisdiction support the delivery of cross-border telemental health services? If yes, in which way?

Integration

- Q.4.1** To what extent do you think telemental health is integrated into the mainstream delivery system in your jurisdiction?
- Q.4.2** More specifically, would you consider that:
- a) your jurisdiction depends mainly on project funding to support telemental health services; or
 - b) your jurisdiction is working on policies to integrate current projects into regular service delivery; or
 - c) your jurisdiction has fully integrated telemental health services into regular service delivery.
- Q.4.3** Generally speaking, what do you consider to be the main obstacles toward the integration of telemental health into existing mental health services delivery?
- Q.4.4** What are the main facilitators?

Lessons Learned

- Q.5.1** In your experience, what are the most critical lessons learned from the implementation of telehealth initiatives in your jurisdiction?
- Q.5.2** Are there particular telehealth issues that are unique to telemental health?

Others

Q.6.1 Do you have specific recommendations to make regarding the development of telemental health services?

Q.6.2 Do you have specific documents / resources you feel would be useful for our project besides those identified in the summary?

THANK YOU FOR YOUR COLLABORATION

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