

Fee-for-service Reimbursement of Telemedicine Services in Canada, 1999/2000

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Coordinating Committee for Reciprocal Billing (CCRB)

Reporting to the Federal/Provincial/Territorial Advisory Committee on Health Services (ACHS), the Coordinating Committee on Reciprocal Billing (CCRB) was formed in 1991 to identify issues arising from inter-provincial/territorial billing arrangements for medical and hospital services. Committee members are also mandated to resolve administrative complexities at the operational level. The jurisdictions of Newfoundland and Labrador, Quebec, Ontario and Alberta, and a federal chairperson, are members of the Committee. All other provinces and territories have contacts. Ongoing support is provided by the CCRB Secretariat, an operational unit within the Canada Health Act Division of Health Canada.

1 Introduction

The fee-for-service reimbursement of telemedicine services by provincial/territorial health insurance plans is an important issue in Canada and through out the world. It is an issue for practitioners, health-care managers and policy-makers who see telemedicine as a potential solution to the problems of access to health care services that often plague rural and remote areas. One difficulty is that telemedicine, although shown to be clinically efficacious, has not been shown to be cost-effective (Bashshur 1998). A related difficulty is the uncertain effect on the health care system of allowing unrestricted reimbursement of telemedicine as fee-for-service (e.g., Grigsby *et al.* 1994).

Telemedicine, or more broadly, telehealth, can be defined as the use of telecommunications and information technologies to overcome geographic distances between health care practitioners or between practitioners and patients for the purpose of diagnosis, treatment, consultation, education and health information transfer (Pong and Hogenbirk 1999). The large geographic area of Canada has made the delivery of health services to its widely dispersed population difficult and telecommunications technology has been proposed as a possible solution. In fact, in the late 1950s, Dr. Albert Jutras, a Montreal radiologist, was one of the first to pioneer teleradiology in Canada and in the world (Picot 1998; Wright 1998).

Telehealth has been proposed as a way of enhancing health care delivery, particularly in rural and remote areas where health care resources and expertise are often scarce or non-existent. Services and expertise from major health care facilities can be brought to such communities with the help of telecommunications and information technologies. Over the last few years, there has been a rapid increase in telehealth activities. A nation-wide survey conducted in 1997 (Picot 1998) and a recently conducted survey (Picot and Craddock 2000), both funded by Industry Canada, has identified dozens of telehealth projects and service companies.

Most telehealth pilot projects have focused on overcoming technological challenges and demonstrating clinical efficacy. But, increasingly, people are asking questions about the policy and economic aspects of telehealth. They are interested in finding out how telehealth can be integrated into the health care system, how certain policies may facilitate or hinder the broader application of telehealth and whether telehealth is cost-effective. One of the major concerns is reimbursement, especially in relation to whether and how physicians are compensated for the services they provide via telehealth. Potential problems relating to reimbursement have received considerable attention in Canada (Pong and Hogenbirk 2000). Some provincial/territorial jurisdictions have been quick to develop and implement policy for the reimbursement of telemedicine services, while others have not yet done so.

Most, if not all, of the jurisdictions in Canada have telehealth projects that are funded by government or industry, or operated through special contracts to provide telehealth services to remote locations, for example, off-shore oil rigs. These often loosely connected networks offer consultations in a variety of medical specialties, courses in medical and nursing education and meeting or management sessions for all levels of government, as well as public- and private-sector users. The telemedicine service component of these networks is not necessarily

reimbursed by the health insurance plan of each province or territory. An examination of these payment alternatives is beyond the scope of this survey and report.

The purpose of this document is to describe the status of telemedicine services provided by physicians, which are reimbursed by means of fee-for-service by provincial/territorial health insurance plans. The approach was to conduct a mail survey of the provincial/territorial contacts of the Co-ordinating Committee on Reciprocal Billing (CCRB). The survey, designed by the CCRB Secretariat, collected information on policy, eligible medical services, billing processes, number of consultations and costs for telemedicine services that were reimbursed by provincial/territorial health insurance plans during fiscal year 1999/2000. Of interest is whether jurisdictions have compatible policies and systems for handling these billings and the implications for cross-jurisdictional or reciprocal billing agreements. The report concludes with a discussion of some of the major barriers to reimbursement for telemedicine services.

2 Methods

To determine the status of fee-for-service payment for telemedicine services, a questionnaire was mailed to the CCRB contacts in all 13 jurisdictions in Canada. The questionnaire had been developed by the CCRB Secretariat, Health Canada, with the help of the Office of Health and the Information Highway (OHIH), Health Canada, and was pilot-tested in January 2000. The revised questionnaire was mailed in June 2000 and seven jurisdictions had responded by October 2000, including one jurisdiction's response to the draft questionnaire.

The Centre for Rural and Northern Health Research (CRaNHR) became involved in the project in November 2000 and CRaNHR carried out subsequent activities, with advice and assistance of the CCRB Secretariat and OHIH. A one-page questionnaire was faxed on November 16, 2000, to the remaining jurisdictions to determine whether or not they reimbursed for telemedicine services. Responses to the one-page fax were received from these jurisdictions by November 24, 2000. The full questionnaire, with minor modifications and some caveats to the interpretation of the questions were mailed to the five jurisdictions that had not yet completed the full questionnaire but had indicated that they reimbursed for some telemedicine services. The questionnaires have been included in the Appendices. All jurisdictions indicated whether or not they reimbursed for telemedicine services in their respective jurisdictions or between jurisdictions.

The analysis of the data are primarily qualitative in nature: responses to open-ended questions were content-analyzed. Numerical data were sparse and, thus, the analysis was limited to descriptive statistics. The status of fee-for-service reimbursement across Canada is first described in general, followed by a more detailed description of the status in each jurisdiction. The Results and Discussion section concludes with a discussion of issues related to the reimbursement of telemedicine within and between Canadian jurisdictions.

3 Results and Discussion

3.1 Fee-for-service Reimbursement of Telemedicine Services Across Canada

Eleven jurisdictions currently allow fee-for-service reimbursement for some telemedicine services within their jurisdiction (Table 1). In several jurisdictions, policies and fee schedules have been modified or created to allow fee-for-service reimbursement of telemedicine services. Several jurisdictions have allowed fee-for-service reimbursement without any major new policy. For example, new policy is not needed in New Brunswick, because existing legislation and policies do not exclude the provision of medical services by means of telecommunications technology (New Brunswick PTTCC 1998). In other jurisdictions, fee-for-service reimbursement is for selected services under interim agreements.

Eight jurisdictions allow fee-for-service reimbursement for telemedicine services provided by other jurisdictions (Table 1). Several telemedicine services are already known to be delivered across jurisdictions in Canada and across national boundaries. For example, the University of Ottawa Heart Institute offers telecardiology services to Baffin Island, the Children's Telehealth Network (CTN) connects the Maritime Provinces and the Dalhousie Medical School's Centre for Telehealth is providing services to St. Kitts in the Caribbean. These services are generally provided under a specific contractual agreement between organizations or jurisdictions.

Table 1. Fee-for-service Reimbursement Status for Telemedicine Services Across Canada

Jurisdiction	Insure Telemedicine Within Jurisdiction? Date of Implementation?	Insure for Residents Receiving Telemedicine in Other Jurisdictions? Date of Implementation?
<i>Alberta</i>	Yes, April 15, 1999	Yes, April 15, 1999
<i>British Columbia</i>	Yes, since 1999	No
<i>Manitoba</i>	Yes, November 1, 1999	No
<i>New Brunswick</i>	Yes, since 1997	Yes, since 1985
<i>Newfoundland & Labrador</i>	Yes, 1999	Unknown
<i>Northwest Territories</i>	Yes, April 1, 2000	Yes
<i>Nova Scotia</i>	Yes, January 29, 1998	Yes, January 29, 1998
<i>Nunavut</i>	Yes, April 1, 2000	Yes, April 1, 2000
<i>Ontario</i>	No	No
<i>Prince Edward Island</i>	No	Yes
<i>Québec</i>	Yes	No
<i>Saskatchewan</i>	Yes, April 1, 1999	Yes, April 1, 1999
<i>Yukon</i>	Yes, since 2000	Yes, since 2000

Definitions of telemedicine are reasonably consistent among the jurisdictions that permit fee-for-service reimbursement (Table 2). In many jurisdictions, the definition of telemedicine is subsumed under the definition of telehealth. Common elements of the definition of telemedicine include: (1) medical services or physician-delivered service, (2) telecommunications technology (that may be further specified or restricted) and (3) service delivery over long or short distances. The broader definition of telehealth may include other health services, as well as management, research and educational components related to the provision of health care or training.

Table 2. Definition of Telemedicine for the Purpose of Billing from each Canadian Jurisdiction ^a

Jurisdiction	Definition of Telemedicine and/or Telehealth
<i>Alberta</i>	Telehealth is defined as a physician delivered health service provided to a patient at a designated RHA telehealth site, through the use of videotechnology, including store and forward. The patient must be in attendance at the sender site at the time of the video capture. Telehealth services do not include teleradiology. (<i>Alberta Health Care Insurance Plan, Schedule of Benefits, Part A – General Rules, GR 1.10 Sep. 26, 2000</i>)
<i>British Columbia</i>	Telehealth is defined as “the use of communications and information technology to deliver health services and transmit health information over both long and short distances.” (<i>BC Ministry of Health 1999</i>)
<i>Manitoba</i>	“ ‘Telemedicine service’ is a medical service provided to a patient presenting at an approved telemedicine site, through the recording of visual images and transmission of those images to receiving physicians at an approved telemedicine site. ... Exceptions [for sites or services not yet approved] will only be made with prior approval.” (<i>Manitoba Physicians Fee Manual, General Schedule, Telemedicine, page B-15, August 1, 2000</i>)
<i>New Brunswick</i>	“Telemedicine/telehealth is the use of information and communications technology to support the access and delivery of health care at a distance and to collect, organize and share clinical information among and between providers and patients, that is needed for patient assessment, diagnosis, care and treatment.” (<i>Department of Health and Wellness 1998</i>)
<i>Newfoundland & Labrador</i>	“Health services provided by psychiatrists to patients, child welfare workers, community health nurses or other allied health professionals over a distance by electronic means of communication - closed circuit television.” (<i>Survey Respondent</i>)
<i>Northwest Territories</i>	“Telemedicine means site-to-site connections of audio/video data communications and does not include telephone communications.” (<i>Survey Respondent</i>)
<i>Nova Scotia</i>	“Telehealth is the use of communication and information technology to deliver health care services over large and small distances.” (<i>Survey Respondent</i>)

Jurisdiction	Definition of Telemedicine and/or Telehealth
<i>Nunavut</i>	“Telehealth is an audio/video tool that allows the provision of improved access to health, social and educational services.” (<i>Survey Respondent</i>)
<i>Ontario</i>	“Presently developing policy” (<i>Survey Respondent</i>)
<i>Prince Edward Island</i>	“Nothing in policy.” (<i>Survey Respondent</i>)
<i>Québec (English translation)</i>	<p>“Telemedicine is the practice of medicine at a distance by means of telecommunication.” (<i>Québec College of Physicians, May 2000</i>)</p> <p>“Telemedicine: all medical services provided over a distance by means of electronic communication.” (<i>Conseil d’Evaluation des Technologies de la Santé de Québec, December 1998, citing Institute of Medicine 1996</i>)</p> <p>“Telehealth: health services, audiovisual communication for educational, administrative or research purposes, and clinical and administrative data processing performed over a distance by means of electronic communication.” (<i>Conseil d’Evaluation des Technologies de la Santé de Québec, December 1998, citing Standing Committee on Family and Community Affairs 1997</i>)</p>
<i>Saskatchewan</i>	“Telemedicine service with direct video link with the patient. Payment is limited to approved facilities and practitioners who must both be in Saskatchewan (Exceptions with prior approval only).” (<i>Survey Respondent</i>)
<i>Yukon</i>	“Telemedicine is a component of telehealth. Telehealth is any health information or health care provided that uses telecommunication as a way of providing the information.” (<i>Survey Respondent</i>)

^a Source for each definition is given in italics. “Survey Respondent” indicates that the definition was provided by the respondent from that jurisdiction and might be a paraphrase of the official definition.

Many of the jurisdictions that do reimburse for telemedicine services, do so for a limited range of services. These limited telemedicine services typically include teleradiology and teledermatology, which deal with images that can be captured by high-resolution cameras and transmitted to specialists. Teleultrasound may soon be added to the list in many jurisdictions.

Permitting fee-for-service reimbursement for teleradiology is, perhaps, an easy step given that specialists are already viewing the images and not the patients *per se*. In many jurisdictions, one of the main barriers to a broader implementation of fee-for-service reimbursement for telemedicine services is the fact that existing legislation or policy requires a face-to-face consultation between patient and physician. This may not be a major hurdle. According to a senior ministry of health official in one of the provinces, the requirement for face-to-face contact between patient and physician can be altered easily by making minor amendments to the existing regulation (Pong and Hogenbirk 2000). Some jurisdictions have already done so.

Other specialties, such as telepsychiatry and certain types of follow-up visits in a variety of specialties have been added to the list of reimbursable services. These services were added after

successful pilot projects, such as the telepsychiatry projects in Alberta and Newfoundland, had demonstrated clinical effectiveness and economic benefits (see, for example, Doze *et al.* 1999; Elford 1999a,b).

A summary of specialties that are eligible for fee-for-service reimbursement of telemedicine services is presented in Table 3. There are four main caveats to the interpretation of this table.

1. Some subspecialties are subsumed under broader specialties. For example, urological surgery has been included under urology. Exceptions are as noted.
2. Some overlapping subspecialties are counted in both specialties. For instance, in the case of pediatric cardiology we have chosen to check mark both pediatrics and cardiology.
3. In many jurisdictions, only limited types of services within a specialty are eligible for fee-for-service reimbursement. For example, in British Columbia, only ultrasound is reimbursable as fee-for-service under obstetrics/gynecology.
4. The check marked telemedicine services are those that are eligible for fee-for-service reimbursement and thus the table reflects potential and not actual use.

Given these caveats, it is still interesting to reflect on which specialties are more frequently eligible for fee-for-service reimbursement for a least a few services offered by way of telecommunication technology. The results from the 13 jurisdictions suggest that cardiology, dermatology, pediatrics, psychiatry and radiology are the specialties most frequently reimbursed by means of fee-for-service (Table 3). Six to nine of the 13 jurisdictions provide fee-for-service reimbursement for these telemedicine services. Emergency medicine, internal medicine, obstetrics/gynecology and orthopedics are reimbursed in five of the 13 jurisdictions.

General practitioners/family physicians can bill for telemedicine services in at least six of the eleven jurisdictions that permit fee-for-service reimbursement (Table 3). In many cases, the general practitioner presents the patient to the consulting physician (specialist). General practitioners may bill fee-for-service in these cases where they are physically involved in the assessment of the patient and thus are assisting the consulting physician. In other circumstances, the general practitioner is the consulting physician. For example, three jurisdictions, Northwest Territories, Saskatchewan and Yukon, explicitly permit general practitioners to bill as the consulting physician when the patient is at another site. In other jurisdictions, however, the role of the general practitioner in providing telemedicine services is not explicitly mentioned. Thus it is not clear, for these jurisdictions, whether the general practitioner is eligible to bill fee-for-service as the assisting or consulting physician, as circumstances warrant.

In addition, the table summarises differences in the extent to which each jurisdiction has allowed fee-for-service reimbursement of telemedicine services. Alberta, Manitoba and Saskatchewan permit fee-for-service reimbursement for selected telemedicine services in 20 or more specialties. Ontario does not insure any telemedicine services while the remaining jurisdictions insure up to ten specialties. It is necessary to emphasize that this report focuses only on those telemedicine services that are reimbursable as fee-for-service. Many jurisdictions have telemedicine projects in which the physicians are reimbursed by alternative methods, such as capitation or salary. A table showing the specialties of all telemedicine or telehealth projects, regardless of the reimbursement arrangement, would be far richer and more complex.

Table 3. Medical Specialties Eligible for Fee-for-service Reimbursement for Telemedicine Services in Canada ^a

Jurisdiction	Anaesthesia	Cardiology	Dermatology	Emergency Medicine	GP ^b	Geriatrics/Gerontology	Internal Medicine	Medical Genetics	Neurology	Neurosurgery	Nuclear Medicine	Obstetrics/Gynecology	Ophthalmology	Orthopedics	Otolaryngology	Pediatrics	Physiatrics/Physical Medicine	Plastic Surgery	Psychiatry	Radiology	Surgery	Urology	Vascular Medicine	Comments
Alberta	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	43 specialties are listed. Radiology funded separately.
British Columbia					✓					✓	✓	✓								✓				Ob/Gyn –ultrasound only. Psychology pending.
Manitoba	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	No specialties excluded <i>per se</i> .
New Brunswick		✓		✓												✓	✓		✓	✓				Plus nephrology. Pediatric services via Nova Scotia.
Newfoundland & Labrador																			✓					
Northwest Territories		✓	✓		✓	✓	✓							✓	✓				✓	✓				Urgent radiology only.
Nova Scotia			✓	✓		✓	✓							✓		✓			✓	✓			✓	
Nunavut			✓																✓					Plus mental health
Ontario																								None
Prince Edward Island			✓									✓				✓			✓	✓				Services via Nova Scotia
Québec		✓														✓				✓				Pediatric cardiology.
Saskatchewan	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Plus psychology
Yukon			✓		✓																			
Count ^c	3	6	8	5	6	4	5	3	3	4	3	5	3	5	4	7	4	3	9	8	4	3	3	Count of reported specialties

^a Not all services within a specialty are automatically eligible for reimbursement as fee-for-service. Not all eligible services billed for fiscal year 1999/2000.

^b Typically, a general practitioner bills for services as an assisting physician to the specialist.

^c Count includes services provided within and between jurisdictions (e.g., PEI and New Brunswick receiving services from Nova Scotia).

3.2 Fee-for-service Reimbursement for Telemedicine Services by Jurisdiction

The following description of individual jurisdictions is based on information provided by each province/territory. It should be noted that the extent of fee-for-service payment and number of consultations for telemedicine services, as reported by the jurisdictions, might be on the low side for two reasons. The first reason is that some jurisdictions are unable to track the use of telemedicine services because there are no special codes or modifiers to indicate that a service was provided by telemedicine. The second reason is that some physicians might not have differentiated between regular face-to-face encounters and telemedicine encounters when they submitted their fee-for-service billings because there was no requirement or financial incentive for them to do so. Thus, the telemedicine utilization and cost data reported below need to be interpreted with care.

3.2.1 Alberta

Alberta has one of the most comprehensive fee-for-service reimbursement programs for telemedicine and telehealth in Canada. The policy, in place since April 1999, includes telemedicine within the broader range of telehealth services. Fee-for-service is permitted for telehealth services provided to Alberta residents who access Alberta's telehealth services while in the province. Alberta currently insures telemedicine when accessed by Albertans receiving care in other provincial/territorial jurisdictions.^{1, 2} According to an official with the Alberta Ministry of Health and Wellness, Albertan physicians are eligible for fee-for-service reimbursement for telemedicine services that they provide to any Canadian resident.

Services offered via telehealth are integrated into the medical fee schedule through the use of a fee code modifier, which can be recognized by the automated claims processing system. There does not appear to be a mechanism to record use of telehealth services by a non-resident if the physician is salaried.³ Consulting and presenting physicians can bill separately: the consulting physician (specialist) will bill for the appropriate service with the telehealth modifier and the presenting physician (often a general practitioner or family physician) will bill for a telehealth assistance service if the presenting "physician is required to be present at the referring site to assist with essential physical assessment without which the consultation service would be ineffective."⁴ This definition of "assisting physician" is reasonably consistent among the jurisdictions that permit general practitioners to bill fee-for-service for telemedicine services.

Teleradiology is not eligible for fee-for-service reimbursement and is instead reimbursed through global funding for facilities in each regional health authority. These health authorities are responsible for coordinating health care services in distinct geographic regions of Alberta.

¹ Wording of this sentence follows that of the question in the questionnaire.

² The wording of the survey question may permit two, perhaps three, interpretations. For example, it is not clear whether an Albertan who is temporarily out-of-province is insured for telemedicine services offered (1) in the other jurisdiction, (2) in Alberta, or (3) in a third jurisdiction.

³ Wording of this sentence follows that of the question in the questionnaire.

⁴ Alberta Health Care Insurance Plan, Schedule of Benefits, Part A – General Rules, GR 17.2 (generated September 26, 2000)

Alberta has one of the most widely distributed telehealth service network with 51 videoconferencing sites, 18 teleradiology/ultrasound sites (of which five sites are in radiologists' offices) and at least seven videoconferencing sites in First-Nations communities. Telehealth equipment is located in a variety of facilities: teaching hospitals and other hospitals in larger population centres and nursing/community health centres in more remote, less-populated areas.

In fiscal year (FY) 1999/2000, there was one teleconsultation in surgery for a non-resident of Alberta at a cost of \$22.19 and 182 teleconsultations for Albertans at a total cost of \$5,291.50 for the following specialties:

Dermatology	36	\$646.92
General Practice	107	\$2,374.33
Internal Medicine	36	\$1,940.04
Obstetrics	1	\$21.56
Physical Medicine	1	\$246.92
Surgery	1	\$61.73

In addition, hospitals billed \$2,100.79 for services to Albertans and \$22.79 to non-residents. There were no consultations recorded for Albertans seeing telemedicine providers practising outside Alberta.

3.2.2 British Columbia

British Columbia currently provides fee-for-service reimbursement for radiology, ultrasound, nuclear medicine and some neurosurgery services. This policy has been in place since 1999. Psychiatry has requested permission to bill for telepsychiatry services. British Columbia does not insure telemedicine services when accessed by British Columbians receiving care in other provincial/territorial jurisdictions.

The four videoconferencing items in neurosurgery are: (1) consultation, (2) follow-up assessment, (3) repeat or limited consultation and (4) presenting physician's fee as an assistant relative to videoconferencing. These have specific codes and are the only fee-for-service items that can be recognized by automated claims processing system. Note that radiology, ultrasound and nuclear medicine telemetry bill as face-to-face encounters using existing fee codes. There is no fee-sharing: the neurosurgeon bills the full fee and the presenting physician can bill separately at a rate of 50% of the fee claimed by the neurosurgeon, if the presenting physician has assisted in the examination of the patient.⁵

Currently, there are 20 sites for radiology, ultrasound and nuclear medicine telemetry, all located in hospitals. Specialists practise at six of these sites. Teleneurosurgery services do not have designated sites and in the words of the respondent, "these services were probably rendered in the physician's office" or perhaps in nearby videoconference facilities.

⁵ British Columbia Medical Services Commission – 1999, Neurosurgery, Notes to code 03313, page I4 – 1.

There were three services billed in FY 1999/2000, using the neurosurgery fee codes for videoconferencing, for a total of \$199.63.

3.2.3 Manitoba

Manitoba currently reimburses physicians on a fee-for-service basis for all eligible telemedicine services rendered in the province at seven hospital sites: two tertiary care hospitals in Winnipeg and one in Brandon (specialist sites) and four hospitals in smaller communities. Telemedicine services must be offered at approved sites and all medical specialties have the potential to be reimbursed. This policy has been in place since November 1, 1999. The province does not currently insure telemedicine services when accessed by Manitobans receiving care in other provincial/territorial jurisdictions.

Manitoba has separate billing codes, called tariffs, for live and store-and-forward telemedicine services. The tariff rate is “equal to the consultation benefit rate for the physician’s bloc of practice.”⁶ Telepsychiatry has a specific billing code or tariff. Dermatology, plastic and reconstructive surgery, obstetrics and gynecology are mentioned specifically in the fee manual, but a code unique to these specialties is not listed. General Practitioners cannot claim as receiving (consulting) physicians but are able to claim as assisting physicians at the referral site for live telemedicine services.

The automated claims processing system is able to recognize billings submitted for telemedicine services and is able to differentiate among specialties by reference to “bloc of practice” codes that are unique to each specialty. It is anticipated that specialists who see non-residents will bill as fee-for-service or will shadow bill if the specialist is wholly salaried.⁷ The consulting physician (specialist) can submit a bill for fee-for-service and the presenting physician can also bill, provided that the presenting physician has assisted in the examination of the patient.

There were no telemedicine services reimbursed as fee-for-service in FY 1999/2000 and, as of February 2001, pediatrics has been the only specialty to bill for telemedicine services in FY 2000/2001.

3.2.4 New Brunswick

New Brunswick has reimbursed physicians on a fee-for-service basis for approved telemedicine services rendered within the province since 1997. In addition, there has been a long-standing tradition between New Brunswick and other Atlantic Provinces and Québec to cover for out-of-province telemedicine services. For instance, since the early 1980s, New Brunswick has been

⁶ Manitoba Physicians Fee Manual, General Schedule, Telemedicine, pages B-15 to B-17, August 1, 2000.

⁷ Shadow billing or dummy billing occurs when physicians, who are on alternative payment plans, submit a bill as if the service rendered was fee-for-service. Physicians on alternative payment plans are not reimbursed for these services. Rather, the Ministries of Health use these data to monitor the services that these physicians provide. The accuracy of shadow-billing is problematic (Dr. Ben Chan, Institute for Clinical Evaluative Sciences, personal communication, January 2000)

reimbursing Québec specialists who read x-rays, EEGs and ECGs electronically transmitted to them by hospitals in northern New Brunswick. Similarly, the province participates in the Children Telehealth Network (CTN) that links various health care facilities in the Maritime Provinces.

Officials with the provincial hospital liability insurance plan have approved fee-for-service reimbursement of telemedicine services. Telemedicine services are billed under existing fee codes with no mechanism to identify that the service was provided by means of telecommunication technology. Thus, it is not known which specialties have provided telemedicine services nor how many services have been provided. Both consulting and presenting or assisting physicians are paid full fees. Salaried physicians will typically bill fee-for-service for telemedicine services that are provided to non-residents of New Brunswick.

There are six telemedicine provider sites, 17 receiver sites and six combined provider/receiver sites in New Brunswick. Two sites are located in clinics and the remainder are in hospitals. Information on the number and costs of telemedicine services were not available for FY 1999/2000.

3.2.4 Newfoundland and Labrador

The Province of Newfoundland and Labrador reimburses physicians on a fee-for-service basis for child telepsychiatry services rendered in the province. This reimbursement policy has been in effect since spring 1999 and the claims system uses a modifier (called a “remarks code”) to identify telepsychiatric services. Information on the number of sites, number of consultations and total costs was not available. It is not known whether the province insures telemedicine services when accessed by residents receiving care in other jurisdictions. Newfoundland has a number of telehealth and telemedicine projects providing various specialty services that are funded by alternative means such as project-specific grants.

3.2.5 Northwest Territories

The Northwest Territories reimburses physicians on a fee-for-service basis for telemedicine services rendered in the territory, effective April 1, 2000. It also insures telemedicine services when accessed by Northwest Territories residents who receive care in another jurisdiction.

New fee schedule codes for telemedicine services were developed by the Northwest Territories. Codes are used for (1) physician requesting consult; (2) physician providing consult and (3) review of x-rays by non-radiologist medical practitioner without patient consultation. Specialty may be inferred from the billing characteristics of the consulting physician.

The Northwest Territories has one telemedicine provider site in Yellowknife and two receiver sites in Inuvik and Fort Smith. They are all hospital sites. Cost information was not available.

The approximate number of telemedicine services provided to residents within the Northwest Territories in 1999/2000 is as follows:⁸

Dermatology	14	Otolaryngology	30
Diabetes	12	Psychiatry	10
Internal Medicine	130	Radiology (urgent)	15
Orthopedics	140		

3.2.6 Nova Scotia

Nova Scotia reimburses physicians on a fee-for-service basis for telemedicine services rendered in the province and for telemedicine services when accessed by Nova Scotia residents receiving care in other provincial/territorial jurisdictions. The policy came into effect on January 29, 1998.

Services offered via telemedicine are billed, using existing fee codes and, thus, cannot be recognized by an automated claims processing system. There would be shadow billing by a salaried physician if telemedicine services were given to a non-resident but the service would be billed using existing codes. Consulting and presenting physicians can bill separately.

Nova Scotia has 42 sites in total, with two specialist sites, 31 other sites and nine sites with specialists that can also refer to other specialists. In FY 1999/2000 there was a total of 16,433 teleconsultations in the following specialties:

Dermatology	193	Other pediatric consults	10
Geriatrics	19	Psychiatry	67
Internal medicine	24	Radiology	15,991
Orthopedics	33	Vascular medicine	93
Other adult consults	3		

Cost breakdown was unavailable. Nova Scotia is a major participant in CTN that links various health care facilities in the Maritime Provinces. Nova Scotia's main role in CTN is as a provider of specialist services. Payment for CTN appears to be by alternative methods, though Prince Edward Island does reimburse specialists in Nova Scotia fee-for-service for their telemedicine services to PEI residents. There were no consultations recorded for Nova Scotia residents seeing telemedicine providers practising outside the province.

3.2.7 Nunavut

Nunavut insures telemedicine services rendered within the territory and when accessed by Nunavut residents receiving care in other provincial/territorial jurisdictions. This policy came into effect on April 1, 2000. However, it has been noted by a ministry of health official that

⁸ These figures are approximate as the telemedicine fee codes did not go into effect until April 1, 2000.

while Nunavut has a fee for telemedicine services, it pays physicians a per-diem rate for telemedicine consults.

There are one telemedicine provider site in Nunavut that is located in a hospital and four receiver sites that are in health centres. Costs were not available for FY 1999/2000. The approximate number of telemedicine encounters within Nunavut in 1999/2000 was:

Cardiology	1
Dermatology	10
Mental Health	100
Surgery	2

There was one telemedicine consultation in dermatology and 10 in psychiatry by providers located outside Nunavut in 1999/2000.

3.2.8 Ontario

Ontario does not currently insure telemedicine services within the province or when accessed by Ontarians receiving care in other jurisdictions. The province is in the early stages of policy development. Ontario has a number of telehealth and telemedicine pilot projects or demonstration projects providing a range of specialty services that are funded by alternative means such as project-specific grants or in-kind support from private companies. Other projects take place in alternative-payment settings (e.g., the Hospital for Sick Children).

3.2.9 Prince Edward Island

Prince Edward Island does not currently insure telemedicine services within the province but does reimburse for telemedicine services when accessed by residents receiving care in other provincial/territorial jurisdictions. Prince Edward Island participates in the CTN that links various health care facilities in the Maritime Provinces. Teleconsultations offered include dermatology, psychiatry, radiology, obstetrics and pediatrics. There are no unique billing codes or modifiers and, thus, there is no mechanism to capture this with an automated claims processing system. Prince Edward Island has one site linked to a specialist site in Nova Scotia. The number of consultations and total costs were unavailable.

3.2.10 Québec

Québec allows fee-for-service reimbursement of selected telemedicine services within the province but not for telemedicine services when accessed by Québec residents receiving care in other provincial/territorial jurisdictions. Pediatric cardiology and radiology are insured for selected services and have specific billing codes. The pediatric cardiologist can bill fee-for-service for (1) writing a consultation report that is sent by fax to the referring physician and (2)

interpreting a pediatric heart ultrasound (including writing and faxing of the consultation report). Teleradiology services were provided for a limited duration of three weeks spanning the Christmas-New Year holidays (1999-2000).

Québec has a number of telehealth and telemedicine pilot projects or demonstration projects providing a range of specialty services that are funded by alternative means such as project-specific grants and in-kind support from private companies.

In Québec, there are four specialist sites, located in major hospitals and 57 sites, located in other hospitals throughout the province. The number of consultations and costs were not available for telemedicine services reimbursed as fee-for-service.

3.2.11 Saskatchewan

Saskatchewan insures telemedicine services within the province and when accessed by Saskatchewan residents receiving care in other provincial/territorial jurisdictions. Cross-jurisdictional service can only be reimbursed as fee-for-service payment with prior approval. The reimbursement policy has been in place since April 1, 1999.

Telemedicine services are integrated into the medical fee schedule through the use of a specific fee code modifier for certain types of teleconsultations listed within five groups of specialties (see below). An automated claims processing system is able to recognize telemedicine services within these groups. It appears, according to an official with Saskatchewan Health, that only general practitioners are using the appropriate fee-code modifiers. Fortunately, the use of Saskatchewan's Northern Telehealth Network is being recorded at all sites and centrally compiled by Saskatchewan Health officials. Salaried physicians who provide telemedicine services to non-residents are expected to shadow bill. Consulting and presenting physicians can bill separately.

There are four types of teleconsultations listed within four groups of specialties.⁹ The four types of consultations are: complete assessment, partial assessment or subsequent visit, consultation and repeat consultation. The four groups of specialties are:

- 1) General practice;
- 2) Pediatrics, internal medicine, physical medicine, medical genetics, cardiology and neurology;
- 3) Psychiatry; and
- 4) Dermatology, neurosurgery, general surgery, orthopedic surgery, plastic surgery, obstetrics and gynecology, urological surgery, ophthalmology and otolaryngology

A fifth specialty, anaesthesiology, can bill for a major or a minor/repeat teleconsultation. Saskatchewan is unique in permitting physicians to bill for telephone calls received from district home care workers or primary health nurse/triage nurse.¹⁰

⁹ Saskatchewan Medical Services Plan, pages A.21 to A. 25, January 1, 2000.

¹⁰ Saskatchewan Medical Services Plan, Telephone Calls, page A.16, January 1, 2000.

Saskatchewan has seven hospitals that provide telemedicine specialist services and permit consultations with other specialist sites. Four nursing stations in remote areas are outfitted with telehealth equipment.

There were 387 consultations via telemedicine for Saskatchewan residents within Saskatchewan from June 1999 to June 2000 in the following specialties:

ABI program	3	Pediatric surgery	69
Dermatology	112	Plastic surgery	1
Diabetic counselling	13	Psychiatry - adult	22
Dietitian counselling	22	Psychiatry - child	74
GP consultation	28	Psychology	9
Orthopedics	25	Stoma therapy	9

There were two out-of-province consultations conducted during June 1999 to June 2000 between Saskatoon and the Hospital for Sick Children in Toronto for a craniofacial clinic. The costs of telemedicine services were not available.

3.2.12 Yukon

Yukon insures telemedicine services within the territory and when accessed by residents receiving care in other provincial/territorial jurisdictions. The reimbursement policy has been in place since April 1, 2000.

Yukon has one specialist site located in a hospital/physician's office and one receiver site located in a nursing station. Telemedicine services are integrated into the medical fee schedule through the use of specific fee codes, which appears to be restricted to teledermatology consultations. Claims are assessed manually. There does not appear to be a mechanism to record use of telehealth services by a non-resident of Yukon if the physician is salaried. Consulting and presenting physicians can bill separately. In FY 1999/2000 there were six teledermatology consultations (\$472.80) and four teleconsultations with a general practitioner (\$123.20).

3.2.13 Summary

The 13 provincial/territorial jurisdictions in Canada have adopted different approaches to reimbursing physicians for providing telemedicine services within and between jurisdictions. The situation varies as to whether or not there is an official policy, as well as in the range of services that are reimbursable under fee-for-service payment plans. In addition, the situation is subject to change as jurisdictions alter their policies or add eligible services in response to the demands of patients, providers and other stakeholders.

Of those jurisdictions that allow fee-for-service billing, most have an official policy, while the remaining jurisdictions allow billings under existing codes. Some jurisdictions, for example

Alberta, Manitoba and Saskatchewan, allow 20 or more medical specialties to bill fee-for-service for selected telemedicine services provided at approved sites. Other jurisdictions, such as Yukon and Newfoundland, permit only one specialty to bill the health insurance plans for telemedicine services. Ontario does not permit any fee-for-service billing for telemedicine services at this time.

3.3 Issues in the Reimbursement of Telemedicine as Fee-For-Service

Current constraints and barriers to the reimbursement as fee-for-service for telemedicine are grouped, for the purposes of this report, into those dealing with the reimbursement of physicians and those dealing with the implications for cross-jurisdictional or reciprocal billing agreements.

The barriers to fee-for-service reimbursement of physicians for telemedicine services have been discussed in some detail in several publications, including a study by Pong and Hogenbirk (2000). Concerns about the safety and clinical efficacy of telemedicine are slowly diminishing, though hard evidence is scarce, data on long-term outcomes are lacking and are likely to be difficult to obtain (Bashshur 1998; Ohinmaa *et al.* 1999; Currell *et al.* 2000). Legislative and policy barriers can often be overcome by relatively minor amendments to existing regulations. No major changes to the health insurance legislation are needed.¹¹ The major barriers that remain are the uncertainties surrounding the impact of telehealth on demand, cost, referral pattern and the health care system as a whole.

From the government's perspective, one of its major concerns is uncontrolled utilization that could drive up health care spending. These concerns have been stated by experts in Australia (Mitchell 1998), the United States (US Department of Commerce 1997) and Canada (New Brunswick PTTCC 1998). On the other hand, it could be argued that an increase in utilization should not be seen as negative if some people, such as those in rural or remote areas, are currently underserved due to inadequate access to medically necessary care. Unfortunately, the cost data reported in this document cannot be used to determine the extent to which telemedicine has or has not driven up health care costs since, as noted earlier, some of the utilization data provided by the provinces and territories may not be accurate. Also, the use of telemedicine on a broad scale is still a relatively recent phenomenon and it may take some time before its true effects on utilization can be felt.

There is some empirical evidence to support claims that telemedicine could help save money by delivering health services more efficiently and economically (see, for example, Bergmo 1996, 1997, 2000). There is also evidence that telehealth saves time and travel costs for patients, particularly those living in rural or remote communities (Nagarajan and Hogenbirk 2000). But such savings typically accrue to individuals, rather than to the health care system. The evidence to date is not overwhelming as it usually has been derived from short-term pilot-projects that offer only a few medical services. Nonetheless, results are reasonably robust and promising for some medical specialties such as radiology, neurosurgery, psychiatry and cardiology (Ohinmaa *et al.* 1999). It is interesting to note that many of these specialties are those that are currently

¹¹ Pong and Hogenbirk (2000), citing a senior official from a provincial ministry of health.

reimbursed in Canadian jurisdictions on a fee-for-service basis. In fact, several Canadian telemedicine pilot projects have provided the data that have been used to assess the efficacy and benefit of telemedicine services (see, for example, Doze *et al.* 1999; Elford 1999a,b; Finley *et al.* 1997; Watanabe 1998 and related articles in *Telemedicine Journal* 1998, volume 4 number 3).

The effect of telemedicine on referral patterns and the health system as a whole is largely unknown. Some experts have argued that the introduction of telemedicine services in remote areas may actually decrease demand for local specialists and thus further inhibit the recruitment and retention of specialists to these areas (see, for example, Robb 1997; New Brunswick PTTCC 1998). Anticipating these problems, the World Organization of Family Doctors (WONCA) has recommended that telemedicine policies and decisions should not adversely affect the local delivery of health care in rural communities (WONCA 1998).

In order to enhance the use of telemedicine, it is necessary to take measures to ensure that telemedicine will not lead to health care cost escalation, that telemedicine will promote proper utilization and that telemedicine will not pit one group of doctors against another.

There are a number of factors that have implications for cross-jurisdictional or reciprocal billing agreements. One factor is that telehealth/telemedicine services are often not fully or properly recorded for billing purposes. This problem could be overcome if provincial/territorial jurisdictions endeavour to ensure that their claims system would record medical services that are delivered by means of telecommunications technology.

Jurisdictions may be reluctant to extend payment to telemedicine providers located in other provinces/territories because of the fear that this would further weaken the availability of medical services in the home jurisdiction and that they may have very little control over utilization and costs. Jurisdictions already have cross-border agreements in geographic regions where access to medical care is a problem. Some of these agreements include telemedicine services, such as CTN in the Maritimes. Other agreements, such as the agreement between Manitoba and Ontario, involve the physical transport of residents of northwestern Ontario to tertiary and quaternary care facilities in Winnipeg, Manitoba.

One situation that will have a new twist with telemedicine would occur when a resident of a jurisdiction that does not insure telemedicine is temporarily in another jurisdiction and receives a telemedicine service during the course of treatment. The question arises as to whether or not the resident's jurisdiction will pay for a service that it does not itself insure. Such situations are likely to be rare, but might increase in frequency under certain circumstances. For instance, with seasonal or migratory workers such as an Ontario resident who works in an oil field in northern Alberta and receives telemedicine services while in Alberta. The situation would become even more convoluted if this Ontario resident working in Alberta receives telemedicine services from, say, British Columbia!

While policy changes to permit fee-for-service reimbursement of telemedicine services have been made in some jurisdictions, the reluctance of policy-makers and other stakeholders in the remaining jurisdictions to make similar changes is understandable, given the fact that the long-term and system-wide effects of telemedicine are still largely unknown. The patchwork quilt of

telemedicine reimbursement policies and practices across Canada reflect, in many ways, the diversity of provincial/territorial priorities and approaches to the provision of medical and health services. This seems likely to continue. Optimistically, one might suggest that the principles of the Canada Health Act and the demands of Canadian citizens may encourage the emergence of common policies that are necessary for the fee-for-service reimbursement of telemedicine services across Canada.

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5 APPENDICES

5.1 CCRB TELEMEDICINE QUESTIONNAIRE

Province or territory (please indicate): _____

1. Definition

- 1.1 For the purposes of billing medical and hospital services, what is the definition of telemedicine in your province/territory?

2. Sites

- 2.1 How many telemedicine provider sites are there in your province/territory?

Number of provider sites: _____

- 2.2 How many telemedicine receiver sites are there in your province/territory?

Number of receiver sites: _____

- 2.3 Location of sites:

Provider (please indicate number of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

Receiver (please indicate number of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

3. Medical Services

- 3.1 Does your province/territory currently insure telemedicine within your jurisdiction?

____ Yes ____ No

If not, is inclusion of telemedicine in the fee schedule underway or planned?

____ Yes ____ No

3.2 Does your province/territory currently insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions? ___Yes ___No

If not, is inclusion of telemedicine in reciprocal billing currently underway or planned?
___Yes ___No

3.3 How does your province/territory handle professional licensing for telemedicine physicians. What if the physician is in one province/territory and the patient is in another? What is the rationale behind this policy? Does the physician need to be licensed with the province/territory where the patient is registered?

3.4 How is licensing for other professionals (other than physicians) providing telehealth services handled?

3.5 How is telemedicine integrated into your medical fee schedule (e.g., consultation, visit)?

3.6 When physicians bill for a telemedicine encounter how does your automated claims processing system recognize this service (e.g., modifier, new fee schedule code, equated to another item in your schedule)?

3.7 Which medical specialties are utilizing this technology (e.g., dermatology, cardiology, ophthalmology, psychiatry, radiology, obstetrics, and surgery)?

3.8 If a physician/specialist providing the telemedicine service is salaried versus fee-for-service, would the claim generated indicate fee-for-service code(s) when the service is being provided to a non-resident?

3.9 What % of the fee is shared between the attending physician and the consulted specialist?
Explain how this is done, if at all.

4. Hospital Services

4.1 Do your hospitals provide in-patient services via telemedicine? ____ Yes ____ No

What is the average number of encounters per month? _____

4.2 Do your hospitals provide out-patient services via telemedicine? ____ Yes ____ No

What is the average number of encounters per month? _____

4.3 How are your hospitals billing for telemedicine services provided?

a. to your own residents (e.g., regional, global funding)

b. to residents of other provinces/territories (e.g., per diem or out-patient)

5 Utilization

5.1 Physician services

Number of services per specialty for fiscal year 1999-2000:

a. by providers **within** your province/territory:

	To your residents	Other p/t residents
Dermatology:	_____	_____
Cardiology:	_____	_____
Ophthalmology:	_____	_____
Psychiatry:	_____	_____
Radiology:	_____	_____
Obstetrics:	_____	_____
Surgery:	_____	_____
Other (please specify):	_____	_____

b. by providers **outside** your province/territory:

To your residents

Dermatology: _____

Cardiology: _____

Ophthalmology: _____

Psychiatry: _____

Radiology: _____

Obstetrics: _____

Surgery: _____

Other (please specify): _____

5.2 In what circumstances is telemedicine used?

6 Costs

6.1 What were your costs for telemedicine for fiscal year 1999-2000?

a. by providers **within** your province/territory:

Dermatology: _____ to own residents
 _____ to residents of other provinces/territories

Cardiology: _____ to own residents
 _____ to residents of other provinces/territories

Ophthalmology: _____ to own residents
 _____ to residents of other provinces/territories

Psychiatry: _____ to own residents
 _____ to residents of other provinces/territories

Radiology: _____ to own residents
 _____ to residents of other provinces/territories

Obstetrics: _____ to own residents

_____ to residents of other provinces/territories

Surgery: _____ to own residents
_____ to residents of other provinces/territories

Other specialties (please specify):
_____ _____ to own residents
_____ to residents of other provinces/territories

_____ _____ to own residents
_____ to residents of other provinces/territories

Hospitals: _____ to own residents
_____ to residents of other provinces

b. by providers **outside** your province/territory:

Dermatology: _____ to own residents

Cardiology: _____ to own residents

Ophthalmology _____ to own residents

Psychiatry: _____ to own residents

Radiology: _____ to own residents

Obstetrics: _____ to own residents

Surgery: _____ to own residents

Other specialties (please specify):
_____ _____ to own residents

_____ _____ to own residents

Hospitals: _____ to own residents

Note:

- Please attach a copy of the applicable page of your physicians fee schedule that is relevant to telemedicine.
- **Forward your completed questionnaire by September 1, 2000 to:**

CCRB Secretariat
Health Canada
Address Locator: 0908D
Tunney's Pasture
Ottawa, Ontario,
K1A 0K9

Fax: (613) 952-8542

QUESTIONNAIRE DU CCFR
SUR LES SERVICES DE TÉLÉMÉDECINE

Province ou territoire (s'il vous plaît préciser) : _____

1. Définition

1.1 Aux fins de la facturation des services médicaux et des services hospitaliers, comment définit-on la télémédecine dans votre province ou territoire?

2. Sites

2.1 Combien y a-t-il de sites fournisseurs de télémédecine dans votre province ou territoire?

Nombre de sites fournisseurs : _____

2.2 Combien y a-t-il de sites clients de télémédecine dans votre province ou territoire?

Nombre de sites clients : _____

2.3 Emplacement des sites :

Sites fournisseurs (s'il vous plaît préciser leur nombre) :

_____ hôpitaux _____ cliniques/salles d'opération hors hôpital
_____ cabinets de médecin _____ autres établissements (svp préciser)

Sites clients (svp préciser leur nombre) :

_____ hôpitaux _____ cliniques/salles d'opération hors hôpital
_____ cabinets de médecin _____ autres établissements (svp préciser)

3. Services médicaux

3.1 Les services de télémédecine sont-ils actuellement assurés dans votre province ou territoire? _____ Oui _____ Non

Sinon, l'ajout de la télémédecine au barème est-il prévu ou à l'étude?

_____ Oui _____ Non

3.2 Est-ce que votre province ou territoire assure actuellement les services de télémédecine fournis à ses résidents qui reçoivent des soins dans une autre province ou un autre territoire? _____ Oui _____ Non

Sinon, l'ajout de la télémédecine dans la facturation réciproque est-il prévu ou à l'étude? _____ Oui _____ Non

3.3 Comment autorise-t-on les médecins à pratiquer la télémédecine dans votre province ou territoire? Comment se fait l'accréditation professionnelle si le médecin est dans une province ou un territoire et le patient dans une autre province ou un autre territoire? Comment justifie-t-on cette politique? Le médecin doit-il être autorisé à pratiquer dans la province ou le territoire où le patient est inscrit?

3.4 Comment se fait l'accréditation des professionnels, autres que les médecins, qui fournissent des services de télésanté?

3.5 Comment intégrez-vous les services de télémédecine dans votre barème d'honoraires médicaux (p. ex. : consultation, visite)?

3.6 Quand les médecins réclament des honoraires pour un service de télémédecine, comment votre système de traitement automatisé reconnaît-il ce service (p. ex. : modificateur, nouveau code de barème d'honoraires, service équivalent à un autre élément de votre barème)?

3.7 Quelles spécialités médicales utilisent actuellement cette technologie (p. ex. :

dermatologie, cardiologie, ophtalmologie, psychiatrie, radiologie, obstétrique et chirurgie)?

3.8 Si le médecin ou le spécialiste qui offre le service de télémédecine est salarié au lieu d'être payé à l'acte, la demande de paiement porte-t-elle un code de paiement à l'acte lorsque le service est fourni à un non-résident?

3.9 Quel pourcentage des honoraires est partagé entre le médecin traitant et le spécialiste consulté? Expliquez comment se fait le partage, le cas échéant.

4. Services hospitaliers

4.1 Vos hôpitaux offrent-ils des services pour patients hospitalisés via la télémédecine?

_____ Oui _____ Non

Quel est le nombre moyen de consultations par mois? _____

4.2 Vos hôpitaux offrent-ils des services de consultation externe via la télémédecine?

_____ Oui _____ Non

Quel est le nombre moyen de consultations par mois? _____

4.3 Comment les hôpitaux facturent-ils les services de télémédecine dispensés?

a. aux résidents de votre province ou territoire (p. ex. : financement par région, financement global)

b. aux résidents des autres provinces ou territoires (p. ex. : tarif journalier, tarif pour consultation externe ou autre)

5. Pratiques actuelles

5.1 Services médicaux

Nombre de consultations par spécialité pour l'exercice 1999-2000 :

a. Par spécialité, **dans** votre province ou territoire :

	aux résidents de votre province ou territoire	à des résidents d'autres provinces ou territoires
Dermatologie :	___	___
Cardiologie :	___	___
Ophtalmologie :	___	___
Psychiatrie :	___	___
Radiologie :	___	___
Obstétrique :	___	___
Chirurgie :	___	___
Autres spécialités (svp préciser) :		
_____ :	___	___
_____ :	___	___

b. Par spécialité, **à l'extérieur de** votre province ou territoire :

	aux résidents de votre province ou territoire
Dermatologie :	___
Cardiologie :	___
Ophtalmologie :	___
Psychiatrie :	___
Radiologie :	___
Obstétrique :	___
Chirurgie :	___
Autres spécialités (svp préciser) :	
_____ :	___
_____ :	___

5.2 Dans quelles circonstances a-t-on recouru à la télémédecine?

6. Coûts

6.1 Quels ont été les coûts de télémédecine pour l'exercice 1999-2000?

a. Par spécialité, **dans** votre province ou territoire :

Dermatologie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Cardiologie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Ophthalmologie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Psychiatrie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Radiologie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Obstétrique : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Chirurgie : _____ pour les résidents de votre province ou territoire
_____ pour les résidents de votre province ou territoire

Autres spécialités (svp préciser) :

_____ : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

_____ : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

Hôpitaux : _____ pour les résidents de votre province ou territoire
_____ pour les résidents d'autres provinces ou territoires

b. Par spécialité, **à l'extérieur de** votre province ou territoire :

Dermatologie : _____ pour les résidents de votre province ou territoire

Cardiologie : _____ pour les résidents de votre province ou territoire

Ophthalmologie : _____ pour les résidents de votre province ou territoire

Psychiatrie : _____ pour les résidents de votre province ou territoire

Radiologie : _____ pour les résidents de votre province ou territoire

Obstétrique : _____ pour les résidents de votre province ou territoire

Chirurgie : _____ pour les résidents de votre province ou territoire

Autres spécialités (svp préciser) :

_____ : _____ pour les résidents de votre province ou territoire

_____ : _____ pour les résidents de votre province ou territoire

Hôpitaux : _____ pour les résidents de votre province ou territoire

Nota : S'il vous plaît joindre une copie de la page du barème des honoraires des médecins qui s'applique aux services de télémédecine.

Envoyer votre questionnaire dûment rempli, d'ici le 1^{er} septembre 2000, à l'adresse suivante :

Secrétariat du CCFR
Santé Canada
Indice de l'adresse 0908D
Pré Tunney
Ottawa (Ontario)
K1A 0K9

Télécopieur : (613) 952-8542

5.3 Caveats to the Interpretation of the CCRB Reimbursement Questionnaire – English Version

NOTE

The purpose of this appendix is to discuss possible differences in the interpretation of the questions in the CCRB Telemedicine Questionnaire. This appendix is intended to permit open and frank discussion of the questions and responses.

The Centre for Rural and Northern Health Research (CRaNHR) and the Coordinating Committee on Reciprocal Billing Secretariat decided to use the existing questionnaire with caveats as appropriate, given that many of the jurisdictions had already responded to the survey. Future studies might consider using a revised questionnaire to re-survey the jurisdictions.

The format has been modified from the actual questionnaire (see Appendix 5.1 for an example of the original formatting). In this appendix, CCRB questions are bolded, caveats or comments are in normal text and the interpretation or decision used by the Centre for Rural and Northern Health Research during the writing of the report are italicized.

CCRB TELEMEDICINE QUESTIONNAIRE

Province or territory (please indicate): _____

1. Definition

1.1 For the purposes of billing medical and hospital services, what is the definition of telemedicine in your province/territory?

Most jurisdictions provided a definition. Not all definitions made explicit reference to fee-for-service reimbursement. In many jurisdictions the definition of telemedicine is subsumed within the broader definition of telehealth.

CRaNHR reported definitions with caveats as appropriate.

2. Sites

2.1 How many telemedicine provider sites are there in your province/territory?

Number of provider sites: _____

2.2 How many telemedicine receiver sites are there in your province/territory?

Number of receiver sites: _____

2.3 Location of sites:

Provider (please indicate number of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

Receiver (please indicate number of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

There is some evidence that the terms “provider sites” and “receiver sites” were interpreted differently by different jurisdictions. For example, it was not clear whether “provider site” referred to the provider of the consultation service or referred to the provider of the image. Similarly, the term “receiver site” could be interpreted to be the receiver of service or the receiver of the image.

In addition, several jurisdictions indicated that some sites could assume either role.

CRaNHR avoided the use of either term and instead tried to clarify responses by specifying the sites where the consulting physician (specialist) was located. Typically, specialists were assumed to be practising in tertiary or quaternary hospitals, usually located in large, urban centres.

3. Medical Services

3.1.1 Does your province/territory currently insure telemedicine within your jurisdiction?

____ Yes ____ No

If not, is inclusion of telemedicine in the fee schedule underway or planned?

____ Yes ____ No

Relatively straightforward questions and answers. CRaNHR added a question to get the date that the policy was implemented.

3.2 Does your province/territory currently insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions? ___Yes ___No
If not, is inclusion of telemedicine in reciprocal billing currently underway or planned? ___Yes ___No

The wording of this survey question may permit several interpretations. Using Alberta, which currently reimburses for telemedicine services, as an example.

1. Is an Albertan who is currently in Alberta insured for telemedicine services offered in the other jurisdictions?
2. Is an Albertan who is temporarily in Manitoba insured for telemedicine services offered:
 - a. in Alberta,
 - b. in Manitoba, or
 - c. in an other jurisdiction?
3. Is a Manitoban who is currently in Alberta insured for telemedicine services offered:
 - a. in Alberta,
 - b. in Manitoba, or
 - c. in an other jurisdiction?

These and other interpretations/options are summarized in the following table.

Table of Within and Cross-Jurisdictional Scenarios for the Provision of Telemedicine Services.¹

Location	Physician in first jurisdiction	Physician in second jurisdiction
<i>First jurisdiction's patient in own jurisdiction (e.g., Albertan in Alberta)</i>	Within jurisdiction reimbursement	Cross-jurisdictional reimbursement Typically envisioned situation
<i>First jurisdiction's patient in second jurisdiction (e.g., Albertan in Manitoba)</i>	Cross-jurisdictional (Perhaps a fee for use of telecommunication equipment in the other jurisdiction). (e.g., Albertan in Manitoba seeing an Alberta physician by telemedicine)	Cross-jurisdictional reimbursement Care remains within jurisdiction (e.g., Albertan in Manitoba seeing a Manitoba physician by telemedicine)
<i>Second jurisdiction's patient in first jurisdiction (e.g., Manitoban in Alberta)</i>	Cross-jurisdictional reimbursement Care remains within jurisdiction (e.g., Manitoban in Alberta seeing an Alberta physician by telemedicine)	Across three jurisdictions (e.g., Manitoban in Alberta seeing a BC physician by telemedicine)

¹ The names of the jurisdictions are used for illustration purposes only and do not necessarily reflect actual reimbursement scenarios.

CRaNHR used the response as reported by each jurisdiction. Follow-up questions were asked of selected jurisdictions. There still is some uncertainty in several jurisdictions as to which cross-jurisdictional scenarios for the provision of telemedicine services are in fact reimbursable as fee-for-service.

3.3 How does your province/territory handle professional licensing for telemedicine physicians. What if the physician is in one province/territory and the patient is in another? What is the rationale behind this policy? Does the physician need to be licensed with the province/territory where the patient is registered?

There was a variety of responses to this complex question, which is a survey in itself. Most jurisdictions did not answer all parts of this question. Future questionnaires might consider separating and rewording these questions.

Due to the complexity of the question and variety of responses, CRaNHR did not include responses to these questions in the report. A brief summary follows.

Eight jurisdictions indicated that the physician must be licensed to practice medicine in the patient's jurisdiction, which is typically the same as that of the physician. PEI requires that physicians be licensed in the physicians' jurisdiction (Nova Scotia), which differs from that of the patient. No jurisdiction required a special telemedicine license. Three jurisdictions were in the process of developing policy and one jurisdiction was not asked this question (Newfoundland completed a pilot-test version of the questionnaire that did not contain this question).

3.4 How is licensing for other professionals (other than physicians) providing telehealth services handled?

Most jurisdictions did not know the answer to this question.

CRaNHR did not include responses to these questions in the report due to the lack of detailed answers. A brief summary follows.

Four jurisdictions indicated that other health care providers must be licensed to practice medicine in the provider's jurisdiction, which is the same of that of the patient. Nurses were mentioned by two jurisdictions, "all clinicians" was mentioned by another jurisdiction while physiotherapists, occupational therapists and nutritionalists were mentioned by a fourth jurisdiction.

3.5 How is telemedicine integrated into your medical fee schedule (e.g., consultation, visit)?

3.6 When physicians bill for a telemedicine encounter how does your automated claims processing system recognize this service (e.g., modifier, new fee schedule code, equated to another item in your schedule)?

Relatively straightforward questions and answers.

3.7 Which medical specialties are utilizing this technology (e.g., dermatology, cardiology, ophthalmology, psychiatry, radiology, obstetrics, and surgery)?

Some jurisdictions listed all of the specialties that were currently providing telemedicine services while other jurisdictions restricted their answer to those specialties that were eligible to be reimbursed as fee-for-service. Some jurisdictions may have further restricted their response to include only those telemedicine services that were reimbursed as fee-for-service during fiscal year 1999/2000.

CRaNHR attempted to restrict the list to those specialties that were eligible to bill as fee-for-service for telemedicine services. Data on the services that actually billed fee-for-service were summarized in subsequent sections of the report.

3.8 If a physician/specialist providing the telemedicine service is salaried versus fee-for-service, would the claim generated indicate fee-for-service code(s) when the service is being provided to a non-resident?

This question was not always well understood and was often left unanswered.

CRaNHR reported the responses with caveats as appropriate.

3.9 What % of the fee is shared between the attending physician and the consulted specialist? Explain how this is done, if at all.

Relatively straightforward question and answers.

4. Hospital Services

4.1 Do your hospitals provide in-patient services via telemedicine? ____ Yes ____ No
What is the average number of encounters per month? _____

4.2 Do your hospitals provide out-patient services via telemedicine? ____ Yes ____ No
What is the average number of encounters per month? _____

4.3 How are your hospitals billing for telemedicine services provided?

a. to your own residents (e.g., regional, global funding)

b. to residents of other provinces/territories (e.g., per diem or out-patient)

Many jurisdictions lacked the detailed information needed to respond to this question. There was the potential for some confusion as to whether all telehealth services, all telemedicine services or just those telemedicine services reimbursed as fee-for-service should be included. The time period was not usually specified by jurisdictions. In addition, the term “encounter” has the potential to be defined differently by each jurisdiction. For example, jurisdictions may count patients, physicians, sites, time units (e.g., for example, the number of ½ hour sessions).

CRaNHR did not summarize responses to these questions in the report due to the paucity of answers as well as variation in the completeness of the answers.

5 Utilization

5.1 Physician services

Number of services per specialty for fiscal year 1999-2000:

a. by providers within your province/territory:

	To your residents	Other p/t residents
Dermatology:	_____	_____
Cardiology:	_____	_____
Etc.:	_____	_____

b. by providers outside your province/territory:

	To your residents
Dermatology:	_____
Cardiology:	_____
Etc.:	_____

Again, many jurisdictions lacked the detailed information needed to respond to this question. There was the potential for some confusion as to whether to include all telemedicine services or just those telemedicine services reimbursed as fee-for-service. There was also the possibility that the phrase “Physician Services” was interpreted as the number of types of services offered instead of the number of patient consultations.

Fortunately, none of the jurisdictions appeared to include telehealth services in their responses, in contrast to the question on hospital services (Question 4) in which a broader range of health services may have been included in the response.

CRaNHR included responses with appropriate caveats. If cost data were provided (Question 6) then it was reasonably inferred that the data referred to number of patient consultations.

5.2 In what circumstances is telemedicine used?

There was some differences in the way the word “circumstance” was interpreted. Answers ranged from the very general to the very specific.

CRaNHR did not include responses to this question, though general reasons, common in the telemedicine literature, were discussed in the text of the report. Responses are summarized below.

Four jurisdictions referred to general reasons such as improved access to health care services for residents in rural, remote or underserved areas. Five jurisdictions gave responses that included pilot project, medical need or listed available specialties or services. Four jurisdictions did not respond.

6 Costs

6.1 What were your costs for telemedicine for fiscal year 1999-2000?

a. by providers within your province/territory:

Dermatology: _____ to own residents
_____ to residents of other provinces/territories

Cardiology: _____ to own residents
_____ to residents of other provinces/territories

etc. : _____ to own residents
_____ to residents of other provinces/territories

b. by providers outside your province/territory:

Dermatology: _____ to own residents

Cardiology: _____ to own residents

etc. : _____ to own residents

Many jurisdictions lacked the detailed information needed to respond to this question. Fortunately, responses that were provided appeared to include only those telemedicine services reimbursed as fee-for-service.

CRaNHR included all available responses.

CCRB TELEMEDICINE QUESTIONNAIRE

Province or territory (please indicate): _____

1. Definition

- 1.1 For the purposes of billing medical and hospital services, what is the definition of telemedicine in your province/territory?

2. Sites offering reimbursable telemedicine services

- 2.1 How many telemedicine **provider** sites are there in your province/territory?
Number of provider sites: _____

- 2.2 How many telemedicine **receiver** sites are there in your province/territory?
Number of receiver sites: _____

- 2.3 Location of sites:

Provider (please indicate **number** of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

Receiver (please indicate **number** of sites):

____ hospital ____ clinic/non-hospital surgical suite
____ physician's office ____ other facilities (please specify)

3. Medical Services

- 3.1 Does your province/territory currently insure telemedicine within your jurisdiction?

____ Yes ® If yes, when was the policy to insure telemedicine within your jurisdiction implemented? _____

____ No ® If not, is inclusion of telemedicine in the fee schedule underway or planned? ____ Yes

____ No

3.2 Does your province/territory currently insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions?

_____ Yes ® If yes, when was the policy to insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions implemented? _____

_____ No ® If not, is inclusion of telemedicine in reciprocal billing currently underway or planned? _____ Yes

_____ No

3.3 How does your province/territory handle professional licensing for telemedicine physicians. What if the physician is in one province/territory and the patient is in another? What is the rationale behind this policy? Does the physician need to be licensed with the province/territory where the patient is registered?

3.4 How is licensing for other professionals (other than physicians) providing telehealth services handled?

3.5 How is telemedicine integrated into your medical fee schedule (e.g., consultation, visit)?

3.6 When physicians bill for a telemedicine encounter how does your automated claims processing system recognize this service (e.g., modifier, new fee schedule code, equated to another item in your schedule)?

3.7 Which medical specialties are utilizing this technology (e.g., dermatology, cardiology, ophthalmology, psychiatry, radiology, obstetrics, and surgery)?

3.8 If a physician/specialist providing the telemedicine service is salaried versus fee-for-service, would the claim generated indicate fee-for-service code(s) when the service is being provided to a non-resident?

3.9 What % of the fee is shared between the attending physician and the consulted specialist? Explain how this is done, if at all.

4. Hospital Services

4.1 Do your hospitals provide in-patient services via telemedicine? Yes No

What is the average number of encounters¹ per month? _____

For how many months? _____

4.2 Do your hospitals provide out-patient services via telemedicine? Yes No

What is the average number of encounters per month? _____

For how many months? _____

4.3 How are your hospitals billing for telemedicine services provided:

a. to your own residents (e.g., regional, global funding)

b. to residents of other provinces/territories (e.g., per diem or out-patient)

¹ 'Encounter' refers to a patient-visit

5 Utilization

5.1 Physician telemedicine encounters

Number of telemedicine encounters per specialty for fiscal year 1999-2000:

- a. by providers **within** your province/territory:

	To your residents	Other p/t residents
Dermatology:	_____	_____
Cardiology:	_____	_____
Ophthalmology:	_____	_____
Psychiatry:	_____	_____
Radiology:	_____	_____
Obstetrics:	_____	_____
Surgery:	_____	_____
Other (please specify):	_____	_____
_____	_____	_____
_____	_____	_____

- b. by providers **outside** your province/territory:

	To your residents
Dermatology:	_____
Cardiology:	_____
Ophthalmology:	_____
Psychiatry:	_____
Radiology:	_____
Obstetrics:	_____
Surgery:	_____
Other (please specify):	_____
_____	_____
_____	_____

5.2 In what circumstances is telemedicine used?

6 Costs

6.1 What were your costs for reimbursable telemedicine services for fiscal year 1999-2000?

a. by providers **within** your province/territory:

	To your residents	Other p/t residents
Dermatology:	_____	_____
Cardiology:	_____	_____
Ophthalmology:	_____	_____
Psychiatry:	_____	_____
Radiology:	_____	_____
Obstetrics:	_____	_____
Surgery:	_____	_____
Other specialities (please specify):		
_____	_____	_____
_____	_____	_____
Hospitals:	_____	_____

b. by providers **outside** your province/territory:

	To your residents
Dermatology:	_____
Cardiology:	_____
Ophthalmology:	_____
Psychiatry:	_____
Radiology:	_____
Obstetrics:	_____
Surgery:	_____
Other specialities (please specify):	
_____	_____
_____	_____
Hospitals:	_____

Note:

- Please ensure that data are for **reimbursable telemedicine** services only.
- Please attach a copy of the applicable page of your physicians **fee schedule** that is relevant to telemedicine.
- **Fax your completed questionnaire by December 13th, 2000** to:

Linda Liboiron (CRaNHR)

Fax: (705) 675-4855

OR

Linda Lord (CCRB)

Fax: (613) 952-8542

CCRB TELEMEDICINE QUESTIONNAIRE (1 page)

Please indicate your province or territory: _____

Reimbursement Policy

A. Does your province / territory currently insure telemedicine within your jurisdiction?

Yes ⇒ If **Yes**, when was the policy to insure telemedicine within your jurisdiction?

No ⇒ If **No**, is the inclusion of telemedicine in the fee schedule underway or planned?

Yes ⇒ When do you anticipate implementing policy to insure telemedicine within your jurisdiction?

No ⇒ When do you plan to consider implementing policy to insure telemedicine within your jurisdiction?

B. Does your province/territory currently insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions?

Yes ⇒ If **Yes**, when was the policy to insure telemedicine when accessed by your residents receiving care in other provincial/territorial jurisdictions implemented?

No ⇒ If **No**, is the inclusion of telemedicine in reciprocal billing currently underway or planned?

Yes ⇒ When do you anticipate implementing policy to insure telemedicine within your jurisdiction?

No ⇒ When do you plan to consider implementing policy to insure telemedicine within your jurisdiction?
