TELEHEALTH
HANDBOOK

Centre for Telehealth
@Mheccu

HANDBOOK

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Version 1.0-03

Foreword & Acknowledgements

This Handbook is a resource to the growing number of people working in the field of telehealth, with a particular focus on applications in the area of mental health and addictions. It is intended to provide Site Coordinators and others with practical information, guidelines, and forms for clinical and evaluation purposes. Additional information can be pursued by following the extensive links and references provided throughout the Handbook.

It is no secret that telehealth is undergoing significant growth. In British Columbia, telehealth activities have included the fields of radiology, diabetes, cancer, emergency medicine, pediatrics, as well as mental health and addictions. In addition, there are many telehealth activities that transcend any particular field or focus, such as distance learning, knowledge transfer for policy-makers, addressing the health needs of special populations, and the electronic health record.

In the area of mental health, the Mental Health Evaluation and Community Consultation Unit (Mheccu) has been providing services, distance learning, and administrative supports using broadband videoconference since 1999. Between 1999 and 2003, the Centre for Telehealth @ Mheccu (CT@M) has introduced videoconference resources in over forty communities, and has shared services and expertise with other provinces and territories, particularly Alberta and the Yukon.

The expansion of telehealth creates a number of significant opportunities. But it also underscores the need for adequate resources to ensure that equipment is well utilized and supported. These resources include the expertise and availability of site coordinators, educators and clinicians. They also include resources addressing the "how-to" of telehealth, and related supports such as scheduling software and a Directory of sites.

With support from the Mental Health and Addictions Services, Ministries of Health Services and Health Planning, the mandate of CT@M includes the development of telehealth resources that support mental health and addictions. This handbook fulfills part of these responsibilities. Additional information is available on-line at http://www.mheccu.ubc.ca/telehealth/index.cfm

This Handbook is substantially a "made-in-BC" product. The CT@M team was fortunate to recruit Sherry Masters as a senior editor. Sherry began collaborating with CT@M as a Site Coordinator, and was an ideal candidate to integrate and smooth the disparate sections of this work. Dr. Harry Karlinsky and Tracy McLellan produced an earlier resource for site coordinators in Northeast BC, and we are grateful to them for allowing CT@M to incorporate and adapt their material into this Handbook.

An earlier draft of the Handbook has been significantly improved, following careful and critical reviews by a number of experts, who are gratefully acknowledged below.

The CT@M team bears responsibility for the production and updating of this Handbook. It is a sincere pleasure to acknowledge and thank James Coyle (Manager, CT@M), Matthew Querée (Research Associate, CT@M), Azmina Hasham (Telehealth Coordinator, CT@M), and Cyril Lopez (Director, Finance and Business Operations, Mheccu).

We will be grateful for feedback and suggested improvements. Please feel free to E-mail comments to jsomers@interchange.ubc.ca.

Dr. Julian M. Somers
Director, CT@M

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External Reviewers

Carol Flewelling
Manager, Telehealth Programs
Hospital for Sick Children
Toronto, Ontario

Stephanie Froissart
Telehealth Project Manager
Hôpital Sainte-Jusine – Mother &
Child University Centre
Montreal, Quebec

Tina McKinnon
Manager, Telehealth Services
Department of Health
and Social Services
Government of Nunavut
Iqaluit, Nunavut

Tracy Mclellan
Team Leader
Adult Mental Health
Dawson Creek, BC

Angela Nickoloff
Manager, Service
Development and Training
NORTH Network
Toronto, Ontario

Dr. Paula Pasquali
Director of Community
Health Programs
Health and Social Services
Government of Yukon

Sharlene Stayberg
Provincial Telehealth Director
Alberta Wellnet
Government of Alberta
Edmonton, Alberta

SECTION 1

INTRODUCTION

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SECTION I INTRODUCTION

1.A How to use this Handbook

1.A.1 Purpose of the Handbook

This handbook is intended to serve as a current, practical resource to support the introduction, implementation, and ongoing maintenance of videoconferencing in mental health throughout BC. It addresses a broad range of topics relevant to many audiences and draws on expertise and knowledge from a variety of sources including:

- the Centre for Telehealth @ Mheccu
- primary sources
- relevant research literature **(See Section 2.C: Research)**
- readers / reviewers **(See Foreword & Acknowledgements)**
- other established Telehealth projects.

This handbook is a "snapshot in time" of resources developed and lessons learned to date in the development of telehealth services in the province of BC. It is not, nor is it intended to be, an exhaustive authority on telehealth. Users who find advice or information contained here to be useful are encouraged to discuss it with all appropriate parties to ensure optimal application.

1.A.2 Target Audience

This handbook is designed primarily as a support for Telehealth Site Coordinators and others who share responsibilities for operational aspects of videoconferencing in mental health. The handbook addresses technical and operational issues, provides a basic overview of clinical, distance education, and administrative applications, and supplies protocols and practical tools to support these applications.

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1.A How to use this Handbook, continued

1.A.3 Other Audiences

Many sections of this handbook will also be relevant to others involved directly or indirectly in providing, monitoring, or accessing mental health services, including

- clinical service providers
- educators
- health care administrators
- government personnel
- financial support personnel
- technical support staff
- mental health consumers and their families.

For example, sections on Clinical Services and Distance Education will be relevant to clinicians and educators respectively. Others may find the handouts and samples most relevant.

Some aspects of this handbook may also be applicable to broader audiences (e.g., those involved in initiating other telehealth applications within the province of BC). Organizations involved in province-wide service delivery (e.g., the Provincial Health Services Authority and major referral centres), may be interested in the handbook's content as well as its potential to serve as a template for other applications. The document may also be of interest to those working in telehealth and / or mental health in other provinces, territories, and countries.

1.A.4 Material of Interest

While the entire document or any of its contents may be of interest to any particular reader, the following links have been provided to direct readers to material that may be most valuable to them. Please note that these hyperlinks are functional only in the complete electronic version of the handbook.

SITE COORDINATORS and others involved in operational aspects:

- **Section 2.D: Videoconferencing Technology**
- Parts of **Section 4: Roles and Responsibilities**, particularly **4.D: Site Coordinator**
- **Section 5: Operational Aspects**
- **Section 6: Clinical Services**
- **Section 7: Distance Education**
- **Section 8: Technical Support**
- Parts of **Section 9: Evaluation**, particularly **9.A.2: Evaluation Protocol** and **9.B.2: Practical Approaches to Evaluation**

CLINICIANS

- **Section 2.C: Research**
- **Section 3.A: Clinical Service Delivery**
- **Section 5: Operational Aspects**
- **Section 6: Clinical Services**

ADMINISTRATORS:

- **Section 2: About Telehealth**
- **Section 3: Applications in Mental Health**
- **Section 4: Roles and Responsibilities**
- **Section 5: Operational Aspects**

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1.A How to use this Handbook, continued

1.A.5 Organization and Updating of the Handbook

In order that this handbook may remain current as telehealth procedures and technologies continue to evolve, the contents have been organized in a modular manner to facilitate updating. The sections and topics within each section are numbered to facilitate the insertion of new sections and topics as they are developed. The front page of each section lists the topics within the section and functions as a detailed Table of Contents. A more general, comprehensive Table of Contents is located at the front of the document.

Updates will reflect important developments in Telehealth relevant to BC. However, the Centre for Telehealth @ Mheccu assumes no responsibility for the comprehensiveness of future updates in this rapidly changing field.

1.A.6 Format of the Handbook

This handbook is available in both print and web-based versions. Each section has been written and formatted in a modular manner, allowing for convenient copying and distribution, as appropriate.

- The print version contains removable sheets within a binder, with tabbed sections to allow for easy location.
- The web-based version is formatted in PDF for standardized viewing. The web version contains numerous hypertext links to relevant resources appearing throughout the handbook.

1.A.7 Forms, Handouts & Samples

As a practical, working tool for Telehealth Site Coordinators, the handbook has been designed to facilitate the copying and distribution of the material for review purposes. Several items are provided, including sample consent forms, clinical protocols, and various other documents all clearly labelled as samples.

These materials are offered as examples only. Any forms developed based on these samples should be carefully reviewed for compliance with local standards, practices, copyright procedures and laws prior to their utilization in new settings.

SECTION 2

ABOUT TELEHEALTH

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SECTION 2 ABOUT TELEHEALTH

2.A Definitions

The words **telehealth**, **telemedicine**, and **e-health** are often used interchangeably.

Telehealth is generally used as an umbrella term to describe all the possible variations of healthcare service using electronic communications and information technology. It includes the facilitation of health assessment and diagnosis, intervention, consultation, supervision, education, and the conveyance of information via analogue and digital media.

A telehealth system comprises[1]

- people – users and providers of health services
- telehealth application technology – hardware, software and peripheral devices
- telecommunications and network links – the means by which users are linked, including telephone and cable lines, Internet, satellites, and digital networks.

Two different kinds of technology make up most of the telehealth applications in use today. The first, called **store-and-forward**, refers to captured digital images (still or video), audio clips, and / or data that are stored at one location and then sent to another location at a later time (i.e., asynchronous). E-mail and facsimile (fax machines) are commonly used forms of store-and-forward.

Real-time technology allows audio / visual data to be sent and received simultaneously (i.e., synchronous). The telephone is the most commonly used form of real-time technology. Two-way interactive video teleconferencing (VTC) fits into this category, and for many is a synonym for telehealth.

Telemedicine is a more restrictive term than telehealth. It describes the provision or support of direct clinical care via telecommunications – diagnosing, treating, or following-up with a patient at a distance. For a more detailed definition and description of telemedicine, please refer to the following websites:

- The Telemedicine Research Centre (TRC) Telemedicine Primer:
http://trc.telemed.org/telemedicine/primer.asp

- Telemedicine Information Exchange (TIE) Telemed 101:
http://tie.telemed.org/telemed101/

Regarding the application of telehealth to the provision of mental health services, **telepsychology** and **telepsychiatry** refer to the provision of psychological and psychiatric services respectively, while **telemental health** refers to broader mental health system applications. Generally, the preferred term depends on the setting and the professionals involved, as the processes and effects are the same regardless of terminology.

[1] *Telehealth Projects: A Practical Guide,* Ministry of Health Planning, August 2001

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2.A Definitions, continued

E-Health most often refers to Internet-based telehealth services. Internet-based activities can be classified as either informatics (i.e., databases, websites, etc.) or human exchanges. Computer Mediated Communications (**CMC**) using networked computers can promote human interaction and collaboration through both store-and forward and real-time interactions.

Telematics is the broadest term of all and is used to describe all aspects of the merging of computers and telecommunications. Another related term is **ICT** – Information and Communications Technologies – essentially the same thing as telematics. Telematic technologies include videoconferencing, satellite television, CMC, and the Internet. More detailed information about telematics can be accessed at

> University of Plymouth website:
http://www.fae.plym.ac.uk/tele/tele.html

Definitions of Other Terminology: Other sources provide definitions for a broad list of terms with which individuals involved in an interactive telecommunications network should be familiar, whether they are involved in telemedicine, telehealth or distance education. Definitions of key terms can be accessed at:

> Office for Advancement of Telehealth, U.S. Dept of Health and Human Services, Glossary and definitions:
http://telehealth.hrsa.gov/pubs/mental/glossary.htm

> Calgary Health Region, Telehealth definitions:
http://www.crha-health.ab.ca/telehealth/definitions.htm

> Health Canada:
http://www.hc-sc.gc.ca/ohih-bsi/theme/tele/index_e.html

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2.B History of Use

2.B.1 Worldwide

The use of television and space technologies in health care has occurred since the 1950s. The following time line of projects, while not exhaustive, illustrates the breadth, longevity, and international scope of telehealth. Descriptions of these and other projects are available via the world wide web.

1920 – First use of radio technology to provide health care support to ships at sea by Haukeland Hospital in Norway

1924 – Radio News magazine illustration of a physician viewing his patient over a radio with a TV screen; TV was not invented until 1929

1945 – Centre of Maritime Health Care consultation established in France

1951 – First cross-state demonstration of telemedicine at New York World's Fair

1954 – Use of a one-way closed circuit television to train medical students at Nebraska Medical Centre

1955 – Introduction of interactive audio link between distance education presenter at Nebraska Psychiatric Institute and seven Midwest U.S. psychiatric hospitals

1956 – Dr. Albert Jutras introduces teleradiology in Montreal

1959 – First audio-visual interactive system established at Nebraska Psychiatric Institute to provide tele-education and telepsychiatry

1964 – Nebraska Psychiatric Institute established link with state hospital via microwave technology, enabling picture and sound transmissions from multiple locations

1967 – Two-way audiovisual microwave used by Massachusetts General Hospital to provide emergency care (including psychiatric consultations) to patients at Logan International Airport

1968 – Closed circuit link established between Department of Psychiatry at Dartmouth Medical School and a rural hospital in New Hampshire to provide user-friendly mental health consultation

1971 – Satellite video consultation project established in Alaska to improve quality of rural health care

1972 – 1975 – Mobile van utilizing two-way microwave audio transmission used to deliver medical care to the Papago Indian Reservation in Arizona

1984 – Australian North-West Telemedicine Project established to provide health care to Aborigines and other island-dwellers in five remote towns

continued

2.B History of Use, continued

2.B.1 Worldwide, continued

1988 – SpaceBridge to Armenia / Ufa, a large international telemedicine program implemented by NASA, provided consultations for earthquake and railway accident victims using one-way video, voice, and facsimile between medical centers in Armenia and Russia and four medical centers in the U.S.

1989 – Creation of the European Institute of Telemedicine

Recent Developments

The last decade has seen a steady increase in the number of telehealth projects throughout the world. Many of the early telehealth projects pioneered the use of satellite and microwave technologies. More recently, the development of the internet has stimulated vast interest in health related information (tele-learning) and in the prospect of widely available web-based services. The internet is currently an astounding health resource, with particular strengths in relation to store-and-forward materials (archived text and video). The use of the internet to support interactive health communications (i.e., synchronous videoconferencing) is less developed at present, as challenges are being addressed in relation to ensuring adequate bandwidth, security, and interoperability with other modalities. The Telemedicine Information Exchange lists over 130 sites internationally.

> Telemedicine Information Exchange (TIE):
History of Telemedicine:
http://tie.telemed.org/telemed101/understand/tm_history.asp

> Current Searchable International Programs Database:
http://tie.telemed.org/programs/

The Office for Advancement of Telehealth, U.S. Dept of Health and Human Services, has published a summary report on telehealth. This document provides information about the history and recent developments in provision of telehealth services in the U.S.

> TELEHEALTH:
Delivering Mental Health Care at a Distance: A Summary Report:
http://telehealth.hrsa.gov/pubs/mental/home.htm

continued

2.B History of Use, continued

2.B.1 Worldwide, continued

Other international sites that feature information about historical or recent telehealth developments include the following:

> UK NHS Information Authority Portal:
http://www.nhsia.nhs.uk/def/home.asp

> Australia and New Zealand Telehealth Committee website:
http://www.telehealth.org.au/

> International Society for Telehealth (based in Norway):
http://www.isft.org/

> Hong Kong Telemedicine Association:
http://ruby.med.cuhk.edu.hk/~hktma/

> History of Telemedicine in France, Norway, Portugal, Spain and Greece[2]:
http://conganat.uninet.edu/ICVHAP/conferencias/017/history.htm

[2] Manual De Telemedicines Para Estudiantes, Editor Dr. Olga Ferrer Roca

2.B History of Use, continued

2.B.2 In Canada[3]

1956 – Dr. Albert Jutras first began doing teleradiology in Montreal

1970s – Distance education in Canada began incorporating new technologies such as telidon (Canada's videotex system), videodisc, computer-assisted instruction, audio conferencing, fibre optics and communications satellites

1976 – Joint project established between NASA and Canada's Department of Communications to conduct a series of telemedical experiments using the communications technology of the Hermes satellite. Medical services including medical consultations, data transmission and continuing education were provided to rural and remote parts of Northern Canada

1977 – The Telemedicine Centre at Memorial University of Newfoundland (MUN) began to develop interactive audio networks for educational programs and the transmission of medical data. The MUN Teleconferencing System has installations in provincial hospitals, community colleges, university campuses, high schools, town halls, and educational agencies.

> MUN Telemedicine Centre
http://www.med.mun.ca/telemed/

The Telehealth and Educational Technical Resource Agency (TETRA) program operating in Newfoundland and Labrador has a range of active telehealth applications, with approximately 70 sites linked via video conferencing.

Early 1980's – The NOR'East Health Network in New Brunswick links three hospitals to the Regional Hospital Centre in Bathurst. The system began with store-and-forward technology and expanded in the last decade to include videoconferencing.

1994 – The BC Cancer Agency initiated a project linking 4 sites in the province of BC to support cancer consultation, treatment and education.

1997 – The Nova Scotia TeleHealth Network established a province-wide computer-based telemedicine network in Nova Scotia. By the spring of 1999, every hospital in the province was connected. The project links doctors in remote communities with specialists in Halifax. It also brings Dalhousie University's continuing medical education program to health care workers across the province.

> Nova Scotia Telehealth Network:
http://www.medicine.dal.ca/innovprog/telemedicine.htm

1997 – The Réseau Québécois de Télésanté élargi (RQTe) initiated a collaborative project linking 32 regional centres to 4 Paediatric Cardiology Services in Quebec. From a small experience in the narrow field of Pediatric Cardiology, the project gradually extended the leading application and other applications focused on patient needs to a vast network dedicated not only to children but to an entire population.

> Réseau québécois de télésanté élargi:
http://www.rqte.qc.ca

[3] Much of the information in this section is summarized from a report entitled *Telehealth Projects / Programs in Canada,* developed by Jocelyn Picot for the National Telehealth Coordinators Workshop, October 2002

continued

2.B History of Use, continued

2.B.2 In Canada, continued

1998 – NORTH pilot project initiated in Ontario, which has since grown to include over 60 sites and a broad range of applications. Other Ontario projects include the Eastern Ontario and Southwestern Ontario telehealth networks.

In the same year, the WestNet Telehealth project was established in the Northwest Territories; it has grown to include seven linked sites utilizing a range of applications.

1999 – Alberta Wellnet project initiated; currently links over 200 sites throughout Alberta for a range of applications. In the same year, Nunavut initiated a project that now links 15 sites. In B.C, the former Peace Liard region with support from the Centre for Telehealth @ Mheccu initiated a pilot project to link 4 sites in three communities.

Over the past few years there has been a significant expansion in the scope of telehealth, and all jurisdictions in Canada now support some level of telehealth activity within their respective health care systems. The Canadian federal government has formally recognized the benefits of Telehealth. It is one of the four key priorities of Health Canada's Advisory Committee on Health Infostructure (ACHI) and a focus of the Office of Health and the Information Highway (OHIH), which is actively involved in the development and maintenance of a searchable, on-line Canadian Telehealth Initiatives Database.

The Office of Health and the Information Highway (OHIH) operates the Resource Centre on Information and Communications Technologies in Health, Health Canada's focal point for all matters concerning the use of information and communications technologies (ICTs) in the health sector:

> Health Canada's OHIH website:
http://www.hc-sc.gc.ca/ohih-bsi/menu_e.html

Other Canadian links include the following:

> Canadian Society of Telehealth:
http://www.cst-sct.org/

> Canadian Health Network: Non-profit web-based health information service
http://www.canadian-health-network.ca/customtools/homee.html

> CANARIE: Canada's advanced Internet development organization:
http://www.canarie.ca/about/about.html

Some provincial governments have established provincial networks to assist in the provision of telehealth information and services. These include:

> Alberta Wellnet:
http://www.albertawellnet.org/

> Saskatchewan Health Information Network:
http://www.shin.sk.ca/

> Manitoba Telehealth:
http://www.mbtelehealth.ca/

> Quebec Health Telecommunication Network:
http://www.msss.gouv.qc.ca/rtss/

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2.B History of Use, continued

2.B.3 In British Columbia

Several projects initiated in British Columbia demonstrate the promise of telehealth as a benefit to the health care system. These projects fall into two main categories:

Applications

- Diagnostic image management systems
- Remote consultation by health professionals
- Electronic patient records
- Distance education
- Health education and promotion
- Health administration

Infrastructure

- Networks, equipment and standards

Further information about some of these projects can be found at the following sites:

> BC Health Industries Network:
http://www.hinetbc.org/telehealth/bcprojects.html

> Ministry of Health Telehealth:
http://www.hlth.gov.bc.ca/bctelehealth/projects.html

Telehealth Services in BC and Yukon: In 1999, Mheccu responded to a request from the Adult Mental Health Division, British Columbia Ministry of Health, and the health authorities in the Peace Liard Health Region of northeastern BC to initiate a pilot telehealth project.

The goals of the pilot project were to supply

- mental health consultations via two-way interactive videoconferencing technology to provide increased access to clinical services for general practitioners, mental health staff and care providers in under-serviced areas of BC
- distance education services to consumers and family members, mental health centre staff, and other clinicians.

Child, adult, and geriatric clinical telepsychiatry sessions were organized and delivered via videoconferencing technology by a roster of outreach psychiatrists who also provided itinerant services in participating communities. Approximately two distance education programs per month were also scheduled using multi-point videoconferencing technology.

continued

2.B History of Use, continued

2.B.3 In British Columbia, continued

Based on the success of this initial project, the Centre for Telehealth @ Mheccu received support from Health Canada in April 2001. Funding from the Canada Health Infrastructure Partnerships Program (CHIPP) supported a consortium of partnerships and collaborations in order to implement and evaluate comprehensive telehealth programs in the Yukon Territory and British Columbia.

Objectives of the CHIPP initiative were to

- improve access to mental health services in rural and remote areas of British Columbia and Yukon
- improve the efficiency and quality of mental health services in rural and remote areas of British Columbia and Yukon
- provide mental health services more cost effectively to rural and remote areas of British Columbia and Yukon (e.g., by reducing cost of travel, time lost from work)
- improve access to distance education programs for consumers, mental health professionals, and physicians in British Columbia, Yukon, and Alberta

Below are some illustrative projects developed through the Centre for Telehealth @ Mheccu (CT@M) in 2002:

Linkage Project
The Linkage Project, funded by the Ministry of Health Services, was designed to significantly expand the network of BC communities that have access to videoconference technology in support of mental health. Through this initiative, over 30 additional communities introduced videoconferencing into their mental health systems, creating the largest telehealth network in BC. This increase in scale was the catalyst for introducing notable network management principles and supports, including GIS mapping, web-based scheduling software, and a telehealth intranet.

Aboriginal Health Needs
The expansion of e-health technology creates opportunities to address the needs of diverse special populations and to address barriers related to distance, culture and society. In partnership with the Sal'i'shan Institute, UVic, and the Aboriginal Health Branch of the Provincial Government, the CT@M received funding from UBC to investigate the effectiveness of e-learning initiatives to support the health of aboriginal people. This project is intended to integrate the informed views of First Nations people, and is a stepping-stone to multi-year funding from UBC's Special Populations - Strategic Teaching Initiative.

Broadband Best Practices Project
Research has established that health professionals are comfortable with e-learning, and that they rate it highly in comparison to other sources of professional development (e.g., journals, workshops, etc.). However, it is not known whether e-learning leads to changes in

continued

2.B History of Use, continued

2.B.3 In British Columbia, continued

practice, or improvements in client outcomes. The Broadband Best Practices Project involves clinicians in rural and remote BC communities in a series of high quality e-learning sessions. Participating clinicians provide their overall valuation of e-learning, their appraisal of the impact of e-learning on their own practice, and the expected benefit to clients. Designed and implemented by CT@M, this project is partially supported by Telus' Community Development Fund.

> Centre for Telehealth @ Mheccu website:
http://www.mheccu.ubc.ca/telehealth/

Other current telehealth projects addressing mental health in BC include

- **the Integrated Community Mental Health System:**
  The Capital Health Region, in partnership with the Victoria Cool Aid Society, is involved in the development and implementation of a standards-based, public domain software package for use in small- to medium-size health and community agencies.

- **the SYNAPSE Multi-Jurisdictional Mental Health Information Systems Project:**
  This project includes Electronic Health Record applications and the integration of key data sources across the continuum of mental health care, such as the proposed BC Mental Health Data Warehouse, Health Registry, and Pharmanet. It also advances standards for data, technology, and security.

These projects are described on the following web sites:

> Ministry of Health Telehealth:
http://www.hlth.gov.bc.ca/bctelehealth/projects.html

> BC Health Industries Network:
http://www.hinetbc.org/telehealth/bcprojects.html

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2.C Research

2.C.1 Research Examples

To date, most studies on telehealth have focused on patient and provider satisfaction with the technology rather than the effectiveness of the technology in delivering services. Most telehealth studies have small sample sizes and rarely include randomized clinical trials. Information about cost-effectiveness is also limited.[4]

A systematic review[5] of telemedicine conducted in 2002 revealed that studies on teleradiology, telemental health, teledermatology, and home telecare were among those providing the most convincing evidence on the efficacy and effectiveness of telemedicine. However good quality studies are still in the minority and the ability to generalize most assessment findings are still limited.

A recent review of telemedicine provision[6] to the adult Medicare population of the United States targeting face-to-face clinical specialties (as opposed to radiology and pathology) examined three categories of telemedicine.

1/ Store-and-forward:
Studies assessing efficacy of store-and-forward telemedicine are lacking for many clinical domains. For teledermatology, the most-studied clinical specialty, diagnostic accuracy and patient management decisions are comparable to those of in-person clinical encounters. Teledermatology also improves access to care when none is available locally, and may have adequate patient acceptance.

2/ Self-monitoring / testing:
This category of telemedicine is used less frequently than the other categories – primarily for management of chronic conditions or specific conditions such as heart disease, diabetes, or asthma. Measurements are usually collected in the patient's home or care facility, reducing the need for face-to-face visits by those with limited mobility. While it is used in many clinical domains for which there is little available evidence of efficacy, some studies show that self-monitoring / testing results in comparable outcomes, improves access, increases satisfaction with care delivered, and may be cost-effective.

3/ Clinician-interactive services:
For many clinical applications, studies reviewing efficacy are non-existent or their evidence is insufficient. However studies of some clinical specialties[7] demonstrate that the diagnostic accuracy associated with the use of telemedicine is comparable to the diagnostic accuracy associated with traditional face-to-face clinician interactive approaches. In emergency medicine, one randomized controlled trial shows it to have comparable health outcomes. Some studies demonstrate improved access to care[8], patient and provider satisfaction, and reduced costs of care.

[4] *Procedural and Methodological Issues in Telepsychiatry Research and Program Development.* B. Frueh et al., Journal of Psychiatric Services, December 2000. APA Abstract: http://tie.telemed.org/citations2.asp?citation=9675&key=1295540705&page=1&pagecount=1

[5] *Systematic review of evidence for the benefits of telemedicine,* Hailey,D., Roine, R, Ohinmaa,A, Journal of Telemedicine and Telecare, 2002. Abstract: http://tie.telemed.org/citations2.asp?citation=12468&key=7336412462&page=1&pagecount=1

[6] *Telemedicine for the Medicare Population.* Summary, Evidence Report/Technology Assessment: Number 24. AHRQ Pub.# 01-E011, Feb 2001. Agency for Healthcare Research and Quality (AHRQ), Rockville, MD. http://www.ahcpr.gov/clinic/epcsums/telemedsum.htm

[7] Cardiology, emergency medicine, otolaryngology, opthamology, pulmonary medicine

[8] Neurosurgery, medical-surgical evaluation, cardiac care

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2.C Research, continued

2.C.1 Research Examples, continued

Psychiatric interviews conducted through video conferencing are generally reliable, according to a critical review in the December 2000 *Psychiatric Services*.[9] A comprehensive literature review found generally high rates of patient and clinician satisfaction with videoconferencing. There is a trend toward increased use of videoconferencing as an affordable way to serve populations in remote regions along with other isolated groups (e.g., military personnel abroad, caregiver support groups, and prisoners).

A review of studies applying directly to behavioural telehealth[10] looked at

- **store-and-forward technologies:** Use for consultation and supervision is growing rapidly. There is little written on store-and-forward technologies in patient care, but several papers support their application to clinical training and supervision.

Regarding Internet-based activities, the Internet clearly provides increased access to literature for patients and providers. Data indicate that participants may perceive online forums, which are often directed by professionals, as helpful (e.g., for people living with obsessive-compulsive disorder). Psychological assessment and psychotherapy online, however, are more controversial than self-help groups. The authors concluded that unless there are extenuating circumstances, store-and-forward interactions between patient and provider are more likely suited for adjunctive or crisis interventions than for a primary means of contact.

- **video teleconferencing (VTC):** Most programs report provider and patient satisfaction. VTC can help lessen the negative impacts of institutionalization, including incarceration. Therapeutic alliance over 10 psychotherapy sessions has been judged similar in face-to-face sessions compared with VTC sessions. It is not technology, but human factors – such as how one looks on camera or being able to sit still – that determine whether VTC use is successful. Most recent papers on diagnosis and assessment by VTC suggest that results compare favourably with results from face-to-face encounters, particularly for schizophrenia and obsessive-compulsive disorder. One study indicates that clients may participate more in psychotherapy at a distance (via videoconference or telephone) than in a face-to-face setting[11].

One Canadian research example on telepsychiatry in rural Alberta[12] indicated that 94% of patients interviewed preferred telepsychiatry to waiting for a consultation and that 74% would have had to miss time from work or pay for child care in order to travel to a conventional consultation. In the latter case the

[9] *Telepsychiatry Likely to Become Prevalent Form of Treatment.* A. Levy, American Psychiatric Association, November 2000. http://www.newswise.com/articles/2000/11/TELEPSYC.APA.html

[10] *Clinical Applications of Telehealth in Mental Health Care.* B. Stamm. Professional Psychology: Research and Practice. Vol. 29, No. 6, December 1998. http://www.apa.org/journals/pro/pro296536.html

[11] *Distance Therapy,* S.X. Day, P.L. Schneider, Journal of Counseling Psychology, Oct 2002. Summary http://www.apa.org/monitor/oct02/distance.html

[12] *Telepsychiatry as a routine service: The perspective of the patient.* Simpson, J., Doze, S., Urness, D., Jacobs, P, Journal of Telemedicine and Telecare, 2001. Abstract: http://tie.telemed.org/citations2.asp?citation=10410&key=6354452997&page=1&pagecount=1

continued

2.C Research, continued

2.C.1 Research Examples, continued

availability of telepsychiatry led to an estimated savings of $210 in travel costs per consultation.

The Centre for Mental Health Services, US Department of Health and Human Services has developed a summary report on Telehealth Services that describes some system and client outcomes.

- **System Outcomes**

– *Staff relationships*
Telehealth brings staffs closer together. Working as colleagues over the network, hospital and community staffs become more supportive of one another and more familiar with each other's roles.

– *Continuity of care*
Telehealth networks have clearly demonstrated improvements in continuity of care, connecting hospital and community providers, clients, and family members in an ongoing, coordinated treatment approach.

– *Follow-up care*
One study of the Menninger Centre for Telepsychiatry in Kansas demonstrates increased follow-up of hospital patients discharged to a nursing home via telepsychiatry.

– *Continuity of Service*
A telepsychiatry link between community and hospital in rural Virginia has allowed more than 400 people treated at the Southwestern Virginia Mental Health Institute to maintain contact with hospital psychiatrists, and to maintain involvement with their community practitioners when hospitalized. Consumers involved in the telepsychiatry clinic show improved self-esteem and greater motivation to participate in treatment.

– *Increased Family and Consumer Involvement*
Telehealth services increase the likelihood that individuals from rural areas will have their family's support during inpatient stays, and that family members will be included in treatment and discharge planning, commitment hearings, etc.

- **Client Outcomes**

– *Validity of Assessment Tools*
Telehealth technologies can be reliably used to administer certain psychiatric / psychological assessment tools (e.g., ratings between video-based and face-to-face conditions were closely correlated for the Mini-Mental Status Exam, the Yale-Brown Obsessive-Compulsive Scale, the Hamilton Depression Scale, and the Hamilton Anxiety Scale).

– *Reliability as a function of bandwith*
Research comparing video assessments of patients with schizophrenia[13] (at two different bandwidths) with live assessments established that there was equal reliability for assessing global severity and positive symptoms of schizophrenia in all three cases. However, negative symptoms were more difficult to assess at the lower bandwidth. A separate study showed that a scale that was particularly sensitive to visual input[14] was actually more reliable via video at a high bandwidth than when conducted in person. This may be due to

[13] Using the Brief Psychiatric Rating Scale (BPRS), the Scale for the Assessment of Positive Symptoms (SAPS) and the Scale for the Assessment of Negative Symptoms (SANS).
[14] The Abnormal Involuntary Movement Scale (AIMS)

continued

2.C Research, continued

2.C.1 Research Examples, continued

the fact that facial and tongue movements can be examined more closely over the video system without violating social space.

– Service Use Patterns

While there is little research in this area, emerging studies reveal that telehealth clients may have more frequent and lengthier contacts with their psychiatrist, leading to greater stability and medication compliance.

– Consumer and Provider Satisfaction

There have been many surveys assessing consumer and provider satisfaction with interactive telecommunication approaches. There appears to be a universally high level of acceptance by both providers and consumers, with every available survey reporting that consumers perceive these services as beneficial, of high quality, and worth continuing.

Related information can be accessed at:

> Telehealth: Delivering Mental Health Care at a Distance
http://telehealth.hrsa.gov/pubs/mental/home.htm

The Agency for Healthcare Research and Quality has a web page listing evidence-based practice centres and evidence reports. This can be accessed at:

> Agency for Healthcare Research and Quality:
http://www.ahcpr.gov/clinic/epcix.htm

See Section 3: Applications in Mental Health for further discussion of the possible applications of telehealth technology in the mental health field.

2.C Research, continued

2.C.2 Cost-Effectiveness

Telehealth applications may demonstrate savings and efficiencies in the following areas[15]:

- reductions in the costs of patient movement
- reduction in the costs of moving staff
- reductions in the opportunity costs of time spent by specialist staff in traveling rather than working in their profession
- laboratory tests which might be deemed unnecessary as a result of a telehealth consultation
- increased use of highly skilled medical staff at a specialist centre
- better scheduling of patient diagnosis and treatment
- provision of more effective treatments to patients leading to more timely recovery
- reduced costs of travel for patients and their families, including the direct costs and the opportunity costs[16] of time spent traveling

A systematic review[17] of cost effectiveness of telemedicine interventions indicated that, of 55 studies employing cost variables, only 44% met quality criteria. The majority of these were restricted to simple cost comparisons, and none used cost utility analysis to establish the 'value for money' that a therapeutic intervention represents.

[15] *Review of the Literature on Evaluation in Telehealth.* Australian New Zealand Telehealth Committee, Commonwealth Department of Health and Aged Care: November 1999.

[16] E.g. Time lost from work

[17] *Systematic review of cost effectiveness studies of telemedicine interventions.* P. Whitten, F. Mair, A.Haycox, C.May, T. Williams, S. Hellmich, British Medical Journal (BMJ) June 15, 2002.

2.D Videoconferencing Technology

Videoconferencing technology enables people to communicate at a distance by using a combination of computer and communication technologies to send real-time (synchronous) audio and video data between participating sites.

The technology can include

- cameras
- computers
- monitors / TVs
- microphones
- peripherals for education and / or specialty applications
- telecommunications and networks
- E-mail, Internet, web conferencing / scheduling, etc.

Types of Videoconference systems

- ***Desktop*** videoconference systems utilize a camera, desktop personal computer and video-conferencing software. These units are connected through telephony to other desktop computers with similar equipment. Desktop computer units can pass data via telephone lines or the Internet.
- ***Room-based*** systems use one or more monitors and usually more than two digital lines to provide sufficient bandwidth for higher-quality motion pictures and sound. Peripherals such as document cameras, VCRs, slide projectors and laptops (used to display documents, PowerPoint slides, etc.) can provide a range of visual aides to inform distance education presentations and discussions. Other peripherals, such as exam cameras and scoping devices, can support a variety of specialized telehealth applications.

See figure 2.D.1. for an illustration of a room-based videoconference system.

Types of Networks

Networks are the means of linking two or more videoconference systems. These can include the following:

- **Analogue networks** rely on modem technology and on dial-up connections. One telephone line is used to make the connection; however the visual images are relatively poor.
- **Digital networks** such as ISDN provide higher quality but are more expensive to use. ISDN (Integrated Systems Digital Network) allows voice, video, and data to be sent over the same line simultaneously. ISDN uses existing telephone lines, but requires specialized switching equipment at both ends. Audio and video quality is a function of bandwidth, which can be increased by combining digital lines in multiples of two.
- **Bandwidth** is a measure of the capacity of the communication channel; the higher the bandwidth, the more information that can be sent in a measured time period. Higher bandwidths allow more video and audio data to be transmitted fast enough to show

continued

2.0 Videoconferencing Technology, continued

movement with less blurring or jerkiness. Bandwidth is usually measured in kilobits per second (kbps).

An ISDN Basic Rate Interface (BRI) consists of two data channels each capable of either 56 kbps or 64 kbps. For the BC telehealth program, three ISDN BRI circuits (using a total of 6 data channels) are combined to achieve a data transfer rate of 336 – 384 kbps[18].

ISDN uses a dial plan similar to regular telephones. Each channel is assigned a unique ten-digit number. Initiating a video connection via ISDN is like dialing a telephone number on a cellular phone – i.e., enter a number, then press connect. Like telephones, ISDN BRIs have three cost components – a one-time installation cost, a monthly access rate, and long-distance toll charges. Because toll charges are applicable to each of the six channels used, the total per minute toll charge is the single channel long-distance rate multiplied by six.

Another type of network used in some rural parts of BC is Switched 56. Switched 56 channels are compatible with ISDN BRI channels at the 56 kbps rate, with six circuits being used for a connection rate of 336 kbps. Switched 56 uses a similar dialing plan and rate structure to the ISDN service, although the monthly access rate is somewhat more costly.

- **Internet (IP) networking** relies on a packet-switched network that allows data to be sent from one computer to another via the Internet. Typically, this data travels over private networks run by the respective health authorities. Information is sent in chunks or 'packets' and treated as individual data without any relationship to other units of data. Transmission control protocol (TCP) puts the units into the correct order. Several issues still need to be addressed in order to achieve widespread use of videoconferencing via IP in British Columbia. These include bandwidth sufficiency, network quality, reliability and consistency of connections, and security and confidentiality of transmissions[19].

Types of Videoconference Connections

- ***Point-to-Point:*** The majority of telehealth videoconference sessions are between two sites. One site will initiate the connection by dialing a phone number, similar to dialing from a cellular phone. Although only one number is dialed, a total of six channels will be connected.

- ***Multi-point videoconferencing*** can be achieved by the use of a video bridge. This is a specialized

[18] 384 kbps is the most frequently used bandwidth for videoconferencing; this provides approximately 80% of television broadcast quality.

[19] *BC Telehealth Program: Technology Architecture, Information and Support.* Ministry of Management Services, Draft Revision A-1 March 2002

continued

2.0 Videoconferencing Technology, continued

control device that enables three or more videoconference sites to dial in. A video bridge permits simultaneous, two-way audio and video communication among all the points that have been interconnected. Multipoint bridging is available as an internal option on some videoconference systems, but is most commonly accessed from a service provider (such as Telus or Northwest Tel in B.C.).

Emerging technology

Videoconferencing can be linked with digital satellite television to connect sites located at a distance. This could enable participants, for example, to call into a television studio while a live program is being broadcast to ask questions of the presenter.

Several commercial companies are developing new ways of using video conferencing (e.g., by incorporating video conferencing into web-based systems). This allows a presenter to deliver a lecture and present visual aids using a camera attached to a web server, which web casts the sounds and images via the Internet. Remote participants can offer comments, ask questions and receive responses in real-time from the presenter through a text messaging box beneath the presenter's video images.

More information on the range of videoconferencing options can be accessed at the University of Plymouth website at

> University of Plymouth website:
http://www.fae.plym.ac.uk/tele/vidconf.html

Glossaries and definitions of technical terminology can be accessed at the following sites:

> Office for Advancement of Telehealth,
U.S. Dept of Health and Human Services,
Glossary and definitions:
http://telehealth.hrsa.gov/pubs/mental/glossary.htm

> Calgary Health Region, Telehealth definitions:
http://www.crha-health.ab.ca/telehealth/definitions.htm

continued

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2.D Videoconferencing Technology, continued

2.D.1 Illustration of a Room-Based Videoconference System

SECTION 3

APPLICATIONS IN MENTAL HEALTH

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SECTION 3 APPLICATIONS IN MENTAL HEALTH

Telehealth networks have enormous potential to provide a wide range of mental health services, distance education and administrative functions. The focus of this section is on applications using interactive two-way videoconferencing technology. Other e-health technologies are also briefly discussed.

3.A Clinical Service Delivery

Mental Health Clinical Services
A variety of mental health providers could make use of the videoconference system, including specialist psychiatrists, psychologists, physicians, psychiatric nurse practitioners, social workers and case managers. Clients / patients are usually seen in a videoconferencing room located within a hospital or outpatient centre. Family or other healthcare providers may be present to offer additional support and information. In any situation, adequate patient supervision and clinical support must be available.[20]

Indirect consultations with a health care provider or in a case conference setting may be appropriate.

Interactive videoconferencing has significant potential to support multidisciplinary assessment, care planning and case management, particularly for individuals with complex care requirements.

Assessment: A wide variety of clinical populations may be assessed including adult, child and adolescent, geriatric, forensic and emergency. Assessments can include

- diagnostic assessments by psychologists or psychiatrists
- interview or interpretation by clinicians with expertise in subspecialty areas, fluency in other languages and / or knowledge of particular cultures
- psychological testing
- forensic assessment options including pre-sentencing assessments, review panel hearings and forensic evaluations, as well as assessment and treatment of the prison population; the use of videoconferencing can also enable testimony and support from family members
- emergency evaluations and crisis intervention are appropriate in some cases
- prescreening for treatment options such as brain injury programs, dual diagnosis rehabilitation programs, etc.
- case conferencing can support isolated service providers in client assessment

[20] CPA Position Paper on Telepsychiatry

continued

3.A Clinical Service Delivery, continued

Treatment services may include

- medication management
- individual, couple, group and / or family therapy
- routine follow-up
- case management with collaboration among all involved clinical participants regardless of distance (distributed care)
- treatment planning
- pre-admission and pre-discharge planning, follow-up post-discharge
- clinical supervision; physician-to-physician procedure support / supervision
- supervised visitation
- family and consumer support / self-help / mutual aid groups

The provision of mental health services via videoconferencing can improve benefit clients / patients and their families by increasing local access to services and reducing wait times for needed services. The provision of telehealth services can reduce travel and other opportunity costs (e.g. missed work) for clients and their families as well as consultants.

Videoconferencing also allows multiple providers to obtain input from experts and to develop and share treatment plans with other clinicians regardless of distance. It supports health care providers to work collaboratively using best practices, multidisciplinary teams and shared care models to enhance and broaden mental health service provision in rural and remote communities.

Where individuals must leave the community to receive treatment, videoconferencing can support continuity of care by allowing the community treatment team to monitor their progress in the hospital, to be involved in discharge planning and to follow-up appropriately post-discharge. It can also allow the same professionals who treat the patient while hospitalized to follow-up in the community.

Telehealth videoconferencing has enabled family members to visit patients receiving treatment in distant locations and to participate in treatment planning. Families and clients can also provide valuable support to one another through 'virtual support groups.' Where a single small community may lack a critical mass of individuals, a self-help or mutual aid initiative can be sustained through participation from several communities.

Videoconferencing technology can also support clinical program planning and development. Clinical consultation can address program issues that are broader than the needs of a particular individual, for example how best to manage persons with bipolar disorder or to implement Assertive Community Treatment teams, given existing resources within the community and / or region.

The scope of clinical service provision is also discussed in **Section 6.A.1: Overview of Adult / Geriatric Clinical Services**.

continued

3.A Clinical Service Delivery, continued

Other Clinical Services

Videoconferencing technology can be used for a wide range of diagnostic and therapeutic applications in addition to mental health (e.g., the provision of medical specialty consultations can be supported with the addition of peripherals to the videoconference system such as general exam cameras and different types of scoping devices).

The web-based Telehealth Information Exchange (TIE) lists over 150 programs that utilize videoconferencing technology to support a wide range of applications including cardiology, dermatology, gastroenterology, emergency / triage, and home health care, to name just a few. The complete range of applications can be accessed at:

> Telehealth Information Exchange (TIE): http://tie.telemed.org/

Other e-health technologies

The use of store-and-forward technologies for clinical consultation (particularly the use of e-mail between program providers) is growing rapidly, however there is very little written on direct patient care. There is some evidence that Internet on-line self-help groups directed by professionals may be seen as helpful by participants. At this time, however, "other store-and-forward interactions between patient and provider (e.g., psychotherapy by e-mail) are more suited for adjunctive or crisis interventions than for a primary means of contact"[21].

[21] *Clinical Applications of Telehealth in Mental Health Care,* Stamm, B.H, Professional Psychology: Research and Practice, American Psychological Association, December 1998. Abstract: http://www.apa.org/journals/pro/pro296536.html

3.B Distance Education

Live multi-site videoconferencing can provide knowledge translation and transfer in a number of different contexts. The medium can be as effective as 'face-to-face' programs while allowing a single presenter to deliver a lecture and interact with more than one site simultaneously. This capability increases access to education for service providers, consumers and their families in rural and remote areas of the province and minimizes travel and time constraints. The live interactive nature of videoconferencing supports individuals at each site to learn by asking questions as well as by hearing the lecture and viewing visual aids such as slides and / or videotapes.

For mental health professionals, videoconferencing technology can provide access to a broad range of relevant education and continuing professional development opportunities. Where maintenance of credits is a mandatory requirement for licensure, professional education delivered through videoconferencing becomes an important option[22].

Distance education via videoconferencing promotes and facilitates the sharing of good practice by linking psychiatrists, psychologists and other mental health experts, physicians and others in rural and remote communities with specialists in other regions within the province and across Canada. The live interactive nature of the medium can promote collaborative learning by involving professionals at multiple remote sites in question-and-answer sessions, case conferencing, best practice discussions, etc. Not limited by jurisdiction, this free interchange provides an opportunity to move provincial and national standards forward.[23]

There is also a role for videoconferencing to support clinical supervision of trainees, physicians and other mental health care providers, given appropriate settings and the clarification of specific licensure, liability and financial arrangements[24].

Consumer and family education sessions can help individuals and their support networks understand and cope with their mental illness; provide information about consumer advocacy organizations, support networks and other provincial and national resources; and link isolated individuals and groups in small communities with their peers in other areas.

Using videoconferencing as a methodology to support mental health research appears to be another promising venue. Telehealth supports the multi-site gathering of information (e.g., for large clinical databases).

[22] CPA Paper on Telepsychiatry

[23] For example, the concept of a national license for practitioners has now become a goal that many jurisdictions are working toward,

[24] CPA Paper on Telepsychiatry

continued

3.B Distance Education, continued

Distance Education provided by The Centre for Telehealth @ Mheccu is discussed in **Section 7.A: *Distance Education Programs*** and is provided on its website. Details about distance education sessions provided to mental health professionals, families and consumers can be accessed at:

> Upcoming Sessions:
http://www.mheccu.ubc.ca/telehealth/upcoming.cfm

> Previous Sessions:
http://www.mheccu.ubc.ca/telehealth/previous.cfm

Information and resources for designing and delivering education sessions are provided in **Section 7.B.1: Distance Education via Videoconferencing**. Information about and links to other e-learning opportunities are provided in Section **7.B.2: *Other Forms of E-Learning*.**

3.C Administration

In addition to its clinical and distance education applications, telehealth videoconferencing technology also provides organizational advantages from an administrative perspective.

Interactive videoconferencing allows staff members at remote sites to participate in regularly scheduled and / or ad hoc meetings without incurring the financial and opportunity costs of traveling to attend them in person. The Peace Liard Telehealth pilot project suggested that videoconferencing technology offers significant cost-saving opportunities as an alternative to in-person attendance at administrative meetings.

The technology can be used not only for regional health management meetings but for any type of meeting or collaboration involving staff at two or more sites. A broad range of administrative and related activities can be supported by videoconferencing including service planning, program development and management, and peer supervision.

As interactive videoconferencing is similar to face-to-face meetings and is much more personal than meetings held via audioconferencing, it has significant potential to support team building, collaboration and integration among staff distributed throughout the region. It can also support information sharing among individuals and teams performing similar functions in other regions, as well as improved access to individuals with particular expertise throughout the province or even interprovincially.

Interactive videoconferencing can therefore be a valuable tool to help create ‘best practice networks’ and to develop and maintain a culture of collaborative learning and continuous improvement.

SECTION 4

ROLES AND RESPONSIBILITIES

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4.A Centre for Telehealth @ Mheccu

The Centre for Telehealth @ Mheccu is part of the University of British Columbia. The Faculty and Staff of the Centre draw on a broad range of experience and expertise to advance the role of interactive technologies in health care. As an academic unit, the Centre for Telehealth strives to advance knowledge regarding best practices in telehealth. Particular areas of interest include the implementation of telehealth in existing clinical systems, the cost-effectiveness of telehealth, the capability of technology to stimulate improvements in care, e-learning, the electronic health record, the sustainability of telehealth, and the role of telehealth in administration.

Further details about the Centre for Telehealth @ Mheccu can be viewed at:

> Centre for Telehealth @ Mheccu website:
http://www.mheccu.ubc.ca/telehealth/

The Centre for Telehealth is committed to working with health authorities at the regional and community level as well as with other stakeholders to design, implement, and evaluate high-quality and sustainable telehealth activities.

The Centre provides the following functions and services:

Grant / Funding Applications

Support for projects has been provided through funding organizations at the national, provincial and regional levels to implement and evaluate projects at various sites throughout BC and Yukon.

Evaluation and Research

Many organizations require practical research concerning the utility and cost-effectiveness of telehealth. This research is often necessary to guide planning regarding the continuation or expansion of telehealth activities within health systems.

Centralized Purchasing

Selection of technical equipment (hardware, software, and peripherals) as well as telecommunications and network links requires careful consideration of their affordability, interoperability, compatibility, reliability, scalability, and integration. Communities that are new to telehealth benefit by joining a large, intact network and lend further strength to negotiations regarding equipment and connectivity costs, etc.

Shared Resources

The Centre for Telehealth has developed a number of resources to support individuals who are interested in telehealth. In addition to this Handbook, the Centre has developed an on-line Directory of telehealth sites, forums and discussion threads for telehealth professionals, a variety of documents, and has led the development of

continued

4.A Centre for Telehealth @ Mheccu, continued

scheduling systems and supports for facilities throughout BC.

Coordination

– Project Coordination

Mheccu has played a key role in developing working partnerships with stakeholders at the national, provincial, regional, and local levels to coordinate the implementation and ongoing maintenance of telehealth services in BC and Yukon. This has included participation in and support of local and regional implementation steering committees.

– Clinical Services

The Centre for Telehealth @ Mheccu has recruited consultants for the provision of telehealth clinical services in various participating communities. It has also played an active role in helping to identify and address potential recruitment barriers such as clinician fees, access to videoconferencing equipment, availability of technical support, credentialing, and licensure.

In addition, the Centre for Telehealth has played a key role in the development of generic clinical policies and protocols as well as sample forms to support the implementation of clinical services **(See Section 6: *Clinical Services*).**

– Distance Education

The Centre for Telehealth @ Mheccu has developed and delivered multi-site distance education sessions targeting mental health professionals, physicians, service recipients, families, and the general public. Topic selection has been based on educational needs assessments and feedback from participants. **(See Section 7.A: *Distance Education Programs*)**

– Scheduling

The Centre for Telehealth @ Mheccu has been responsible for scheduling clinical and distance education sessions and distributing calendars to each participating site on a monthly basis. Mheccu is now considering the selection of secure scheduling software that will address the security, flexibility, and multi-site / multi-level requirements of this labour-intensive function **(See Section 8.A.4: Scheduling).**

4.B Regional Health Authorities

Regional Health Authorities in B.C. have worked to ensure successful implementation of the telehealth initiative at the local and regional levels, as well as to ensure the sustainability of appropriate services over the longer term.

The Provincial Government has highlighted the following functions[25]:

Resource Requirements
Determine resource requirements and ensure sufficient resource allocations for

– Human resources
The Authority will determine what human resources are needed, whether current staff are already working at capacity, the number and type of new staff needed, and / or how workloads may need to be reorganized to accommodate the new service. It is also important to determine to what extent current service providers have knowledge and experience working with telehealth services, and how they will be oriented and trained.

– Financial resources
While some initial start-up and implementation costs may be covered by federal and / or provincial grants, the Health Authority must work to ensure the allocation of sufficient financial resources to ensure that implementation is adequately supported at the local and regional level, as well as to ensure sustainability of the project.

– Organizational resources
The success of a telehealth project will depend far more on the development of positive human relationships and effective organizational infrastructure than on technical factors.

Project management
Project managers will direct implementation and ongoing program operation at the regional and local levels to specify what needs to be done, when, how, and by whom. The style of project management should reflect the experience of personnel as well as the level of diversity within the organizational culture (i.e., differences between local and remote, urban and rural sites).
Effective project management will

- establish clear project objectives and time lines
- determine roles and responsibilities
- identify local and regional project requirements and resources
- develop an action plan that incorporates identified requirements and resources
- develop contingency plans to address possible problems and unexpected outcomes.

Section 5: *Operational Aspects* provides a more detailed discussion of organizational requirements and considerations.

The Ministry of Health has developed a practical guide to assist with the start-up and implementation of telehealth projects in British Columbia, which can be accessed at

> Telehealth Projects: A Practical Guide, MOH:
http://www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

[25] *Telehealth Projects: A Practical Guide*. Ministry of Health Planning and Ministry of Health Services. August 2001

4.C Provincial Health Services Authority

The Provincial Health Services Authority has taken responsibility for integrating a variety of Provincial resources in the area of telehealth. Within PHSA are several agencies and services that utilize telehealth, including Riverview Hospital, the Forensic Psychiatric Services Commission and the Cancer Agency.

At the time of writing, the PHSA has initiated consultations with telehealth stakeholders and is preparing to address issues of shared concern, such as sustainability of telehealth programs and integrated planning for future activities.

4.D Site Coordinator

The Local Site Coordinator plays a key role in successfully initiating, implementing, and maintaining ongoing telehealth service at the community site. When recruiting a local site coordinator it is important to consider four key factors.

Background and personal characteristics
In addition to an appropriate health background and technical abilities, the Local Site Coordinator should understand the local culture(s) and be able to communicate effectively.

Workload requirements
A key element for successful implementation of telehealth projects has been sufficient dedicated resources at the local level. Local Site Coordinators require sufficient dedicated time to perform this vital function. The level of support, particularly in the start-up phase, is significant and should not be underestimated. Duties and responsibilities should not merely be added to an already full workload.

Characteristics of the participating sites
The situations of participating sites should be considered, particularly where backup health professionals and technical support services may not be readily available.

Commitment to the project
The Local Site Coordinator must be able to act as an effective 'local champion.' Time and energy are required to build strong trusting relationships and promote acceptance and buy-in with all stakeholders.

There are a number of functions required to ensure successful project and site coordination of a telehealth project. While some of these functions overlap and may be combined in a single position, it is unlikely that one individual will fulfill all of these roles. For this reason, roles and responsibilities must be clearly defined at the regional and local levels.

There are five main functional areas.[26]

Executive

- planning
  – strategic planning
  – developing a communication / education plan to promote usage of the equipment and services and to educate users and the public about the system and services
  – environmental scanning of telehealth industry, community needs
  – conducting needs assessment for user groups
- policy development
- resource management
  – preparing funding applications
- maintaining liaison
  – between the administration and health care providers
  – between the administration and government
  – with vendors

[26] *Developing Canadian Telehealth Guidelines: A National Workshop for Telehealth Coordinators.* Advisory Council on Health Infrastructure (ACHI) Telehealth Working Group, October 21, 2001.

continued

4.D Site Coordinator, continued

Managerial

- reporting to executive
- managing staff and budgets
- planning
  - – developing and implementing strategic plan
  - – developing communication / education plans
  - – environmental scanning of telehealth and community needs
  - – conducting needs assessment for user groups
- policy development
- resource management
  - – identifying sources of funding
- liaising between the administration and health care providers
- conducting evaluation activities
- knowledge of the equipment, partial responsibility for training users on the equipment in some cases

Technical

- applying operational knowledge of the equipment
- assuming primary responsibility for training users on the equipment
- providing technical support
- troubleshooting
- facilitating daily telehealth operations
- liaising with vendors
- managing resources
- planning
  - – participating in strategic planning process
  - – facilitating needs assessment for user groups, applications
  - – executing / delivering communication / education plan
  - – environmental scanning of community needs
  - – recommending and implementing contingency and backup protocols
- conducting evaluation activities

Clinical

- facilitating daily telehealth operations
- facilitating consultations within scope of practice
- liaising between patients / clients and health care providers
- scheduling
- operational knowledge of equipment
- primary responsibility for training users on the equipment
- planning
  - – participating in strategic planning process
  - – executing / delivering communication / education plan
  - – environmental scanning of community needs
  - – designing and conducting needs assessment for user groups, applications
  - – recommending and implementing contingency and backup protocols
- conducting evaluation activities

continued

4.D Site Coordinator, continued

Clerical

- facilitating daily telehealth operations
- scheduling
- operational knowledge of equipment for administrative and education / training applications; partial responsibility for training users on the equipment in some cases
- planning
  – participating in strategic planning process
  – executing / delivering communication / education plan
  – environmental scanning of community needs
  – facilitating needs assessment for user groups
  – recommending and implementing contingency and backup protocols
- capturing and entering data for evaluation activities

The Local Site Coordinator is typically a member of the Mental Health Team designated as the primary contact for telehealth activities **(See Section 6.A.2: Adult / Geriatric Clinical Protocol Followed by the Centre for Telehealth @ Mheccu).**
It should be noted that specific responsibilities (for example re: documenting sessions and physician orders) should be restricted to the scope of practice of the individual filling the Local Site Coordinator role.

While duties and responsibilities of the position may vary from site to site depending on local requirements and resources, a sample Site Coordinator Job Description is provided in **Section 4.D.1.**
*(See next page **8 of 8** for Job Description SAMPLE.)*

continued

4.D Site Coordinator, continued

4.D.1 Sample Local Telehealth Site Coordinator Job Description

SAMPLE
Local Telehealth Site Coordinator

Job roles and responsibilities may include

- managing, scheduling and providing needed technical and administrative support for on-site day-to-day operations including
  - clinical sessions (including facilitation of clinical consultations within scope of practice);
  - distance education sessions
  - administrative meetings.

- providing training and technical support for users including
  - training users to operate the equipment
  - initiating and receiving videoconference calls
  - troubleshooting problems
  - setting up and taking down equipment as required.

- implementing appropriate clinical and administrative protocols and processes.

- establishing and maintaining effective communication channels with all stakeholders (The Centre for Telehealth @ Mheccu, UBC; the local Management Team; service providers, consumers and families; other community stakeholders) in order to
  - promote stakeholder awareness, understanding, acceptance and participation
  - promote current and upcoming events
  - liaison between patients/clients and consultants
  - ensure timely, complete, accurate and secure client information flow between sites to support the provision of clinical services
  - capture and provide utilization data and evaluation reports.

- participating in planning, quality assurance and budgetary activities.

- performing other administrative duties on an ongoing basis as required.

SECTION 5

OPERATIONAL ASPECTS

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SECTION 5 OPERATIONAL ASPECTS

5.A Facilitating Clinical Services

"The success of any telehealth project will depend to the greatest degree on the development of positive human relationships and effective organizational infrastructure, as opposed to a reliance on technical interaction."[27]

Organizational considerations include

- the need for effective planning and project management
- the involvement of appropriate stakeholders
- the allocation of sufficient organizational resources for successful project implementation and evaluation
- ensuring that appropriate policies and protocols are in place to support the telehealth project, with consideration of credentialing requirements, liability and insurance, security, client consent, ethics committee approval, etc.
- planning for sustainability of the project.

User and Provider considerations include

- ensuring sufficient awareness, education and training of clients, doctors, nurses, allied health professionals and health administrators
- providing clinicians with appropriate education and training as well as technical and administrative support
- ensuring client / patient information, consent and privacy requirements
- helping community members to understand the purpose of the project and the impact it may have on their community
- determining the design and type of client records to be used, taking into consideration quality assurance, evaluation, legal requirements etc.
- ensuring an appropriate standard of care: "In circumstances where telehealth interventions are available, in time it may be considered a breach of the standard of care not to use it when face-to-face consultations are not available."[28]

If the telehealth project will cross provincial and / or national borders, considerations include

- ensuring health professionals have the appropriate licensure to carry out professional activities that cross jurisdictions
- determining the locus of responsibility (i.e., at the provider site or the patient site) and ensuring liability insurance coverage of transactions between the relevant jurisdictions (e.g., within or outside the province, the country or internationally).

These and other issues are discussed in more detail in
> Telehealth Projects: A Practical Guide:
www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

A discussion of organizational requirements and considerations for establishing and coordinating telehealth videoconferencing programs is also provided in **Section 4: *Roles and Responsibilities.***

[27] *Telehealth Projects: A Practical Guide,* Ministry of Health Planning and Ministry of Health Services, August 2001
[28] CMPA Information Sheet

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5.A Facilitating Clinical Services, continued

5.A.1 Recruitment

One of the greatest challenges in developing a telehealth program is the recruitment of committed clinical consultants.

Considerations affecting an individual's availability and willingness to provide consultations via videoconferencing include

- easy access to a videoconference unit (e.g., at a hospital where the consultant currently has practice privileges)
- dedicated clinical sessions
- availability of technical support (e.g., it can be extremely time-consuming to schedule dedicated clinical sessions with an individual consultant using the busy video conferencing room of a major hospital)
- appropriate expenses / fees **(See Section 5.A.3: Clinical Payment)**
- relationship with the local team of service providers.

Other considerations relate to the key question: "Where is the tele-health act performed – where the provider is located or where the patient / client is located?" These considerations include the following:

- Currently all outreach psychiatrists go through a full credentialing process in those hospitals where mental health clients / patients are provided with telehealth services. While time consuming and cumbersome, this practice helps to reduce uncertainty regarding liability issues, etc.
- Since licensure is a provincial or territorial responsibility, licensure is an issue where clinical service is provided across jurisdictions. No consensus has been reached so far in Canada on where the site of care or locus of accountability is deemed to rest.[29] Where videoconferencing spans jurisdictions, a conservative approach would suggest that the consultant be licensed in both jurisdictions in addition to being credentialed at the local hospital.
- Liability has been a consistently raised concern. This has been addressed by vetting the clinical protocols with the Canadian Medical Protection Association as well as the Legal Counsel of the BCHC Risk Management Society.

[29] *Ibid.*

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5.A Facilitating Clinical Services, continued

5.A.2 Coordination

To date, mental health services have been coordinated through a collaborative approach between the Centre for Telehealth @ Mheccu, the Health Regions and Local Sites.

Local Level

At the local level, the initial implementation of clinical services was coordinated by a Local Implementation Steering Committee chaired by the Local Site Coordinator and comprising a range of appropriate stakeholders including administrators, providers (physicians, mental health clinicians, acute and continuing care staff, etc.), and consumer / family representatives.

Some key implementation issues addressed by the steering committees included

- **Videoconferencing room location**
  Location of the unit in a rural community is a key decision. Clinical applications require the presence of a mental health professional to attend with the client / patient, and to date the majority of involved professionals have been community mental health nurses working in the mental health centres. For these reasons, locating the unit in the mental health centre can be advantageous in terms of staff convenience and access to outpatient medical records.

  On the other hand, locating the unit at the local hospital can provide easier access to physicians and after-hours access, ensure better technical support, and possibly provide greater patient anonymity. In the longer term, location at the hospital may support the development of a wider range of clinical applications such as emergency triage, shared care of inpatients, pre-discharge planning, and / or participation of assisting specialists to meet now-mandatory continuing education requirements.

  Site implementation committees need to carefully consider the advantages and disadvantages of location of the unit, guidelines on choice of sites and clinical and educational goals of the telehealth initiative.

- **Videoconferencing room setup**
  The setup of the videoconferencing room is another key success factor. Considerations include room security, privacy / confidentiality, space requirements, lighting and other factors affecting the quality of sound and visual images. Examples gleaned from Mheccu's review of its own videoconference room requirements are provided in **5.A.2.1: Features of Videoconference Rooms and Desirable Enhancements.** Also **see 5.B.2: Privacy / Confidentiality; and 7.B.1.4: Videoconference Room Setup for Distance Education Sessions.**

- **Policy and protocol development**
  While the Centre for Telehealth @ Mheccu has played a lead role in the development of generic policy and protocol for telehealth clinical service delivery, the local and regional steering committees have worked to endorse them and ensure that they are adapted where necessary to meet local and regional requirements.

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5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

- **Recruitment**
  Local and regional steering committees played a supportive role by identifying local requirements and potential barriers to recruitment, with the Centre for Telehealth @ Mheccu taking the lead in recruiting consultants **(See previous section 5.A.1. for a discussion of recruitment issues).**

- **Training**
  The local committees identified key stakeholders for initial training on the equipment. A train-the-trainer model was used to ensure that other users could receive appropriate training as required.

- **Promoting awareness and acceptance of the program**
  The steering committees have worked to introduce the telehealth program to users and to the general public. For example, Coast Garibaldi held an official 'launch' to introduce its service that was attended by administrators, service providers, and consumer / family members in three communities **(See 5.A.2.2: Sample Telehealth Promotion Documents.)**

Subsequent to initial implementation, ongoing coordination of clinical sessions at the local level has primarily been the responsibility of the Site Coordinator and Consultant as described in **Section 6: Clinical Services Overview (6.A.1; 6.B.1; 6.C.1; 6.C.2) and Clinical Protocol sections (6.A.2; 6.B.2).**

It is important to note that a key element for successful implementation has been sufficient dedicated resources at the local level. The level of support is significant and should not be underestimated. Successful implementation requires, for example, that the Local Site Coordinator have time to perform this function and that additional duties and responsibilities not be added to an already full plate.

Regional Level
Where there are multiple videoconferencing sites within a region, it is important to ensure effective program planning and management at the regional level.

In Peace Liard and Coast Garibaldi regional coordination has been achieved through the creation of a Regional Telehealth Coordinator role as well as a Regional Implementation Steering Committee. In addition to the key implementation issues identified and described above at the local level, program management at the regional level must be concerned with sustainability issues **(See 5.A.4: Sustainability).**

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5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

Macro Level

Key functions undertaken by the Centre for Telehealth @ Mheccu have included:

- support of and participation in local and regional steering committee meetings
- physician recruitment, orientation and reimbursement
- technical support in setting up and scheduling consulting sessions (e.g., negotiating and securing dedicated consulting session time at lower mainland hospitals)
- supporting the building of local awareness and acceptance of the Tele Mental Health program (presentations to stakeholders, support of and participation of promotional activities, etc.)
- development and distribution of generic clinical policy, protocol, forms etc.

On an ongoing basis, the Centre for Telehealth Manager has facilitated and participated in regular meetings with Local and Regional Telehealth Coordinators. The Coordinator also scheduled and distributed a monthly calendar for each participating site outlining clinical and distance education sessions **(See sample 6.A.2.7).**

Section 4: Roles and Responsibilities provides additional information on organizational requirements and considerations for establishing and coordinating telehealth videoconferencing programs.

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5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

5.A.2.1 Sample Features of Videoconference Rooms and Desirable Enhancements[30]

2.1 Accessories

- Wall sign that identifies the site
- Red light or sign outside the room to forewarn others that a conference is in progress
- Tent cards for participant's names
- Clearly visible clock(s) (to display more than one time zone) so that participants remain aware of the time

2.2 Lighting

- As in film studios, directional light towards participants is desirable. Light cast on work surfaces would create shadows. The literature read so far, does not provide light levels (Lux) desirable for VTC rooms
- Change fluorescent lighting and pot lighting to cool-white or blue-white fluorescent or white halogen lighting. Warm-yellow lights make people look jaundiced and cause flicker on the video image[31]

2.3 Layout

- Document camera that can be reached from the presenter's seat

2.4 Space Requirements[32]

- Allow each person 3 ft of space along one side of the conference table
- A camera 10'-11' from the participants should be able to frame 3 people comfortably. For wide-angle lens it may differ
- The average conference table is only comfortable and effective for groups of 6 or fewer people
- Viewers should be seated at a distance from the screen that is between 4-7 times the height of the monitor
- Aisle at least on one side of 2.5'. The VC unit needs 2.5' x 2.5' floor space
- Each participant must be equidistant from the camera

2.5 Cameras[33]

- Generally, a camera can frame 3-seated participants. For this reason, a typical room design with a 6-person table requires two cameras, each viewing 3 people. Presets with single camera can be done manually or by voice activation, the latter is preferred
- A separate camera is usually provided for flip charts, slides, transparencies, or solid objects.

2.6 Display System

- Video projectors are rarely used in VTC facilities, as the image is not sharp and clear due to enlargement; they are used only where there are a very large number of participants.
- The centre of the monitor screen should be approximately 3.5' above floor level

[30] Summarized from *Features of Videoconference Rooms: A Proposal to Enhance Existing Spaces at Mheccu,* Centre for Telehealth @ Mheccu, 2002.

[31] *"Effective Videoconferencing, Techniques for Better Business Meetings",* Lynn Diamond, PH.D & Stephanie Roberts, 1996. *"Videoconferencing for the Real World – Implementing Effective Visual Communications Systems",* John Rhodes, 2001.

[32] *"Videoconferencing and Videotelephony – Technology and Standards"* 2nd Edition, Richard Schaphorst, 1999.

[33] *Ibid.*

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5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

5.A.2.1 Sample Features of Videoconference Rooms and Desirable Enhancements, continued

2.7 Audio

- VC audio products integrate microphone, speaker, and echo canceller into a single device that sits in the centre of the table. This unit minimizes the need to acoustically treat the room and to be concerned with the placement of the microphone and speaker.

2.8 Soundproofing and Air Quality

- Shutting the HVAC air ducts in the room to create sound proofing compromises air quality in the room. A dedicated soundless window-mounted air conditioner unit (such as used in recording studios) would allow fresh air into the room, which would also be heated in the wintertime. The HVAC would have to be rerouted.
- Acoustic paneling that is fabric covered or tiles can provide soundproofing. It may be wise to get the noise levels measured after the air conditioner has been installed, and air ducts sealed, to determine the need for acoustic paneling.
- It is desirable to keep the ambient noise level of the room at a low level (45 dB or less). This is achieved by a combination of inherent location and / or sound treatment of the walls. Room reverberation time should be between 0.3 and 0.5 sec. The room's absorption coefficient should lie between 0.25 and 0.45. If less than 0.25, the room will be hollow sounding; if more than 0.45, it will sound dead.[34] Upholstery on chairs, carpet on the floor, and ceiling tile will absorb most of the reverberations in the room.

2.9 Furniture, Room Aesthetics and Positioning

- Fabric covered, low back chairs are desirable. Avoid light colours and reflective parts that would cause the room lights to be reflected directly into the camera. Our chairs are low back with armrests and are a greenish gold colour.
- Wall paint colour choice would be light blue or light Grey such as Benjamin Moore 1627, 829, 996 and HC-169
- Videoconferencing Trapezoid table with electrical outlets for PCs.

2.10 Peripheral Devices

- Scan converter is available
- Laptop is available
- LCD projector is available
- Electronic whiteboard
- Retractable projection screen from the ceiling
- VCR is available

[34] *"Bretford's Guide to Successfully Planning a Video Conferencing Room"*, Bretford Manufacturing Ltd., 1999.

continued

5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

5.A.2.2 Sample Telehealth Promotion Documents (a) Letter to Physicians

SAMPLE

Coast Garibaldi Health

[Date]

Dear Physician:

I am pleased to introduce you to our new **Tele Mental Health Program** that has recently been established on the Sunshine Coast.

This pilot program is operated by Coast Garibaldi Health in partnership with the Mental Health Evaluation and Community Consultation Unit (Mheccu), Department of Psychiatry, University of British Columbia.

The adult, geriatric and child outreach psychiatrists who visit the Sunshine Coast will now provide additional consultation and follow-up clinical services using two-way interactive video-conferencing technology installed on the second floor of St. Mary's Hospital. This program will result in improved access and reduced waitlists for needed psychiatric services.

Outreach psychiatrists providing clinical consultation services to the Sunshine Coast via videoconferencing include [Name of Consultant] (adult psychiatry) and [Name of Consultant] (geriatric psychiatry). Child and youth psychiatric consultations will also be provided.

In addition, the UBC Mood Disorders Program and the UBC Cross-Cultural Psychiatry program is now offering psychiatric consultations through videoconferencing technology.

> The Mood Disorders Program is headed by Dr. Raymond Lam. The activities of the Mood Disorders Program include providing exemplary assessment and treatment for patients, educating health professionals and the public, and conducting new clinical research in mood disorders. Dr. Manjunath will be the psychiatric consultant available to residents on the Sunshine Coast.
>
> The Cross Cultural Psychiatry Program is headed by Dr. Soma Ganesan. The focus of this program is to sensitize health care service providers and the public to a culturally sensitive approach in communication, assessment and treatment on mental health and mental illness. The program currently provides culturally sensitive and language-specific psychiatric assessment in 21 languages and dialects.

Distance education sessions are also being provided on a monthly basis to our local consumers and family members, mental health professionals and physicians.

To learn more about this exciting new program, please plan to attend our **launch event** on:
[location]
[time]

For more information about the Tele Mental Health Program, and the referral process, please contact local site coordinator [contact information].

My thanks to all those individuals who are helping to ensure the success of this innovative program.

Sincerely yours,

Manager, Rural Mental Health & Addictions

5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

5.A.2.2 Sample Telehealth Promotion Documents (b) Invitation to Telehealth Launch Event

SAMPLE

An Invitation…

You are invited to attend a Launch Event to introduce our new Tele Mental Health Program to rural communities in the Coast Garibaldi area of the Vancouver Coastal Health Region.

This exciting new program provides interactive two-way videoconferencing capabilities to Sunshine Coast, Powell River and Sea to Sky communities. The adult, geriatric and child outreach psychiatrists who visit these communities will now provide additional consultation and follow-up clinical services to improve access and reduce waitlists for much needed psychiatric services.

In addition, the service will provide distance education sessions on a wide range of mental health topics to our local consumers and family members, mental health professionals and physicians. The technology will also support interactive meetings of mental health professionals and administrators throughout our region to improve communication and service coordination while reducing travel costs.

This technology has been made available to Coast Garibaldi communities through funding from Health Canada and administered by the Mental Health Evaluation and Community Consultation Unit (Mheccu), Department of Psychiatry, University of British Columbia. It is part of a larger initiative to introduce telehealth services to rural communities throughout British Columbia and the Yukon.

The Launch event will be held on **[date and time]** You are invited to attend this event at any of the following launch locations:

- Sunshine Coast site [location]
- Sea to Sky site [location]
- Powell River site [location]
- Mheccu site at UBC (limited space capacity)

Please RSVP to [contact information] and let us know which site you will be attending.

Manager, Rural Mental Health and Addictions

5.A Facilitating Clinical Services, continued

5.A.2 Coordination, continued

5.A.2.2 Sample Telehealth Promotion Documents (c) Poster

SAMPLE

You're invited .....

Tele Mental Health Program Launch Event

Wednesday, June 5, 2002
1 pm to 3 pm
St. Mary's Hospital
Tele Health Videoconference Room 203

Who Should Attend?

- Family Physicians
- Nurses
- Mental Health Professionals
- Community Service Providers
- Mental Health Consumers and their Families
- Anyone Interested in Mental Health Services on the Sunshine Coast

What is Tele Mental Health?

- Interactive two-way videoconferencing
- Outreach psychiatrists providing clinical consultation services
- Distance education sessions for consumers, family members, mental health professionals and physicians
- Interactive meetings

Come and see how it works

- Live interactive links with other sites including Mheccu (UBC); Powell River; Squamish
- Calendar of upcoming events

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5.A Facilitating Clinical Services, continued

5.A.3 Clinician Payment

With the exception of salaried or sessional-paid clinicians, the payment of clinicians remains an issue for telehealth projects.[35] The province of British Columbia currently does not have fee codes in place for telehealth physician payment, and available mechanisms for the reimbursement of telehealth clinical activities vary significantly across Canada by jurisdiction and specialty area[36].

The Centre for Telehealth @ Mheccu has joined several interested groups in order to address this important element of sustainable telehealth. Faculty and staff of the Centre for Telehealth are particularly interested in applying evidence to decision-making regarding clinician payment for telehealth activity. This includes careful review of experience in other jurisdictions as well as continued research on cost-outcome of telehealth activities in BC.

To date, clinicians providing consultation via videoconferencing to sites participating in the B.C. Telehealth Initiative have been either salaried or reimbursed using sessional fees **(See 6.A.2.6: Sample Certificate of Services).**

5.A.4 Sustainability

In order to ensure telehealth project sustainability past the initial implementation timeline, both the Centre for Telehealth and Regional Health Authorities will need to consider various means of augmenting project budgets and decreasing project expenditures.

Options for augmenting telehealth project budgets include

- user fees
  – at the macro level, distance education rounds may involve user fees
  – at the local level, health authorities could charge rental fees for the use of videoconferencing rooms / equipment by other individuals or organizations[37]
- shifting budgets to reallocate funds (e.g., since the increased use of interactive videoconferencing is expected to reduce staff travel costs for meetings and education events, these savings could be shifted to the telehealth budget to offset line and long distance charges)
- provision of maintenance funding as well as start-up funding by Ministry of Health for Telehealth initiatives.[38]

Options for cost reductions include

- conducting least cost path analyses (e.g., by reviewing connectivity options to identify minimum sufficient bandwidth; the most cost-efficient network; whether or not to bridge)

[35] *Telepsychiatry and Physician Reimbursement,* H. Karlinsky. Canadian Psychiatric Association, The Bulletin, June 2000.

[36] *Telehealth Update,* M. Borsellino, Medical Post Vol. 38, No. 04, January 29,2002.

[37] In a rural community lacking other local videoconferencing resources, potential users could include local municipalities and / or regional districts; chambers of commerce; community colleges; school districts; businesses; and / or other community organizations.

[38] *Peace Liard TeleMental Health Evaluation: Lessons Learned,* Peace Liard Health, December 2001.Recommendation 2

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5.B Legal and Ethical Issues

5.B.1 Consent

Need for Consent

The British Columbia *Health Care (Consent) and Care Facility (Admission) Act,* which came into force in February 2000, demands that health care providers present the adult client with information to understand and make a decision regarding the proposed health care intervention, including:

- information about the nature of the proposed health care intervention
- the risks and benefits of the intervention
- alternative courses of treatment

As of October 2001 the consensus among telehealth providers across Canada[39] was that:

- formal, written consent is required for a telehealth encounter
- consent should be for the use of the videoconferencing medium for the consultation and should be distinguished from consent for treatment / care

This recommendation for explicit consent was based on the immaturity of telehealth and the lack of widespread knowledge and acceptance of telehealth as a valid means of delivering healthcare.

More recently[40] the national telehealth coordinators group have reversed their decision, recommending that the consent process for telehealth services be integrated into the consent process for other health services to reduce duplication and support continuity of care.

However this handbook provides information on obtaining explicit consent for telehealth services to support the provision of clinical services where integration with other services is not possible, or where the health authority has not yet completed the necessary development and legal processes to address continuity of care issues.

Where there is a separate consent process for telehealth services, it must be simple and as transparent as possible to clinicians to avoid it becoming a barrier to utilization.

Purpose of Consent

Consent serves two primary purposes:

- protection from liability
- providing information / education to the client.

For these reasons separate sheets are provided to the client as follows:

- Standard consent form for Mental Health Services **(See samples 6.A.2.1 and 6.B.2.1)**
- Information sheet about Telehealth **(See sample 6.A.2.3)**
- Consent form for Telehealth Consultation **(See sample 6.A.2.2).**

[39] Developing Canadian Telehealth Guidelines, A National Workshop for Telehealth Coordinators, October 2001

[40] October, 2002

continued

5.B Legal and Ethical Issues, continued

5.B.1 Consent, continued

Content for informed consent

Full disclosure should be the basis of consent, and should include

- an explanation of telehealth and what is involved
- potential risks and benefits
- client choice to participate
- an outline of the backup plan should technology fail or be insufficient
- assurance of security / privacy
- making the client aware if additional documentation is being transmitted
- making the client aware of where the health record(s) will reside.

In establishing consent, health providers must be aware of cultural and language issues.

Recording of client sessions requires specific consent. The patient and clinical provider would both need to be aware of the purpose of the tape, where it will be stored and for how long, who will have access, ownership of the tape and the fact that the tape is part of the client record.

Obtaining Consent

It is the responsibility of the Local Site Coordinator (or designate) to ensure that the appropriate consent forms are signed by the patient or legal guardian / substitute decision-maker prior to the Telehealth consultation. These signed forms are considered to be part of the client record and are kept at the patient (referring) site.

At the beginning of the videoconferencing session, it is the responsibility of the Consultant to review consent to ensure the patient's participation is fully informed and voluntary **(See Sections 6.A.2: Adult / Geriatric Clinical Protocol and 6.B.2: Child and Youth Clinical Protocol Followed by Centre for Telehealth @ Mheccu).**

Consent for Distance Education Sessions

This issue arises primarily if the session is to be recorded. The potential value of taping a distance education session for future educational use must be weighed against the potential drawbacks. These include privacy issues and the possibility of discouraging participation.

Prior to taping a session, the speaker should give consent. The distribution of materials should be addressed at the time of session booking with the speaker. The speaker should be aware of the purpose of the tape, where it will reside, and who will have access.

All session participants should at least be verbally notified that the session is being taped, as their interaction with the speaker or their image in the audience may be captured. Depending on the proposed use of the tape, it may be necessary to edit taped sessions to remove the interactive portions or audience images.

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5.B Legal and Ethical Issues, continued

5.B.2 Privacy / Confidentiality

This handbook assumes that the Regional Health Authority complies with the *Freedom of Information and Protection of Privacy Act* of BC (the "Act") and any other legislation requirements that govern the collection and release of information. Further the *Act* requires the health provider to make every reasonable effort to ensure that personal information in its custody and control is accurate and kept in a secure and confidential manner.

> Freedom of Information and Protection of Privacy, British Columbia
http://www.mser.gov.bc.ca/FOI_POP/

Operational aspects of Tele Mental Health service delivery related to confidentiality include[41]:

Videoconferencing Room

- The location of room should be private and quiet.
- The room should be appropriately soundproofed, considering the potential for sound to travel along airshafts, etc.
- The room should have a locked door, with a sign indicating a session is under way.
  See 5.B.2.1: Room Signage
- Windows should be covered (including any in the door).
- The room and system should be cleared of patient images or documentation at end of any session.

Confidentiality Agreements

- Review confidentiality agreements to ensure sufficient coverage for telehealth.
- Ensure service providers (tech support, bridge operators, etc.) are aware of sensitivity of information and are covered by confidentiality agreements.

Equipment Security

- Control access to room and equipment.
- Establish a policy for key distribution.
- Allow only trained individuals to have access (e.g. use of password protection).
- Activate auto answer control for telephones and mute microphones to avoid unexpected interruptions.

Transmission of Client Information

When transmitting sensitive or confidential client information between the referral and consulting sites consider the following:

- When sent over the Internet via email, the text message should be encrypted, or the attached message password protected.
- When sent via facsimile, appropriate protocol should be followed
- When the most readily available methods cannot be guaranteed secure, a secure alternative method of transportation of information (e.g., courier) should be used.

During Session

- Only those necessary should be present in the room.
- All present should be introduced.

Recording Sessions

- The patient / provider must give consent **(See 5.B.1: Consent).**

[41] Developing Canadian Telehealth Guidelines, A National Workshop for Telehealth Coordinators, October 2001

continued

5.B Legal and Ethical Issues, continued

5.B.2 Privacy / Confidentiality, continued

5.B.2.1 Room Signage (a) Education Session in Progress

Please Do Not Interrupt!

CT@Mhealth

Telehealth Education Session In Progress

Thank you

5.B Legal and Ethical Issues, continued

5.B.2 Privacy / Confidentiality, continued

5.B.2.1 Room Signage (b) Clinical Session in Progress

Please Do Not Interrupt!

CT@Mhecc Clinical Videoconferencing Session In Progress

Contact: [Name and contact goes here]

Thank you

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5.B Legal and Ethical Issues, continued

5.B.3 Information Management

In a telehealth project, there are several stakeholders involved who will require information related to the project, and who will need to share this information with others.

It is important to determine how information will be safeguarded and appropriately managed when it crosses multiple sites and organizations.

The Ministry of Health and the Health Information Management Coordinating Council have identified several critical success factors[42] for the management of health information in BC, including

- ensuring the privacy and confidentiality of personal information in accordance with legislation
- adoption and use of standards
- quality and accountability (i.e., ownership) of information collected
- appropriateness and usage of information collected and shared
- integration of information across the health system, where appropriate.

> Health Information Management Website: http://www.hlth.gov.bc.ca/him/

Documentation of the telehealth encounter is required for the patient record, physician payment, healthcare funding, workload measurement and project evaluation. There should be documentation of the telehealth encounter at all participating sites.

The role of the telehealth Local Site Coordinator in patient registration and documentation is a new role, and as such new processes and procedures need to be developed and integrated with existing processes.

Existing policies, processes and procedures should be maintained as much as possible, however. Telehealth should build upon existing policies wherever possible and reasonable, to ensure that it is truly integrated into mainstream mental health delivery (e.g., physician documentation of a consultation should be the same regardless of whether the consultation is conducted in person or remotely).

It is the role of the Local Site Coordinator to ensure that proper procedures are developed and implemented and clear roles and responsibilities are developed and followed so that the required information is documented, complete and correct for each session. However the Local Site Coordinator does not assume responsibility for maintaining the official patient record, only for capturing general information regarding the telehealth encounter. The responsibility of the Local Site Coordinator to document a session and physician orders should be restricted to the scope of practice of the individual filling the coordinator role **(See Section 4.D for additional information about the Site Coordinator role).**

[42] *Telehealth Projects: A Practical Guide,* Ministry of Health Planning and Ministry of Health Services, August 2001 P. 45

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SECTION 6

CLINICAL SERVICES

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SECTION 6 CLINICAL SERVICES

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6.A Adult / Geriatric Clinical Services

6.A.1 Overview of Adult / Geriatric Clinical Services

The adult / geriatric clinical protocol currently followed by the Centre for Telehealth @ Mheccu is outlined in **Section 6.A.2.**

The date and time of Adult / Geriatric Telehealth clinical sessions are negotiated by the relevant Local Site Coordinator and Consultant. Scheduled clinical session times are included in the monthly Telehealth Program Calendars **(See Sample 6.A.2.7)** circulated by Mheccu's Telehealth Coordinator.

Sample forms utilized for the consent process are provided. In addition to the standard consent for treatment form currently utilized within the Region to access clinical services **(Sample 6.A.2.1)**, an additional consent form specific for Telehealth **(Sample 6.A.2.2)** and a telehealth consultation information sheet **(Sample 6.A.2.3)** may also be components of the consent process **(See Section 5.B.1: Consent).**

Signed consent forms are considered to be part of the client record and are kept at the patient (referring) site.

As part of the clinical protocol, the Local Site Coordinator completes an Intake Form for each referred client **(Sample 6.A.2.4)** and partially completes the Consultant's Schedule **(Sample 6.A.2.5)**. Along with the relevant referral information, the Intake Form and Consultant's schedule are forwarded to the Consultant prior to the clinical session.

Following each clinical session, the Consultant completes the Consultant's Schedule and a Reimbursement Form **(Sample 6.A.2.6)** and returns this to the Local Site Coordinator. Consultation notes are also dictated and forwarded to the Local Site Coordinator who in turn forwards copies to the referring physician and other relevant parties.

As part of the **Evaluation Protocol (See Section 9.A.2)**, following each clinical session Evaluation Forms are completed by the clients **(See 9.A.2.1)**, local service provider **(See 9.A.2.2)** and Consultant **(See 9.A.2.3)**. The Local Site Coordinator collects these evaluation forms.

At the end of each month, the Local Site Coordinator forwards copies of Intake Forms, Videoconference Logbook sheets **(See 9.A.2.5)**, Evaluation Forms and Consultant Reimbursement Forms to Mheccu's Telehealth Program Coordinator for evaluation and reporting purposes.

Contact Information for the Local Site Coordinators and Adult / Geriatric Consultants can be found in **6.A.2.9**

continued

6.A Adult / Geriatric Clinical Services, continued

6.A.1 Overview of Adult / Geriatric Clinical Services, continued

Scope of Clinical Service Provision
The scope of clinical applications using videoconferencing is potentially very broad and encompasses many diagnostic and therapeutic modalities that are traditionally provided through face-to-face consultation.

Interprofessional Mental Health Services:
The BC Telehealth Project supported by the Centre for Telehealth @ Mheccu was initially set up to provide psychiatric client consultations. Subspecialties have recently been added and are discussed in **6.C.1: Mood Disorders and 6.C.2: Cross-Cultural Psychiatry.**

The types of mental health services most frequently provided via teleconferencing in other jurisdictions are those that replicate traditional face-to-face mental health care. However, like traditional mental health services, telehealth services may not be effective for every consumer.[43]

In other jurisdictions psychiatrists and psychologists provide a range of services via videoconferencing including [44]:

- clinical interviews – these may be conducted between clinicians in consultation, between a psychologist or physician and one or more health care providers (e.g., case manager, clinical nurse practitioner, social worker), and / or between mental health professionals and a patient
- treatment planning, pre-admission and pre-discharge planning, as well as follow-up post-discharge
- individual, couple, group, and / or family therapy
- routine follow-up
- medication management
- emergency evaluations and crisis intervention – these may be appropriate in some cases while alternative options are being aggressively pursued
- case management – in large distributed systems where multi-provider case management is required, videoconferencing allows collaboration among all the involved clinical participants regardless of distance
- forensic applications of telepsychiatry – these may include assessing patients for involuntary commitment and / or diversion and conducting commitment hearings; licensure and legislative requirements regarding involuntary commitment may vary from one jurisdiction to another
- prescreening for treatment options such as brain injury programs, dual diagnosis rehabilitation programs, etc
- clinical supervision at a distant site – this can facilitate both training and patient care.

Psychiatrists and psychologists may also carry out administrative, research, teaching and professional development activities via teleconferencing.

[43] For example, a consumer with paranoid delusions focused on electronic monitoring
[44] APA Resource Document on Telepsychiatry Via Videoconferencing, 1998.

continued

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6.A Adult / Geriatric Clinical Services, continued

6.A.1 Overview of Adult / Geriatric Clinical Services, continued

There is also significant potential for the service to be further expanded and enhanced to provide broader inter-disciplinary care by including other physicians, psychiatric nurse practitioners, social workers, case managers, and outreach workers. Some examples[45] include

- Assertive Community Treatment – the use of videoconferencing has the potential to create or expand ACT teams in rural areas
- family visits – family members living in rural areas can visit hospitalized patients and plan for their return home, with videoconferencing removing cost and travel barriers
- support to residential programs, group homes, and long-term and extended care facilities

A discussion of mental health applications is also provided in **Section 3.A: Clinical Service Delivery.**

In addition, the Centre for Mental Health Services, U.S. Department of Health and Human Services has developed a summary report on Telehealth Services. Chapter 2 of this report provides additional information on the provision of mental health services via videoconferencing, and can be accessed at

> Telehealth: Delivering Mental Health Care at a Distance, Chapter 2:
http://telehealth.hrsa.gov/pubs/mental/section2.htm

Other Clinical Applications:
In smaller rural communities, the availability of interactive videoconferencing technology also provides the opportunity to explore other telehealth applications. Some options are discussed in **6.C.3: Additional Specialists and Services.**

[45] *Telemental Health: Delivering Mental Health Care at a Distance.* Centre for Mental Health Services, US. Department of Health and Human Services. Rockville MD, 1998.

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6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu

1/ All patients will be fully assessed (including relevant collateral reports) by either
– a local mental health case manager or
– a local family physician, or
– a local psychologist or psychiatrist
before being referred for consultation via videoconferencing.

2/ Patients will require referral by a physician. Mental health case managers may also recommend a referral take place. However, family physicians will need to be informed about and in agreement with all consultations that occur based on the request of the local case manager.

3/ The designated individual within the Adult Mental Health team (hereafter referred to as the "Local Site Coordinator") will be the primary contact for his/her respective community and will coordinate patient access to the telehealth program.

4/ A six-month schedule of dates for videoconferencing sessions for the community will be established through the Local Site Coordinator working in conjunction with the Consultant and the Program Coordinator at the Centre for Telehealth; this schedule will be continually updated out to a six-month horizon.

5/ The Local Site Coordinator will be responsible for prioritizing and scheduling the use of the consultation time in discussion with the Consultant. The Local Site Coordinator will inform patients, the referring physicians, and relevant mental health staff of the time and place of the scheduled appointment.

6/ The Local Site Coordinator will be responsible for completing an "Intake Form" for each patient scheduled for a Telehealth consultation.

7/ The Local Site Coordinator will partially complete the "Consultant's Schedule" form. This form is then to be faxed to the Consultant, along with the appropriate "Intake Form," other relevant referral information (determined in consultation with the consultant), and a copy of the "Consultation Evaluation – Consultant" form.

8/ The Centre for Telehealth Program Coordinator will make arrangements for securing access to the Consultant's preferred videoconferencing facility.

9/ Patients will preferably be assessed during the videoconferencing consultation in the presence of a local health care professional. This will usually be their mental health case manager. Alternatives may include the local family physician, the local psychiatrist or the Local Site Coordinator. At the discretion of the Local Site Coordinator and Consultant, patients can also be assessed independently at the remote site.

10/ It will be the responsibility of the Local Site Coordinator (or that person's designate) to ensure that the client is fully informed and that both a "consent for mental health services form" and a "consent for telehealth consultation form" are signed by the patient or legal guardian /substitute decision maker. These signed forms are considered to be part of the client record and are kept at the patient (referring) site.

continued

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

11/ It will be the responsibility of the Local Site Coordinator (or that person's designate) to ensure that the local health care professional who will be present during the consultation is familiar with the camera / monitor setup and that the equipment will be appropriately secured following the consultation.

12/ At the beginning of the videoconferencing session, it will be the responsibility of the Consultant to review consent to ensure the patient's participation is fully informed and voluntary.

13/ If consent is not obtained or if it is withdrawn, or in the circumstance of technical problems, the Local Site Coordinator must be informed immediately, and is responsible for organizing the provision of the required care by alternate means. This may involve a referral to the family physician or the Emergency Department, waiting to see a visiting psychiatrist, traveling to see a psychiatrist in another community, or rescheduling the videoconferencing session.

14/ Following the consultation, the Local Site Coordinator (or that person's designate) will ask the patient and attending health care professional to complete a brief evaluation of the telehealth session.

15/ Following the consultation the Consultant will complete a brief evaluation of the telehealth session, which he / she will forward to the Local Site Coordinator along with a Certificate of Services (Sessional) form.

16/ Following the consultation, the Consultant will dictate a note that will be sent to the Local Site Coordinator who will forward a copy to the referring physician and, where relevant, local mental health professionals.

17/ The Consultant will not assume responsibilities of the attending physician. The referring physician and local therapists remain clinically responsible for the care of the patient after assessment by the Consultant. It is the responsibility of the family physician and, if involved the mental health team, to respond to all of the Consultant's recommendations.

18/ On a monthly basis, it will be the responsibility of the Local Site Coordinator to forward that month's Intake forms, Consultants' Schedules, Evaluations and Reimbursement forms to the Centre for Telehealth Program Coordinator.

19/ This process and clinical protocol will be reviewed on an annual basis and adapted as necessary.

20/ At this point in time, provision of certifications and second opinions under the *Mental Health Act* is not possible.

continued

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.1 Sample Consent for Adult / Geriatric Mental Health Services

SAMPLE

AMBULATORY CARE

Consent for Treatment and Care

Name of Client:_____

I, _____, agree to participate in the therapy/treatment plan (attached to this document)

OR
I/We _____, who are the parents/legal guardians/responsible committee for the above named client, agree that she or he should participate in the therapy/treatment plan (attached to this document).

The therapy described in the treatment plan will be provided by members of the Mental Health Treatment Team.

I/we understand this treatment plan as explained by the therapist.

_____ _____
Signature of Client Signature of Parent/Guardian/Committee

Signature of Therapist_____

Date_____

CONSENT TO RELEASE INFORMATION TO OTHER COMMUNITY HEALTH CARE AGENCIES:

I, the undersigned, do hereby further authorize the staff of the [Name of Health Authority] to release such information as is necessary concerning my diagnosis, treatment and care of other health agencies. This information will only be provided to ensure my continuing health care.

_____ _____
Signature of Client Signature of Parent/Guardian/Committee

Signature of Therapist_____

Date_____

Sample provided courtesy of NEHSDA Adult Mental Health NHA

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.2 Sample Consent for Telehealth Consultation

SAMPLE
TELEHEALTH
CONSENT FOR CONSULTATION

[*Legal Name of Entity where the patient is voluntarily admitted under the Hospital Act, or if an outpatient, Name etc. of Person obtaining consent]*

Name of Client:_____

I,_____, do hereby agree to an assessment via videoconferencing

OR

I,_____, legal guardian/substitute decision maker for the above named client, hereby agree to his/her assessment via videoconferencing under the direction of:

_____, M.D./Ph.D.

The nature, anticipated effects, significant risks and alternatives to my participation in the videoconferencing consultation program have been explained to me and I understand the explanation and the alternatives. The limitations of consultation through teleconferencing have also been explained to me.

I consent that the above named physician or psychologist may in his/her discretion, make use of the assistance of other clinicians and facility staff, and may permit them to order or perform all or part of the assessment and that he/she may permit them to have the same discretion in my assessment as him/herself.

*Signed:*_____ _____
(patient or legal guardian/substitute decision maker) *(Date)*

_____
(witness)

_____
(address of witness)

Sample provided courtesy of NEHSDA Adult Mental Health NHA

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.3 Sample Telehealth Consultation Information Sheet, 1 of 2

SAMPLE

Welcome to the [Name of Health Authority] Telehealth Program

What is the [Name of Health Authority] Telehealth Program?

The goal of this program is to assist with providing mental health care and services to patients and their families who live in under-serviced communities in British Columbia.

How is an appointment made?

Appointments require referral from a physician. This referral is directed to the local coordinator who, in turn, requests the consultation. Once the referral is accepted, the local coordinator will contact you directly to arrange the time, date, and location of your appointment. You will also be given the name and phone number of a person to contact if you have any questions or concerns before your appointment.

Will I have to operate the equipment?

Someone will greet you at the start of the appointment and will make sure the videoconferencing equipment is set up properly. The equipment is simple to use – a camera mounted on top of a special monitor (which looks like a television screen). Although not usually necessary, the view of the camera can be altered by using a simple remote control.

Before beginning the appointment, there will be time for you to become familiar with the room and the equipment. Although you are welcome to operate the remote control, there will also be a health care professional available to stay with you throughout the appointment. If you prefer, this individual will be able to manage the equipment on your behalf.

What happens during the appointment?

First, a local health care professional will ask you to sign a consent form. You will then see the Consultant on the special monitor. You will be introduced to the Consultant and any other health care professionals participating in the appointment. You will be able to talk to, hear, and see the Consultant just as you would during a face-to-face visit. As indicated above, a local health care professional will be available to stay with you throughout the appointment.

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.3 Sample Telehealth Consultation Information Sheet, 2 of 2

How does the session end?

Your session will finish like a regular appointment. The Consultant will forward recommendations to your physician and any other members of your treatment team that you identify. You will have an opportunity to ask any questions you may have before the end of your session.

Are there any risks to participation?

The vast majority of individuals who have participated in videoconferencing sessions in order to access psychiatric services have been very satisfied with the experience. The cited benefits include a more timely appointment in one's local community, obtained without the stress and expense of travel. However, if the experience seems uncomfortable, it can be discontinued at any time. Breach of confidentiality is not felt to be a risk, as the transmission is designed to fail should anyone attempt to electronically eavesdrop during the appointment. However, there is always the remote possibility of security or technical failures. Finally, although well accepted, further evaluation studies are necessary to ensure diagnostic and treatment outcomes equal to those obtained in face-to-face clinical encounters, and that this means of delivering psychiatric services is appropriate for all patient populations.

What are the alternatives to the Telehealth Program?

Participation must be completely voluntary. If you do not wish to participate, your family physician will access psychiatric services according to the traditional options available in your community. This may involve waiting to see a visiting psychiatrist or traveling to see a professional in another community.

We'd like to hear from you …

Your comments are valuable and necessary in helping us provide the best possible care for you and others in your community. At the end of the session, please take the time to fill out the evaluation form. Remember – all information is private and confidential.

Thank you for participating!

Local Contact name and Phone Number _____

(Note: this information sheet has been adapted from one utilized by the Children's TeleHealth Network, Halifax, Nova Scotia)

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.4 Sample Intake Form Adult / Geriatric Clinical Services

SAMPLE

INTAKE FORM
(ADULT/GERIATRIC)

☐ Powell River
☐ Sunshine Coast
☐ Sea to Sky

COAST GARIBALDI TELE MENTAL HEALTH PROGRAM

Name:	DOB (d/m/y):	Medical Services Plan # (MSP):	Phone #:
Address:	City/Town:	Postal Code:	Marital Status: S M D CL W

LIVING ARRANGEMENTS:
☐ Alone
☐ Spouse / partner
☐ Family
☐ Friend
☐ Group Setting
☐ Facility:_____

LOCATION AT TIME OF REFERRAL
☐ Acute care hospital
☐ Seniors Lodge
☐ LTC facility
☐ Group home/Assisted living
☐ Own home
☐ Other

EMPLOYMENT STATUS
☐ Full – time
☐ Part – time
☐ Student
☐ Not employed
☐ Other

SPECIALTY REQUESTED:
☐ General psychiatry
☐ Geriatric psychiatry

Gender: ☐ Male ☐ Female

PSYCHIATRIC HISTORY *(Forward previous psychiatric records, and where treatment occurred, if available)*
NOTE: If box is checked, please include time information (point in time, duration) in space beside it

SUBSTANCE ABUSE:
☐ Alcohol _____
☐ Drug (prescription)_____
☐ Drug (recreational)_____

OTHER BEHAVIOURS:
☐ Aggressive behaviour _____
☐ Suicide attempt _____
☐ Suicide ideation _____
☐ Forensic _____

☐ Past hospitalization *Name of Facility:* _____

OTHER COMMENTS ON PSYCHIATRIC HISTORY *(include previous medications)* : _____

MEDICAL HISTORY: _____ **CURRENT MEDICATION:** _____

SOCIAL/FAMILY BACKGROUND: *(& FIRST NATIONS)* _____ **FAMILY PSYCHIATRIC HISTORY:** _____

SERVICES REQUESTED *(CHECK ALL THAT APPLY)*:
☐ Establish diagnosis
☐ Consultation and treatment suggestions
☐ Consultation with follow-up as required
☐ Ongoing psychiatric follow-up
☐ Assist with management of behaviour
☐ Assist with management of previously diagnosed condition
☐ Service coordination
☐ Family consultation
☐ Medication management
☐ Pre-admission screening
☐ Other:_____

AGENCIES / SERVICE PROVIDERS INVOLVED:
☐ Community Mental Health Clinic
☐ Office of the Public Guardian
☐ Office of the Public Trustee
☐ Forensic / Law
☐ Geriatric Assessment Team
☐ Other:_____

WHO WILL BE PRESENT WITH THE PATIENT DURING THE TELEPSYCHIATRY CONSULTATION?
☐ Client only ☐ Family ☐ Therapist ☐ Family doctor ☐ Other:_____

REFERRING PHYSICIAN: _____ **BILLING #:** _____ **TELEPHONE:** (___) _____
MENTAL HEALTH PROFESSIONAL : **TELEPHONE:** (___) _____

OFFICE USE ONLY		
	REFERRAL DATE:	APPOINTMENT DATE:
	DATE FAXED TO CONSULTANT:	APPOINTMENT TIME:
	CONSULTANT:	DATE CLIENT INFORMED OF APPOINTMENT:

Adapted from Tele Mental Health Service, Alberta Mental Health Board

Sample provided courtesy of North Shore/Coast Garibaldi Mental Health and Addictions, Vancouver Coastal Health Authority, adapted from NEHSDA Adult Mental Health NHA

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6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.5 Sample Consultant's Schedule

SAMPLE

CONSULTANT'S SCHEDULE

Community
☐ Powell River
☐ Sunshine Coast
☐ Sea to Sky

Name of Psychiatric Consultant: ________________.

Site Coordinator Completing this form: ________________

Phone: **Fax:**

Consultant to complete this section.

Videoconference Schedule		Patient Name:	Referring Doctor's Name	Clinical Diagnosis	Immediate Disposition (see below)
Date	Time				

Immediate Disposition:
1. Outreach Follow-up Recommended
2. Telehealth follow-up recommended
3. No follow-up needed
4. Recommend admission to hospital
5. Referral to specialist / treatment

Sample provided courtesy of North Shore/Coast Garibaldi Mental Health and Addictions, Vancouver Coastal Health Authority, adapted from NEHSDA Adult Mental Health NHA

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.6 Sample Certificate of Services

Mheccu Mental Health Evaluation & Community Consultation Unit

UBC *Department of Psychiatry*
The Faculty of Medicine
University of British Columbia

FOR COAST GARIBALDI COMMUNITY SESSIONS ONLY

NAME OF DOCTOR	Surname	Initials
DR. NUMBER		
FOR PERIOD		
FROM	TO	SESSIONAL

AGENCY NAME		NUMBER
FACILITY/SITE NAME		NUMBER
PROGRAM NAME		NUMBER
CONTROL NAME		NUMBER
SUB CONTROL NAME		NUMBER

DATE OF SERVICE YYYY/MO/DAY	TIME WORKED FROM	TO	DESCRIPTION OF SERVICES RENDERED	FOR MHECCU USE ONLY HOURS WORKED	AMOUNT PAID
			TOTAL		

I certify that these sessions are provided as
ATTENDING PSYSICIAN SIGNATURE
AUTHORIZED SIGNING AUTHORITY

Charges will be reviewed and authorized by the following community personnel
Paul Charron (Sechelt)
Dr. Stephen Holliday (Squamish)
Nora Koros (Powell River)

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.7 Sample Monthly Program Calendar

Sechelt, BC - ***Tele Mental Health Service*** **September 2002**

Revised: as of 3/28/03 12:32 PM

Prepared by the Centre for Telehealth @ Mheccu

Mheccu Mental Health Evaluation & Community Consultation Unit

http://www.mheccu.ubc.ca/telementalhealth/

Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6 Mood Disorder Subspecialty Clinical Consults for Coast Garibaldi sites 1:00 a.m. – 4:00 p.m. PDT-90 min as needed for 1 or many sites Dr. Chinnapalli Manjunath Host site: Mheccu Remote site:*1st come 1st serve *Please advise Dr. Manjunath and Mheccu directly
9 Adult Clinical Consults 1:30 – 4:30 p.m. PDT *Test time 1:15 p.m. PDT* Dr. Craig Emes Host site: VGH Remote site: Sechelt	10	11	12 Geriatric Clinical Consults 1:30 – 4:30 p.m. PDT *Test time 1:15 p.m. PDT* Dr. Femi Agbyewa Host site: Mheccu Remote site: Sechelt	13 Cross Cultural Subspecialty Clinical Consults 9:00 a.m. – 12:00 p.m. PDT-90 min as needed per client Clinician -TBA (*as required depending on request) Host site: VGH Remote site: *First come first serve-please arrange with Cross Cultural Office, then Mheccu directly
16	17 **Professional Mental Health Education Sessions** 11:00 – 12:15 p.m. PDT *Test time 10:45 a.m. PDT* Title: Mental Health & Aboriginal Peoples Module 1: Perceptions of Health Professionals, facilities, & things "medical". Presenter: Bill Mussell Host Site: Sal'ishan Institute, Chilliwack Remote site: Sechelt	18	19	20
23	24 **Professional Mental Health Education Sessions** 11:00 – 12:15 p.m. PDT *Test time 10:45 a.m. PDT* Title: Mental Health & Aboriginal Peoples Module 2: Effects of Institutionalization on First Nations Lifestyles. Presenter: Bill Mussell Host site: Sal'ishan Institute, Chilliwack Remote site: Sechelt	25	26	27
30				

*Please notify James Coyle at coyle@interchange.ubc.ca (or call 604-822-1642) if there are changes to this schedule OR if you would like to register for any Mheccu or AMHB education sessions.

6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.A.2.8 Monthly Program Calendar Distribution

TELEHEALTH PROGRAM
Protocol for Distribution of Monthly Calendars

Following regular consultation between Local Site Coordinators and Mheccu, the Mheccu Telehealth Coordinator will circulate the following month's DRAFT calendars to Local Site Coordinators as well as to the consultants, the Mheccu Clinical Director and the Regional Child & Youth Mental Health Coordinators.

The recipients will have two days to forward any changes to the Mheccu Telehealth Coordinator.

The Mheccu Telehealth Coordinator will then verify the changes with parties involved and in a timely manner, distribute the calendars marked FINAL to the Local Site Coordinators, Regional Child & Youth Mental Health Coordinators, and Consultants.

The Local Site Coordinators will be responsible for circulation within their area to appropriate designates. Each Local Site Coordinator will establish a distribution checklist and will provide a copy to the Mheccu Telehealth Coordinator. These checklists will ensure that in the absence of the Local Site Coordinator, the distribution can be continued without interruption.

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6.A Adult / Geriatric Clinical Services, continued

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth@Mheccu

6.A.2.9 Site Coordinators and Consultants Contact Information for Adult / Geriatric Clinical Services

Site / Program Coordinators

Centre for Telehealth @ Mheccu

Director
Dr. Julian M.Somers
jsomers@interchange.ubc.ca
(604) 822-0427

Manager
James Coyle
coyle@interchange.ubc.ca
(604) 822-1642

Regional Health Authority

Note: Regional Health Authority to insert names and contact information of each Local Site Coordinator within the Region.

Consultants

Note: Regional Health Authority to insert names and contact information for each consultant providing Adult / Geriatric Telehealth Services within the Region.

> Mheccu's Web Page:
http://www.mheccu.ubc.ca/telehealth

6.B Child and Youth Clinical Services

6.B.1 Overview of Child and Youth Clinical Services

The child and youth clinical protocol that has been followed by the Centre for Telehealth @ Mheccu is outlined in **Section 6.B.2.**

The date and time of child and youth telehealth clinical sessions are negotiated by the relevant Child & Youth Local Site Coordinator and the Consultants. Scheduled clinical sessions are included in the monthly Telehealth Program Calendars **(See Sample 6.A.2.7)** that are circulated by Mheccu's Telehealth Coordinator.

Sample forms utilized in the consent process are provided. In addition to the standard consent for treatment form currently utilized by the Child and Youth program **(Samples 6.B.2.1),** an additional consent form specific for telehealth **(Sample 6.A.2.2)** and a telehealth consultation information sheet **(Sample 6.A.2.3)** may also be components of the consent process **(See 5.B.1: Consent).** Signed consent forms are considered to be part of the client record and are kept at the patient (referring) site.

As part of the clinical protocol, the Child & Youth Local Site Coordinators completes an Intake Form for each client **(Sample 6.B.2.2)** as well as partially complete a Consultant's Schedule **(Sample 6.A.2.5).** Along with the relevant referral information, the Intake Form and Consultant's Schedule are forwarded to the Consultant prior to the clinical session.

Following each clinical session, the Consultant completes the Consultant's Schedule and a reimbursement form **(Sample 6.B.2.3)** and returns them to the Regional Child & Youth Mental Health Coordinator.

As part of the Evaluation Protocol **(See 9.A.2)**, following each clinical session Evaluation Forms are completed by the clients **(See 9.A.2.1)**, local service provider **(See 9.A.2.2)** and Consultant **(See 9.A.2.3)**. These evaluation forms are forwarded to the Regional Child & Youth Mental Health Coordinator.

At the end of each month, the Regional Child & Youth Mental Health Coordinator will forward copies of Intake Forms, Videoconference Logbook sheets **(See 9.A.2.5)**, Evaluation Forms and Consultant Reimbursement Forms to Mheccu's Telehealth Program Coordinator for evaluation and reporting purposes.

Contact Information for the site coordinators and Child and Youth Consultants can be found in **6.B.2.4**.

Scope of Clinical Service Provision: A discussion of current and potential mental health applications is provided in **6.A.1** and in **Section 3.A: Clinical Service Delivery.**

Other clinical applications are discussed under **6.C.3.**

6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu

1/ All patients will be fully assessed (including relevant collateral reports) by either
– a local mental health case manager or
– a local family physician, or
– a local psychologist or psychiatrist
before being referred for consultation via videoconferencing.

2/ Patients will require referral by a physician. Mental health case managers may also recommend a referral take place. However, family physicians will need to be informed about and in agreement with all consultations that occur based on the request of the local case manager.

3/ The designated individual within the Children's Mental Health team (hereafter referred to as the " Child & Youth Local Site Coordinator") will be the primary contact for his/her respective community and will coordinate patient access to the telehealth program.

4/ A six-month schedule of dates for videoconferencing sessions for the community will be established through the Child & Youth Local Site Coordinator working in conjunction with Centre for Telehealth @ Mheccu's Telehealth Coordinator. This schedule will be continually updated out to a six-month horizon. For those sessions involving BC Children and Women's Hospital (BCCW), on the day of the videoconference session, the Child & Youth Local Site Coordinator must call Telus (604) 454 6451 and tell them that a videoconference session with BCCW has been booked and that the dial-in number for the Gateway is now required.

5/ The Child & Youth Local Site Coordinator will be responsible for prioritizing and scheduling the use of the consultation time in discussion with the Consultant. The Child & Youth Local Site Coordinator will inform patients, the referring physicians, and relevant mental health staff of the time and place of the scheduled appointment.

6/ The Child & Youth Local Site Coordinator will be responsible for completing an "Intake Form" for each patient scheduled for a telehealth consultation.

7/ The Child & Youth Local Site Coordinator will complete the "Consultant's Schedule" form. This form is then to be faxed to the Consultant along with an "Intake Form," other relevant referral information (determined in consultation with the consultant), and a copy of the "Consultation Evaluation – Consultant" form.

8/ The Centre for Telehealth @ Mheccu's Telehealth Coordinator will make arrangements for securing access to the videoconferencing facilities at the agreed upon times at the appropriate videoconferencing site for that Consultant.

9/ Patients will preferably be assessed during the videoconferencing consultation in the presence of a local health care professional. This will usually be their mental health case manager. Alternatives may include the local family physician, the local psychiatrist, or the Child & Youth Local Site Coordinator. At the discretion of the Child & Youth Local Site Coordinator and Consultant, patients can be assessed with family members and can also be assessed independently at the remote site.

continued

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6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

10/ It will be the responsibility of the Child & Youth Local Site Coordinator (or that person's designate) to ensure that the client is fully informed and that both a "consent for mental health services form" and a "consent for telehealth consultation form" are signed by the patient or legal guardian/substitute decision maker. These signed forms are considered to be part of the client record and are kept at the patient (referring) site.

11/ It will be the responsibility of the Child & Youth Local Site Coordinator (or that person's designate) to ensure that the local health care professional who will be present during the consultation is familiar with the camera/monitor setup and that the equipment is appropriately secured following the consultation.

12/ At the beginning of the videoconferencing session, it will be the responsibility of the Consultant to review consent to ensure the patient's participation is fully informed and voluntary.

13/ If consent is not obtained or if it is withdrawn, or in the circumstance of technical problems, the Child & Youth Local Site Coordinator must be informed immediately, and is responsible for organizing the provision of the required care by alternate means. This may involve a referral to the family physician or the Emergency Department, waiting to see a visiting psychiatrist, traveling to see a psychiatrist in another community, or rescheduling the videoconferencing session.

14/ Following the consultation, the Child & Youth Local Site Coordinator (or that person's designate) will ask the patient (or attending family member) and attending health care professional to complete a brief evaluation of the telehealth session. It will be the responsibility of the Child & Youth Local Site Coordinator (or that person's designate) to collect and forward this evaluation data to the Regional Child & Youth Mental Health Coordinator.

15/ Following the consultation the Consultant will complete a brief evaluation of the telehealth session, which he/she will forward to the Regional Child & Youth Mental Health Coordinator along with the "Consultant's Reimbursement Form

16/ Following the consultation, the Consultant will dictate a note that will be sent to the Child & Youth Local Site Coordinator who will forward a copy to the referring physician and, where relevant, local mental health professionals.

17/ The Consultant will not assume responsibilities of the attending physician. The referring physician and local therapists remain clinically responsible for the care of the patient after assessment by the Consultant. It is the responsibility of the family physician and, if involved the mental health team, to respond to all of the Consultant's recommendations.

continued

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6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

18/ On a monthly basis, it will be the responsibility of the Regional Child & Youth Mental Health Coordinator to forward copies of that months Intake forms, Consultant's Schedules, Evaluations, and Reimbursement forms to the Centre for Telehealth @ Mheccu Telehealth Coordinator.

19/ This process and clinical protocol will be reviewed on an annual basis and adapted as necessary.

20/ At this point in time, provision of certification and second opinions under the *Mental Health Act* is not possible.

continued

6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.B.2.1 Sample Consent Forms for Child and Youth Mental Health Services

SAMPLE

Children and Youth Consent for Service

Clients Name: _____

Parent or Legal Guardian's Name: _____

Address: _____

I agree to meet with a Child & Youth Mental Health Clinician to seek mental health services for myself

OR

I agree for my child/youth to meet with a Child & Youth Mental Health Clinician to seek mental health services.

These services may include any of the following: individual counseling, case management, or Psychiatry (on site visits and/or Telehealth).

As in all clinical services, records are kept on each client. Safeguarding the privacy of your personal information is an ethical obligation to you that staff take very seriously. We do not release any information about you or your family without your written permission, except as stated below.

Children and youth have a right to confidentiality. Parents do not have an automatic right to know what their child has told his or her counselor. We believe that children are best serviced when their families are part of their treatment: however, under the B.C. Infant's Act, children of a certain age have the right to consent to their own treatment and this extends to confidentiality with their clinician. The age is not specified in law and depends upon the maturity of the child.

There are 5 MAJOR EXCEPTIONS of the LIMITS OF CONFIDENTIALITY:

1. **If we have reason to believe a child is being abused, we are required by law to report our concerns to Child Protection in the Ministry for children & Families. Child abuse can be emotional, physical or sexual.**
2. **If we have reason to believe that a person is a danger to him/herself or others, we must notify someone who has the ability to protect the person at risk (parents, RCMP, Doctor)**
3. If a judge orders us to appear in a court of law, we are obliged to answer questions put to us and submit our files if requested to do so. In such cases, the party requesting the information is asked to explain to the judge why the information is necessary.
4. To ensure a high quality of service, clients may be discussed in a case consultation venue with other Child and Youth mental Health staff, or our Outreach Child and Youth Psychiatrists. All information is kept confidential within the Child and Youth Mental Health service.
5. Sometimes it is important to discuss your mental health needs and treatment plan with your Family Doctor, other than exception #2 we would do so with your permission.

I have READ and UNDERSTAND the above statement regarding accessing service and confidentiality.

_____ _____

Signature of parent/guardian/child/youth Signature of Witness

Dated _____ at _____

Ministry for Children & Families **Child & Youth Mental Health**

Sample has been provided courtesy of Child and Youth Mental Health Services, Dawson Creek, Ministry of Children and Family Development

6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.B.2.1 Sample Consent Forms for Child and Youth Mental Health Services

CHILDREN'S and YOUTH CONSENT FOR
MENTAL HEALTH SERVICES
SAMPLE

I agree to meet with _____ _____
(Name) (Position)
to seek service for issues of personal concern. I understand that the content of our discussions will be confidential. Further I understand, the confidentiality protocol has been explained to me.

Client's Name: _____

Parent' or Legal Guardian's Name: _____

Address: _____

I understand that the counseling relationship is confidential within the limits of the (changing) law. I understand these exceptions as they have been explained to me:

- If my/ child's counselor has reason to believe that a child is being physically or sexually abused or in danger of being abused, s/he has a legal and ethical responsibility to report this concern to the Ministry for Children and Families.
- If my counselor has reason to believe that I might injure myself, someone else, or that other persons are at risk for some reasons, s/he has a legal and ethical right to intervene, even if this means breaking confidentiality.
- If my counselor or his/her file is subpoenaed to court.
- It may be helpful or necessary for my counselor to speak to other professionals who may be involved in aspects of my physical and emotional health. Wherever possible, this will be done with my understanding the intent of such contact. I have the right to know what transpired in any conversations between my counselor and other professionals.
- My counselor has the right and obligation to seek consultation and supervision in order to adequately perform his/her job. S/he will let me know when this occurs and obtain my consent whenever possible.
- My counselor has explained to me that, if an active file exists with the Ministry for Children and Families, s/he will be required to provide reports as required or appropriate. I understand that I will be able to see these reports before they are forwarded to the Ministry for Children and Families.

_____ _____
Client's Signature NPCRS Staff Signature

_____ _____
Parent of Legal Guardian Signature Date

6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.B.2.2 Sample Intake Form Child & Youth Clinical Services

SAMPLE

INTAKE FORM
(CHILD & YOUTH)

☐ Powell River
☐ Sunshine Coast
☐ Sea to Sky

COAST GARIBALDI TELE MENTAL HEALTH PROGRAM

Name:	DOB (d/m/y):	Medical Services Plan # (MSP):	Phone #:
Address:	City/Town:	Postal Code:	Gender: ☐ Male ☐ Female

LIVING ARRANGEMENTS:
☐ Alone
☐ Family
☐ Foster Care
☐ Group Setting
☐ Other: _____

NAMES OF FAMILY MEMBERS LIVING WITH PATIENT (& PARENT CONTACT INFO)

SOCIAL WORKS / COUNSELORS:
Name:
Contact Info:

Name:
Contact Info:

SCHOOL: _____ **GRADE:** _____

PSYCHIATRIC HISTORY *(Forward previous psychiatric records, and where treatment occurred, if available)*
NOTE: If box is checked, please include time information (point in time, duration) in space beside it

SUBSTANCE ABUSE:
☐ Alcohol _____
☐ Drug (prescription) _____
☐ Drug (recreational) _____

OTHER BEHAVIOURS:
☐ Aggressive behaviour _____
☐ Suicide attempt _____
☐ Suicide ideation _____
☐ Forensic _____

☐ Past HOSPITALIZATION *Name of Facility:* _____

OTHER COMMENTS ON PSYCHIATRIC HISTORY *(include previous medications)* : _____

MEDICAL HISTORY: _____ **CURRENT MEDICATION:** _____

SOCIAL/FAMILY BACKGROUND: *(& FIRST NATIONS)* _____ **FAMILY PSYCHIATRIC HISTORY:** _____

SERVICES REQUESTED *(CHECK ALL THAT APPLY)*:
☐ Establish diagnosis
☐ Consultation and treatment suggestions
☐ Consultation with follow-up as required
☐ Ongoing psychiatric follow-up
☐ Assist with management of behaviour
☐ Assist with management of previously diagnosed condition
☐ Service coordination
☐ Family consultation
☐ Medication management
☐ Pre-admission screening
☐ Other: _____

AGENCIES / SERVICE PROVIDERS INVOLVED:
☐ Community Mental Health Clinic
☐ MCF: Child Protection Services
☐ MCF: Family Support Services
☐ Alcohol & Drug Services
☐ Child Care Worker
☐ Forensic / Law
☐ Other: _____

WHO WILL BE PRESENT WITH THE PATIENT DURING THE TELEPSYCHIATRY CONSULTATION?
☐ Client only ☐ Family ☐ Therapist ☐ Family doctor ☐ Other: _____

REFERRED BY: PHYSICIAN: _____ **BILLING #:** _____ **TELEPHONE:** (___) _____
MENTAL HEALTH PROFESSIONAL : **TELEPHONE:** (___) _____

OFFICE USE ONLY		
	REFERRAL DATE: _____	APPOINTMENT DATE: _____
	DATE FAXED TO CONSULTANT: _____	APPOINTMENT TIME: _____
	CONSULTANT:	DATE CLIENT INFORMED OF APPOINTMENT:

Adapted from Tele Mental Health Service, Alberta Mental Health Board

Sample provided courtesy of North Shore/Coast Garibaldi Mental Health and Addictions, Vancouver Coastal Health Authority, adapted from Child and Youth Mental Health Services, Dawson Creek, Ministry of Children and Family Development

6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.B.2.3 Sample Certificate of Services

Mheccu Mental Health Evaluation & Community Consultation Unit

UBC *Department of Psychiatry*
The Faculty of Medicine
University of British Columbia

FOR COAST GARIBALDI COMMUNITY SESSIONS ONLY

NAME OF DOCTOR	Surname	Initials
DR. NUMBER		
FOR PERIOD		
FROM	TO	SESSIONAL

AGENCY NAME		NUMBER
FACILITY/SITE NAME		NUMBER
PROGRAM NAME		NUMBER
CONTROL NAME		NUMBER
SUB CONTROL NAME		NUMBER

DATE OF SERVICE YYYY/MO/DAY	TIME WORKED FROM	TO	DESCRIPTION OF SERVICES RENDERED	FOR MHECCU USE ONLY HOURS WORKED	AMOUNT PAID
			TOTAL		

I certify that these sessions are provided as
ATTENDING PSYSICIAN SIGNATURE
AUTHORIZED SIGNING AUTHORITY

Charges will be reviewed and authorized by the following community personnel
Paul Charron (Sechelt)
Dr. Stephen Holliday (Squamish)
Nora Koros (Powell River)

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6.B Child and Youth Clinical Services, continued

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth@Mheccu, continued

6.B.2.4 Site Coordinators and Consultants Contact Information for Child and Youth Clinical Services

Site/Program Coordinators

Centre for Telehealth @ Mheccu

Director
Dr. Julian M. Somers
jsomers@interchange.ubc.ca
(604) 822-0427

Manager
James Coyle
coyle@interchange.ubc.ca
(604) 822-1642

Regional Health Authority

Note: Regional Health Authority to insert names and contact information of each Local Site Coordinator within the Region.

Consultants

Note: Regional Health Authority to insert names and contact information for each consultant providing Child & Youth Telehealth Services within the Region.

> Mheccu's Web Page:
http://www.mheccu.ubc.ca/telehealth

6.C Subspecialties and Other Applications

6.C.1 Overview Mood Disorder Subspecialty

The Mood Disorder clinical protocol is as outlined for Adult/Geriatric Clinical Services in **Section 6.A.2**.

The date and time of Mood Disorder clinical sessions are negotiated by the relevant Local Site Coordinator and Consultant. Scheduled clinical sessions times are included in the monthly Telehealth Program Calendars **(See Sample 6.A.2.7)** circulated by Mheccu's Telehealth Coordinator.

The forms utilized for the consent process are provided. In addition to the standard consent form currently utilized within the Region to access clinical services **(See 6.A.2.1)**, an additional consent form specific for Telehealth **(Sample 6.A.2.2)** and a telehealth consultation information sheet **(6.A.2.3)** may also be components of the consent process **(See Section 5.B.1 Consent)**. Signed consent forms are considered to be part of the client record and are kept at the patient (referring) site.

As part of the clinical protocol, the Local Site Coordinator completes a Patient Information Questionnaire **(See Sample 6.C.1.1)** for each referred client, as well as partially completes the Consultant's Schedule **(Sample 6.A.2.5)**. Along with the relevant referral information, the Intake Form and Consultant's schedule are forwarded to the Consultant prior to the clinical session.

Following each clinical session, the Consultant completes the Consultant's Schedule and a Reimbursement Form **(Sample 6.A.2.6)** and returns them to the Local Site Coordinator. Consultation notes are dictated and forwarded to the Local Site Coordinator who in turn forwards copies to the referring physician and other relevant parties.

As part of the Evaluation Protocol **(See 9.A.2)**, following each clinical session Evaluation Forms are completed by the clients **(See 9.A.2.1)**, local service provider **(See 9.A.2.2)** and Consultant **(See 9.A.2.3)**. The Local Site Coordinator collects these evaluation forms.

At the end of each month, the Local Site Coordinator forwards copies of Intake Forms, Videoconference Logbook sheets **(See 9.A.2.5)**, Evaluation Forms and Consultant Reimbursement Forms to Mheccu's Telehealth Coordinator for evaluation and reporting purposes.

Contact Information for the Local Site Coordinators can be found in **6.A.2.9**.

Mood Disorder consultants can be contacted at:

UBC HOSPITAL MOOD DISORDERS CENTRE
University of British Columbia Hospital
2255 Wesbrook Mall
Vancouver, B.C. V6T 2A1
Phone: (604) 822-7512
Fax: (604) 822-7922

continued

6.C Subspecialties and Other Applications, continued

6.C.1 Overview Mood Disorder Subspecialty, continued

6.C.1.1 Sample Mood Disorders Patient Information Questionnaire / 1 of 4

MOOD DISORDERS CLINIC

PATIENT INFORMATION QUESTIONNAIRE

Name: **Age:**

Date:

Your answers to these questions will greatly help your assessment at the Mood Disorders Clinic. Please try to answer them as completely as possible. Examples of answers are given for each question. Please bring the completed questionnaire with you when you come to your assessment appointment.

Do you have any current medical conditions? Yes ☐ No ☐
If yes, please provide details:

Medical Condition	Date First Diagnosed
e.g. diabetes	*1992*

Please list all of your current medications, including prescription, over-the-counter medications, vitamins, and naturopathic preparations:

Name of Medication	**Dose**	Date Started
e.g. Prozac	*20 mg/day (1 tablet)*	*Sept./95*

6.C Subspecialties and Other Applications, continued

6.C.1 Overview Mood Disorder Subspecialty, continued

6.C.1.1 Sample Mood Disorders Patient Information Questionnaire / 2 of 4

-2-

Do you have any allergies to medications? Yes ☐ No ☐
If yes, please list:

Name of Medication	Reaction
e.g. Penicillin	*Rash, Swelling*

Have you previously received psychiatric treatment? Yes ☐ No ☐
If yes, please list:

Name of Psychiatrist	Dates attended
e.g. Dr. Mood	*Sept/94 – Aug/95*

Have you ever been admitted to hospital for psychiatric treatment? Yes ☐ No ☐
If yes, please provide details:

Hospital	**Date Admitted**	Length of Hospitalization
e.g. Vancouver General Hospital	*July/95*	*3 weeks*

6.C Subspecialties and Other Applications, continued

6.C.1 Overview Mood Disorder Subspecialty, continued

6.C.1.1 Sample Mood Disorders Patient Information Questionnaire / 3 of 4

-3-

Have you received antidepressant medication for your mood disorder? Yes ☐ No ☐
If yes, please list all previous antidepressant medications:

Name	Highest Dose Taken	Date Started	Duration of Treatment
e.g. amitriptyline	*200 mg (4 tablets)*	*Aug/95*	*4 weeks*

Have you received psychological treatment for your mood disorder? Yes ☐ No ☐
If yes, please provide details:

Name of Therapist	**Date Started**	Duration of Treatment
e.g. Dr. Clinic	*May/95*	*6 months*

6.C Subspecialties and Other Applications, continued

6.C.1 Overview Mood Disorder Subspecialty, continued

6.C.1.1 Sample Mood Disorders Patient Information Questionnaire / 4 of 4

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Is there anyone in your family who has psychiatric illness? Yes ☐ No ☐
If yes, please provide details:

Relative	Illness
e.g. Father	*Depression, Alcoholism*

Thank you for completing this questionnaire.
Please bring this questionnaire with you when you come for your assessment appointment.

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6.C Subspecialties and Other Applications, continued

6.C.2 Overview Cross-Cultural Psychiatry

The Cross-Cultural clinical protocol is as outlined for Adult/Geriatric Clinical Services in **Section 6.A.2**.

The date and time of Cross-Cultural telehealth clinical sessions are negotiated by the relevant Local Site Coordinator and Consultant. Scheduled clinical sessions times are included in the monthly Telehealth Program Calendars **(See Sample 6.A.2.7)** circulated by Mheccu's Telehealth Coordinator.

The forms utilized for the consent process are provided. In addition to the standard consent form currently utilized within the Region to access clinical services **(Sample 6.A.2.1)**, an additional consent form specific for Telehealth **(Sample 6.A.2.2)**, and a telehealth consultation information sheet **(Sample 6.A.2.3)** may also be components of the consent process **(See Section 5.B.1: Consent).** Signed consent forms are considered to be part of the client record and are kept at the patient (referring) site.

As part of the clinical protocol, the Local Site Coordinator completes an Intake Form for each referred client **(See Sample 6.C.2.1)**, as well as partially completes the Consultant's Schedule **(Sample 6.A.2.5)**. Along with the relevant referral information, the Intake Form and Consultant's schedule are forwarded to the Consultant prior to the clinical session.

Following each clinical session, the Consultant completes the Consultant's Schedule and a Reimbursement Form **(Sample 6.A.2.6)** and returns them to the Local Site Coordinator. Consultation notes are dictated and forwarded to the Local Site Coordinator who in turn forwards copies to the referring physician and other relevant parties.

As part of the Evaluation Protocol **(See 9.A.2)**, following each clinical session Evaluation Forms are completed by the clients **(See 9.A.2.1)**, local service provider **(See 9.A.2.2)**, and Consultant **(See 9.A.2.3)**. The Local Site Coordinator collects these evaluation forms.

At the end of each month, the Local Site Coordinator forwards copies of Intake Forms, Videoconference Logbook sheets **(See 9.A.2.5)**, Evaluation Forms, and Consultant Reimbursement Forms to Mheccu's Telehealth Coordinator for evaluation and reporting purposes.

Contact Information for the Local Site Coordinators can be found in **6.A.2.9**.

Cross-Cultural Psychiatry consultants can be contacted at:

Cross-Culture Clinic
Vancouver Hospital & Health Sciences Centre
Ground Floor,
715 West 12th Avenue
Phone: (604) 875-4115
Fax: (604) 875-5386

continued

6.C Subspecialties and Other Applications, continued

6.C.2 Overview Cross-Cultural Psychiatry, continued

6.C.2.1 Sample Intake Form Cross-Culture Psychiatry

Cross-Cultural Psychiatry Program
Outpatient Psychiatry Department
Ground Floor, Health Centre – 715 West 12th Avenue, Vancouver, B.C. V5Z 1M9
Telephone (604) 875-4115 ------ Fax: (604) 875-5386

VIDEO TELECONFERENCING --- PATIENT INTAKE FORM

Please Indicate Community: Dawson Creek/ Fort Nelson/ Fort St. John/ Sechelt/ Squamish

(CONTACT SITE COORDINATOR IN COMMUNITY WITH APPOINTMENT DATE)

DATE OF REFERRAL: _____

NAME OF PATIENT: _____ SEX: Male / Female

DATE OF BIRTH: _____ MARITAL STATUS: _____

ADDRESS: _____

PHONE: (H)_____ (Cell) _____(W) _____

PERSONAL HEALTH NUMBER: _____

G.P.: _____ BILLING NUMBER: _____

ADDRESS: _____

PHONE: _____ FAX: _____

REASON FOR REFERRAL: _____

_____

CURRENT MEDICATIONS: _____

_____

SUBSTANCE USE: _____

LANGUAGES SPOKEN/CULTURAL BACKGROUND:_____

_____

LEGAL ISSUES (include claim numbers) _____

Sample provided courtesy of the Cross-Cultural Psychiatry Program, Department of Psychiatry, UBC

6.C Subspecialties and Other Applications, continued

6.C.3 Additional Specialists and Services

The installation of interactive video-conferencing technology provides an opportunity for health professionals and clients/patients in smaller rural communities throughout B.C. to access other specialists and services that would normally be accessible only by travel to larger referral centres.

Diagnostic and therapeutic applications including psychological assessment, hospital discharge planning, and consultation could potentially be provided.

For example, the provision of medical and psychological specialty consultations can be supported with the addition of peripherals to the videoconference system such as

- general exam cameras
- scoping devices (e.g., stethoscopes, opthalmoscopes and / or otoscopes).

Other applications which are being explored in this or other jurisdictions include

- translation services for the deaf and hard of hearing
- speech and language pathology services (e.g., videoconferencing linked a speech and language pathologist located at Children's Hospital with the multidisciplinary care team, including the family, of a young girl in Sechelt to provide training on the use of a speech augmentation device)
- services related to learning and developmental disorders
- neuropsychology services
- referral assessments (for example, to drug and alcohol residential services).

SECTION 7

DISTANCE EDUCATION

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SECTION 7 DISTANCE EDUCATION

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7.A Distance Education Programs

7.A.1 Overview

The Centre for Telehealth @ Mheccu has broadcasted several distance education programs each month, designed to meet the needs of mental health professionals and family physicians, as well as other sessions of interest to consumers, family members, and the public. The Alberta Mental Health Board's Telehealth Service has collaborated in the technical delivery of these rounds. In addition, the UBC Dept of Family Practice has cosponsored several professional education rounds, while various consumer / family advocacy organizations have cosponsored the consumer & family/public rounds (Canadian Mental Health Association-BC Division, Schizophrenia Society of BC, Mood Disorders Association of BC, Anxiety Disorders Association of BC, Association for Awareness & Networking of Eating Disorders, Sal'i'shan Institute).

Topics for the education sessions have been selected based on information obtained from annually conducted educational needs assessments **(See Samples 7.A.2.1, 7.A.2.2, 7.A.2.3)** as well as feedback from the Distance Education evaluation forms **(See Evaluation Section 9.A.2.4)**.Contact information for the Education Coordinators and Local Hosts can be found in **7.A.4**. Each participating remote community has a Local Host for each of the rounds **(See Sample description of Duties and Responsibilities of Local Hosts, 7.A.9)**. Local Site Hosts attend all presentations and are responsible for distributing details of the educational program, ensuring local technical setup, facilitating discussion, as well as distributing and collecting the evaluation forms. Local Hosts encourage attendees to sign the Sign In Sheet **(See Sample 7.A.5)** and circulate an Audience Instruction Sheet **(See Sample 7.A.6)**.

All distance education sessions are included in the monthly Telehealth Program Calendars **(See Sample 6.A.2.7)**, which are circulated in advance by the Centre for Telehealth @ Mheccu's Telehealth Coordinator. Individual Flyers **(See Samples 7.A.7.1 and 7.A.7.2)** are also circulated for each presentation. A protocol for the creation and distribution of the individual Education Flyers can be found in **7.A.8**.

In addition, a listing of education sessions will be updated frequently on the Centre for Telehealth @ Mheccu's website as follows:

> Upcoming sessions:
http://www.mheccu.ubc.ca/telehealth/upcoming.cfm

> Previous sessions:
http://www.mheccu.ubc.ca/telehealth/previous.cfm

Education sessions will be broadcast one hour later for areas affected by Pacific Daylight Savings Time when this is in effect.

Information and resources for designing and delivering education sessions via videoconferencing are provided in **7.B.1**, including

- topic selection **(7.B.1.1)**
- format and presentation **(7.B.1.2)**
- curriculum development **(7.B.1.3)**
- advice about room set-up to optimize sound and visuals **(7.B.1.4)**.

Other forms of e-learning are briefly discussed and some resources provided in **7.B.2**.

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7.A Distance Education Programs, continued

7.A.2 Sample Educational Needs Assessments

7.A.2.1 Sample Consumer and Family Members Educational Needs Assessment

TELE MENTAL HEALTH PROGRAM
CONSUMERS AND FAMILY MEMBERS NEEDS ASSESSMENT

1. Please rate your interest in the following topics from low to high, where 1 indicates low interest/value and 5 indicates high interest/value. If you circle "3, 4, or 5" for any topic, please let us know what in particular about the topic you would like to see incorporated into an educational event.

TOPIC	LOW 1	2	3	4	HIGH 5		Please specify specific topic of interest
1. Schizophrenia						➡	
2. Personality Disorders						➡	
3. Anorexia Nervosa/Bulimia						➡	
4. Somatoform Disorders						➡	
5. Depression						➡	
6. Alcohol Abuse						➡	
7. Dementia						➡	
8. Attention Deficit Hyperactivity Disorder/Behavioural Disturbances						➡	
9. Bipolar Disorder						➡	
10. Substance Abuse						➡	
11. Sleep Disorders						➡	
12. Anxiety Disorders						➡	
13. Suicidality						➡	
14. Psychiatric Medications						➡	
15. Mental Health Legislation						➡	

2. *How often would you like to meet?* ☐ Weekly ☐ Every two weeks ☐ Monthly ☐ Every second month
3. *Preferred day of week:* ☐ Mon. ☐ Tues. ☐ Wed. ☐ Thurs. ☐ Fri. ☐ Sat. ☐ Sun.
4. *Times preferred:* ☐ Mornings ☐ Lunch hour ☐ Afternoon ☐ Evening
5. Are there other topics you would like to hear about? _____
6. Are there particular speaker (s) you would like to hear? _____

This survey was adapted from forms designed by Centre for Addiction & Mental Health, Dept. of Psychiatry, University of Toronto. It is being conducted in association with MHECCU, Department of Psychiatry, UBC.

PLEASE RETURN COMPLETED SURVEY TO:

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY!

7.A Distance Education Programs, continued

7.A.2 Sample Educational Needs Assessments, continued

7.A.2.2 Sample Mental Health Professionals Education Needs Assessment

TELE MENTAL HEALTH PROGRAM
COMMUNITY MENTAL HEALTH PROFESSIONALS NEEDS ASSESSMENT

1. Please rate your interest in the following topics from low to high, where 1 indicates low interest/value and 5 indicates high interest/value. If you circle "3, 4, or 5" for any topic, please let us know what in particular about the topic you would like to see incorporated into an educational event.

TOPIC	LOW 1	2	3	4	HIGH 5		Please specify specific topic of interest
1. Schizophrenia						➡	
2. Personality Disorders						➡	
3. Anorexia Nervosa/Bulimia						➡	
4. Somatoform Disorders						➡	
5. Depression						➡	
6. Alcohol Abuse						➡	
7. Dementia						➡	
8. Attention Deficit Hyperactivity Disorder/Behavioural Disturbances						➡	
9. Bipolar Disorder						➡	
10. Substance Abuse						➡	
11. Sleep Disorders						➡	
12. Anxiety Disorders						➡	
13. Suicidality						➡	
14. Psychiatric Medications						➡	
15. Mental Health Legislation						➡	

2. How often would you like to meet? ☐ *Weekly* ☐ *Every two weeks* ☐ *Monthly* ☐ *Every second month*
3. Preferred day of week: ☐ *Mon.* ☐ *Tues.* ☐ *Wed.* ☐ *Thurs.* ☐ *Fri.*
4. Times preferred: ☐ *Mornings* ☐ *Lunch hour* ☐ *Afternoon*
5. Are there other topics you would like to hear about?
6. Are there particular speaker(s) you would like to hear? _____

This survey was adapted from forms designed by Centre for Addiction & Mental Health, Dept. of Psychiatry, University of Toronto. It is being conducted in association with MHECCU, Department of Psychiatry, UBC.

PLEASE RETURN COMPLETED SURVEY TO: ***THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY***

7.A Distance Education Programs, continued

7.A.2 Sample Educational Needs Assessments, continued

7.A.2.3 Sample Family Physicians Educational Needs Assessment, 1 of 2

TELE MENTAL HEALTH PROGRAM
FAMILY PHYSICIANS EDUCATIONAL NEEDS ASSESSMENT

1. Please rate your interest in the following topics from low to high, where 1 indicates low interest/value and 5 indicates high interest/value. If you circle "3, 4, or 5" for any topic, please let us know what in particular about the topic you would like to see incorporated into an educational event by placing a ✓ in the columns.

TOPIC	LOW 1	2	3	4	HIGH 5		Office Detection	Cognitive, behavioural & psychosocial interventions	Medication	Other (please specify below)
1. Schizophrenia						➡				
2. Personality Disorders						➡				
3. Anorexia Nervosa/Bulimia						➡				
4. Somatoform Disorders						➡				
5. Depression						➡				
6. Alcohol Abuse						➡				
7. Dementia						➡				
8. Attention Deficit Hyperactivity Disorder/Behavioural Disturbances						➡				
9. Bipolar Disorder						➡				
10. Substance Abuse						➡				
11. Sleep Disorders						➡				
12. Anxiety Disorders						➡				
13. Suicidality						➡				

***2.** Please rate your interest in the following topics from low to high, where 1 indicates low interest/value and 5 indicates high interest/value.*

		Low				High
1. Geriatrics	Geriatric Psychopharmacology	1	2	3	4	5
	Dementia	1	2	3	4	5
	Nursing home patient management	1	2	3	4	5
	Competence to consent to treatment	1	2	3	4	5
2. Child/Adoles.	Adaptation to divorce and reconstituted families	1	2	3	4	5
	Various psychotherapies	1	2	3	4	5
	Pediatric pharmacotherapies	1	2	3	4	5
3. Psychiatric Medications		1	2	3	4	5

7.A Distance Education Programs, continued

7.A.2 Sample Educational Needs Assessments, continued

7.A.2.3 Sample Family Physicians Educational Needs Assessment, 2 of 2

4. Overview of herbal remedies	1	2	3	4	5
5. Introduction to alternative treatments (homeopathy, naturopathy)	1	2	3	4	5
6 Drug interactions and psychopharmacology	1	2	3	4	5
7 Psychopharmacology and pregnancy	1	2	3	4	5
8 Management of victims of violence	1	2	3	4	5
9 Cognitive Therapy	1	2	3	4	5
10 Interpersonal Therapy (IPT)	1	2	3	4	5
11 How to fill out medical disability forms	1	2	3	4	5
12 The difficult patient	1	2	3	4	5
13 Psychosocial rehabilitation	1	2	3	4	5
14 Mental Health Legislation	1	2	3	4	5
15. Other (please specify)	1	2	3	4	5

3. How often would you like to meet? ☐ Weekly ☐ Every two weeks ☐ Monthly

4. Preferred day of week: ☐ Mon. ☐ Tues. ☐ Wed. ☐ Thurs. ☐ Fri. ☐ Sat. ☐ Sun.

5. Times preferred: ☐ Morning ☐ Afternoon ☐ Evening

6. Gender ☐ M ☐ F

7. Year of graduation: _____ Degree(s): _____

8. % of patients treated with psychotherapy alone: _____ % of combined psychotherapy/pharmacotherapy _____

9. Number of prescriptions written per week: Antidepressants _____ Mood stabilizers _____ Antipsychotics _____
Minor tranquilizers _____ Hypnotics _____

10. Comfort level prescribing:

	Low				High
Antipsychotics	1	2	3	4	5
Antidepressants	1	2	3	4	5
Mood stabilizers	1	2	3	4	5
Benzodiazepines	1	2	3	4	5
Hypnotics	1	2	3	4	5

11. Course level wanted: ☐ Introduction/Review ☐ Intermediate ☐ Advanced

12. Please RANK ORDER (from 1 = most preferred to 4 = least preferred) the following options below to indicate your preference as a format for a 1 to 2 hour educational event:

	Most			Least
a. Lectures (1 to 1 1/2 hours)	1	2	3	4
b. Small group discussions	1	2	3	4
c. Lecture (1 hr) followed by group discussion	1	2	3	4
d. Lecture (1 hr) followed by discussion of your cases in a small group setting	1	2	3	4

13 Have you previously attended educational sessions offered through videoconferences?
☐ Yes ☐ No

14 Are you interested in attending educational sessions offered through videoconferencing?
☐ Yes ☐ No

This survey was adapted from forms designed by Centre for Addiction & Mental Health, Dept. of Psychiatry, University of Toronto. It is being conducted in association with MHECCU, Department of Psychiatry, UBC.
Please return completed survey to:_____ Thank you for taking the time to complete the survey

7.A Distance Education Programs, continued

7.A.3 Sample Handout: Instructions for Distance Education Presenters

Location

Telehealth education sessions are broadcast from a conference room located at 2250 Wesbrook Mall (across the street from the Detwiller Pavilion of UBC Hospital). Parking is available at the back of the building upon receiving a pass from James Coyle or Kathleen Brooks.

Group (Multipoint) Videoconferencing

The telehealth rounds can be thought of as group videoconferencing. You will be able to speak to, hear, and observe listening audiences in a number of remote communities, and vice versa. In more practical terms you will be looking at a small camera, which sits atop a 27-inch television monitor. The listeners in the remote communities will be sitting in front of similar cameras and monitors. Normally, the monitor will display the picture of whoever is talking, so most often it will be you (or your visuals/PowerPoint) that is being displayed.

At each site the camera can be controlled by a remote control similar to the remote control that we use with our television sets at home. Buttons on the remote control can make the camera zoom in and out as well as pan the room. However, it's usually not necessary for the speaker to use the remote control during a presentation, because the cameras are voice-activated (that is, they will automatically focus on the person who is speaking).

Please note that a local operator will be available to handle the remote control on your behalf and handle the sending of your PowerPoint slides. However you will be in complete control of the pace and timeliness of sending those slides and are free to ask to go back to previous slides/material.

Sounds are recorded through a microphone that sits on the conference table and has a MUTE button that turns red when activated. To avoid background noise, the participating communities have been encouraged to keep their microphones on mute unless a question is being asked.

Audiovisuals

If desired, you can use audiovisuals for your talk.

You will NOT have an overhead or slide projector for these rounds. Instead, you have one of three options:

1/ You can make up your visuals in PowerPoint. Please forward your slides by email ahead of time and we will be able to load them on our PC in the system prior to the session.

2/ You can use a device called a Document Camera. This looks like an overhead projector that has a flat tray instead of a glass panel, with a camera-mounted overhead. Transparencies and paper documents will both work. The device can handle colour, and this can be a good way of making your visuals more attractive.

continued

7.A Distance Education Programs, continued

7.A.3 Sample Handout: Instructions for Distance Education Presenters, continued

3/ You can broadcast standard VCR videotapes.

Slide Background
Light text on a dark background works well. A classic colour mix is a dark blue background with yellow text because it provides adequate contrast and is easy to read. Use a landscape format as it fills the screen better.

Fonts
Any font size smaller than 28 points should be avoided. 36-point is the largest that you will need. Try not to use more than two fonts on any slide, and use the same two fonts throughout the entire presentation. Please use a font with broad lines, such as Arial (28 pt minimum), rather than a font with narrow lines.

Text
On text slides "fewer words are better." Use short, bulleted statements made up of key words (that are a cue to you and the audience) within the essential phrase outlining what you want to say. Use a maximum of 4-5 statements of 1-2 lines each for a maximum of 8 lines of text per slide, plus the title of the slide. Keep charts and graphs simple.

Number of slides
Most good speakers average two minutes per slide, not counting title and outline slides.

Visual Presentation
The operator managing the presentation has a choice of what to show on the screen for viewers: you or the visuals. Some systems will handle both simultaneously, but this is dependent on the equipment in each community. It can be dull to look at a bit of text on a screen for five minutes while your voice goes on in the background. Consequently, we will want the camera to be on you for most of the time. Your visuals should not be so essential that viewers need to have access to them at all times. And unlike most presentations, your audience will not have the option of glancing from you to the visuals and back at will.

Visual Printouts
It is helpful for the remote audiences to have printouts of your visuals. If these are forwarded one or two weeks ahead of your presentation date, we can make arrangements to distribute them to the remote viewers on your behalf. While light text on a dark background works well for slides, this is hard to read on a handout and should be converted to black print on a light background.

continued

7.A Distance Education Programs, continued

7.A.3 Sample Handout: Instructions for Distance Education Presenters, continued

What to wear

Believe it or not, clothing choices make a difference. Please do not wear clothing, particularly shirts, that rustle a lot. Heavy necklaces that are likely to bounce are also a bad idea.

Pure white clothing reflects all of the light, whereas your face reflects less. If you wear a snow-white shirt your face will look a bit washed out and your shirt will be blinding.

Bland, middle-tone colours are best for videoconferencing. Really bright colours and checkerboards tend to give odd effects and should be avoided. Blues and greys also work better than black.

Interaction

We strongly encourage interactivity throughout the presentation. Questions and comments should be encouraged from the remote participants at frequent intervals (e.g., every 5 to 7minutes – almost like a commercial break). At most, the prepared presentation should require no more than two-thirds of the available time. It's often helpful to repeat the question before answering, particularly if the question was initially hard to hear.

Potential Conflicts of Interest

Please state any relevant industry sponsorships at the beginning of your presentation.

Evaluation

At the end of the education session, all who have attended the presentation will be encouraged to complete a brief one-page evaluation of the presentation. At your request, this feedback can be forwarded to you.

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7.A Distance Education Programs, continued

7.A.4 Contact Information – Distance Education

The contact information for non-Mheccu staff below may not be current. These individuals have been involved with our ongoing program to date. This information also represents a sample of the kind of information that a contact sheet should have for most programs engaged in ongoing telehealth events. **More current information, and a much more extensive list is on Mheccu's Telehealth Partner Portal.**

Mental Health Professional Rounds

Education Coordinators:

- UBC - Mheccu
  James Coyle (604) 822-1642
- Alberta Mental Health Board
  Maureen Konrad (403) 783-7731

Local Hosts:

- Dawson Creek Hospital
  Tracy McLellan (250) 784-7369
  Dr. Stephen Ashwell
  (250) 782-1186
- Fort St. John
  James Thomson (250) 787-3380
  Dr. Paul Mackey (250) 785-6677
- Fort Nelson
  Lynn Fertuck / Bernice Traichevich
  (250) 774-7092
  Dr. Marius Mostert
  (250) 774-7838
- Whitehorse
  Alison Conant (867) 667-8346
- Squamish
  Dr. Stephen Holliday
  (604) 892-2293
- Sechelt
  Tracey Newcombe (604) 885-6101
- Powell River
  Nora Koros (604) 485-3650
- Chilliwack
  Marion Mussell
  (The Sal'i'shan Institute)
  (604) 793-1983
- Alberta Hospital Ponoka
  Patti Pugh (403) 783-7731

Consumer / Family Rounds

Education Coordinators:

- UBC - Mheccu
  James Coyle
  (604) 822-1642

Local Hosts:

- Dawson Creek Hospital
  Tracy McLellan (250) 784-7369
  Dr. Stephen Ashwell
  (250) 782-1186
- Fort St. John
  James Thomson (250) 787-3380
  Dr. Paul Mackey (250) 785-6677
- Fort Nelson
  Lynn Fertuck / Bernice Traichevich
  (250) 774-7092
  Dr. Marius Mostert
  (250) 774-7838
- Whitehorse
  Alison Conant (867) 667-8346
- Squamish
  Dr. Stephen Holliday
  (604) 892-2293
- Sechelt
  Tracey Newcombe
  (604) 885-6101
- Powell River
  Nora Koros (604) 485-3650
- Chilliwack
  Marion Mussell
  (The Sal'i'shan Institute)
  (604) 793-1983
- UBC
  James Coyle
  (604) 822-1642

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7.A Distance Education Programs, continued

7.A.4 Contact Information – Distance Education, continued

Consumer / Family Education Partners

http://www.mheccu.ubc.ca/telehealth/partners.cfm

- Alzheimer Society of BC
  Contact: Barbara Lindsay
  (604) 681-6530

- Anxiety Disorders Association of BC
  Contact: Lynn Miller
  lynn.miller@ubc.ca

- Association for Awareness and Networking around Disordered Eating (ANAD)
  Contact: Raine McKay
  rainejmckay@shaw.ca

- BC Schizophrenia Society
  Contact: Nicole Chovil
  nchovil@telus.net
  (604) 270 7841 ext 26

- Canadian Mental Health Association, BC Division
  Contact: Sarah Hamid
  shamid@cmha-bc.org
  (604) 688-3234

- Mood Disorders Association of BC
  Contact: Robert Winram
  mdabc@telus.net
  (604) 873-0103

- The Sal'i'shan Institute
  Contact: Bill or Marion Mussell
  info@salishan.ca
  (604) 793-1983

- The f.o.r.c.e. Society for Kids' Mental Health
  Contact: Keli Anderson
  kelianderson@hotmail.com
  (604) 878-3400

Physician Education Partners

- Department of Family Practice, UBC
  Contact: Dr. Carl Whiteside
  cbwh@interchange.ubc.ca
  (604) 822-5498

7.A Distance Education Programs, continued

7.A.5 Sample Distance Education Sign In Sheet

Location: _____

Title of Presentation: _____ **Date**:_____

Presenter: _____

NAME (Please Print)	NAME (Please Print)

7.A Distance Education Programs, continued

7.A.6 Sample Handout: Audience Instruction Sheet

Welcome to the Centre for Telehealth @ Mheccu's Distance Education Program.

These rounds involve a number of communities in B.C. as well as, on occasion, Alberta and Yukon.

Using video conferencing technology, you will be able to speak, hear, and see participants in each of the other communities. Like you, listeners in other communities will be sitting in front of a camera and monitor. Normally, the monitor will display the picture of whoever is talking, so if you ask a question, your face will be broadcast to the other communities.

At each site, the camera can be controlled by a remote control similar to the remote control that we use with our television sets at home. Buttons on the remote control can make the camera zoom in and out as well as scan the room. However, it's usually not necessary to use the remote control during a presentation, because the cameras are voice-activated (that is, they will automatically focus on the person who is speaking). Please note that a local host will be available to handle the remote control on your behalf.

Sounds are recorded through a microphone that sits on the conference table and has a MUTE button that turns red when activated. To avoid background noise, your local host has been encouraged to keep your microphone on mute unless a question is being asked, and to a void moving the microphone as this disrupts reception at all other sites.

These rounds will work best if YOU PARTICIPATE! Please feel free to ask questions and to comment on the presentation. Please remember to introduce yourself and state the name of your community.

THANK YOU FOR COMING TODAY! Remember to sign in and fill out an Evaluation Form.

7.A Distance Education Programs, continued

7.A.7 Sample Educational Flyers

7.A.7.1 Sample Mental Health Professional Flyer

Professional Mental Health Education Sessions

Sponsored in collaboration with the Sal'i'shan Institute, Chilliwack, BC

Tuesday, September 17th, 2002

11:00 a.m. – 12:15 p.m. PDT

Mental Health & Aboriginal Peoples - *Module 1*

Perceptions of Health Professionals, facilities, & other things "Medical"

Host Site: The Sal'i'shan Institute Society, Chilliwack
Presenter: Mr. Bill Mussell

Biography of presenter
Bill's career includes significant involvement in probation and parole, post-secondary teaching, organization formation, development, and management (governance matters), community development, and health. He is the Chairman and President of the Native Mental Health Association of Canada and the Principal Educator of the Sal'i'shan Institute. He lives in the Fraser Valley, the traditional home of the Sto:lo people.

Goals

a) to describe the role of medical services in the colonization of First Nations and Aboriginal peoples of British Columbia through the past 100 years, or so
b) to pose the question of how medical services can be employed to help free First Nations and Aboriginal peoples from the negative effects and consequences of colonization.

Learning Objectives

At the end of the interactive session, participants will be able to

- outline historical events and identify the resultant attitudes of British Columbia's First Nations and Aboriginal peoples towards modern health resources
- explore implications of attitudes such as fear, resistance, "reliance" upon emergency services, and preference for own health practitioners
- identify what the Sal'i'shan Institute learned, from the experience of training First Nations community health representatives and alcohol/drug counsellors
- discuss the importance of self-management for the person, family and community, and the ultimate goal of self-determination in the provision of medical services that include mental health
- discuss ways to influence attitudes for better usage of medical services, to result in prevention.

Please register with your local Site Coordinator by September 13th 2002.
For further information contact:

Dawson Creek	Tracy McLellan	250-784-7369	OR	Dr. Stephen Ashwell	250-782-1186
Fort St John	James Thomson	250-787-3380	OR	Dr. Paul Mackey	250-785-6677
Fort Nelson	Lynn Fertuck/Bernice Traichevich	250-774-7092	OR	Dr. Marius Mostert	250-774-7838
Whitehorse, Yukon	Alison Conant	867-667-8346			
Squamish	Dr. Stephen Holliday	604-892-2293			
Sechelt	Tracey Newcombe	604-885-6101			
Powell River	Nora Koros	604-485-3650			
Chilliwack	Marion Mussell (Sal'i'shan Institute)	604-793-1983			

7.A Distance Education Programs, continued

7.A.7 Sample Educational Flyers, continued

7.A.7.2 Sample Educational Flyer – Consumer and Family Distance Education

Family, Consumer and Public Mental Health Education Sessions

Sponsored in collaboration with the Sal'i'shan Institute, Chilliwack, BC

Thursday, October 17th, 2002
7:00 p.m. – 8:15 p.m. PDT

Mental Health & Aboriginal Peoples - *Module 3*
Medical Care to Health Care in First Nations?

Host Site: The Sal'i'shan Institute Society, Chilliwack
Presenter: Mr. Bill Mussell

Biography of presenter
Bill's career includes significant involvement in probation and parole, post-secondary teaching, organization formation, development, and management (governance matters), community development, and health. He is the Chairman and President of the Native Mental Health Association of Canada and the Principal Educator of the Sal'i'shan Institute. He lives in the Fraser Valley, the traditional home of the Sto:lo people.

Description

- Attempts to describe how contemporary family and community life in First Nations have relied heavily upon the notion of dependence, sometimes co-dependence, seldom independence, and rarely co-reliance.
- The purpose of this session is to explore the application of these concepts to the 'realities' of community life, especially the implications of integration, institutionalization, and promising strategies to overcome barriers to positive family and community change.

Learning Objectives

At the end of the interactive session, participants will be able to

- outline the history of programs and services that have contributed to dependence upon health professionals, as opposed to self-care and prevention
- describe challenges connected with establishing/re-establishing family-based health care
- explore ways and means to support "community-based care" that includes professional practitioners serving as consultants, as needed
- examine the importance of providing culturally cogent training for First Nations health workers.

Please register with your local Site Coordinator by October 10th 2002.
For further information contact:

Dawson Creek	Tracy McLellan	250-784-7369	OR	Dr. Stephen Ashwell	250-782-1186
Fort St John	James Thomson	250-787-3380	OR	Dr. Paul Mackey	250-785-6677
Fort Nelson	Lynn Fertuck/Bernice Traichevich	250-774-7092	OR	Dr. Marius Mostert	250-774-7838
Whitehorse, Yukon	Alison Conant	867-667-8346			
Squamish	Dr. Stephen Holliday	604-892-2293			
Sechelt	Tracey Newcombe	604-885-6101			
Powell River	Nora Koros	604-485-3650			
Chilliwack	Marion Mussell (Sal'i'shan Institute)	604-793-1983			

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7.A Distance Education Programs, continued

7.A.8 Protocol for Distribution of Monthly Flyers

Protocol for the Creation & Distribution of Monthly Flyers

Each month, each of the Education Coordinators will forward details of the following month's rounds to the Mheccu Telehealth Program Coordinator. Details will include the presenter's name and affiliation, title of the presentation, and learning objectives.

The Centre for Telehealth @ Mheccu's Program Coordinator will then create and circulate the following month's DRAFT Distance Education Flyers to the MHECCU Distance Education Coordinators as well as the Centre for Telehealth's internal team. Upon confirmation of their approval of the flyers, the flyers will then be circulated to the following recipients prior to the end of the month preceding the event:

- Primary Site Coordinators
- Consumer/Family Local Hosts
- Education Coordinators
- Mental Health Professional Local Hosts
- Alberta Ponoka Host
- Whitehorse Host

At the same time, the flyers will be circulated to Calvin Lim for posting on the Mheccu Web Site.

Information from the educational flyers will also be included on the Monthly Program Calendars.

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7.A Distance Education Programs, continued

7.A.9 Sample Local Host Duties and Responsibilities

SAMPLE

Duties and Responsibilities

Local Host: Consumer and Family Distance Education Sessions

Note: Two co-hosts will share responsibilities and will provide backup for each other for illness, vacations etc.

Local Site hosts will attend all presentations and will be responsible for distributing details of the educational program, ensuring local technical setup, facilitating discussion, as well as distributing and collecting the evaluation forms. Local Hosts will provide attendees with the option of signing a sign-in sheet and will also circulate an Audience Instruction Sheet.

The distance education sessions will be broadcast from Mheccu's facility. The consumer and family rounds are currently held on the third Thursday of the month from 7 – 8 pm.

Prior to Education Session

- Let Site Coordinator know the approximate number of participants you are expecting for the session (minimum of 1 day before the meeting)
- [Site coordinator makes copies of handouts, evaluation forms, sign-in sheet, etc.]
- Pick up keys, copies of handouts, evaluation forms, sign-in sheet and logbook from Site Coordinator on the afternoon of the education session

Before the meeting

- open the room
- set up coffee & tea, sign-in sheet, etc.
- run through test procedures before the meeting
- if there are any technical problems, call Telus at 1-800-339-2033
- unlock elevator

During the education session

- greet participants
- distribute handouts and evaluation forms to all participants. Circulate audience instruction sheet
- keep microphone on MUTE unless a question is being asked
- facilitate discussion during question periods
- ask participants to complete evaluation forms

After the meeting

- collect completed evaluation forms
- complete logbook entry
- tidy up room; clean & put away coffee, equipment, supplies, etc.
- ensure that all participants have left the area
- ensure that the door and elevator are locked
- return keys, evaluation forms, logbook and sign-in sheet to Site Coordinator

7.B E-Learning

The Centre for Telehealth @ Mheccu provides enhanced professional development through continuing education programs to participating sites in B.C. and Yukon. Distance education rounds are regularly scheduled presentations that are broadcast to all the remote communities at the same time. See Mheccu's website for more information on the project and current activities

> Mheccu Website:
http://www.mheccu.ubc.ca/telehealth/

Distance education sessions may be hosted by any site. Health authorities may wish to take advantage of videoconferencing technology to provide additional professional development opportunities within a region, or shared with other regions, in order to

- address identified training requirements
- share specific staff expertise[46] regionally
- standardize knowledge and skills throughout the region
- maximize staff participation at remote sites
- improve the cost-effectiveness of scarce professional development resources (e.g., by reducing professional development travel costs and/or by maximizing the number of staff trained per session).

Information and resources for designing and delivering education sessions via videoconferencing are provided in **7.B.1**, including

- topic selection **(7.B.1.1)**
- format and presentation **(7.B.1.2)**
- curriculum development **(7.B.1.3)**
- advice about room set-up to optimize sound and visuals **(7.B.1.4)**.

Other forms of e-learning are briefly discussed and some resources provided in **7.B.2**.

[46] For example, in the areas of Assertive Community Treatment; Rehabilitation Program Development; Geriatrics; Eating Disorders; etc.

continued

7.B E-Learning, continued

7.B.1 Distance Education Via Videoconferencing

7.B.1.1 Topic Selection

Selection of education topics provided by the Centre for Telehealth @ Mheccu has been based on consultation with service providers and community members, the availability of qualified clinical educators, and review of priorities within the mental health system.

Initial education sessions developed and provided by Mheccu involved single, stand-alone topics (examples of stand-alone sessions include Practical Resources for Clinicians, Dual Relationships, Mental Health Outreach).

Feedback and evaluation from participating sites has indicated that there is also a strong interest in the development of multi-session modules, each concentrating on a specific topic (examples of topic areas addressed through multi-session modules include Mental Health and Aboriginal Peoples, Depression, Axis II/Personality Disorders, Psychopharmacology).

Health authorities and service providers interested in developing additional distance education resources and events to meet their own specific training requirements may base topic selection on existing staff and/or administrative surveys.

The sample educational needs assessment forms for consumer and family members, mental health professionals, and family physicians provided in **7.A.2** may be also be used or adapted if desired.

Other considerations for topic selection include the availability of clinical expertise within or outside of the region as well as training requirements to meet current and emerging standards of practice including provincial Best Practices guidelines, accreditation requirements, etc.

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7.B E-Learning, continued

7.B.1 Distance Education Via Videoconferencing, continued

7.B.1.2 Format and Presentation

The education modules being developed and provided by Mheccu are organized as follows:

- Each education module spans 3-5 weeks, consisting of one 60-90 minute meeting each week.
- A typical module includes 2 (or more) meetings for mental health clinicians, one meeting for the public, and where appropriate, one meeting for physicians.
- Multiple meetings are available to mental health clinicians in order to allow for greater interaction among participants, more detailed information sharing, and discussion of relevant practical challenges arising in the practices of participating professionals.
- Sessions for the public and physicians are intended to be informational, while complementing each theme addressed with mental health staff.

Feedback and evaluations of Mheccu's distance education sessions to date have provided valuable information regarding the format and presentation of education sessions.

- re education sessions by and for physicians:
  – In general, attendance by physicians has been greater when talks are designed specifically for MDs and/or when education sessions are integrated into physician grand rounds in the hospital.
  – Case presentations by local physicians work best.
  – Education sessions should be actively marketed by a colleague.
  – Despite all of the above, unpaid time constraints continue to impact on physician attendance.
  – Presenters may therefore wish to address physicians alongside the mental health clinicians in one session (e.g., to promote shared or better-integrated care and/or where education sessions cannot be integrated into physician grand rounds).
- re mental health professional education sessions:
  – Sessions should be actively marketed including timely dissemination of flyers (via e-mail, posting on staff bulletin boards, etc.) and promotion by colleagues.
  – Staff are generally busy and require detailed information about the topic, the presenter and learning objectives in advance in order to make the decision to attend.
- re consumer and family / public education:
  – Sessions should be actively marketed throughout the community to promote attendance (e.g., through email, public service announcements in local newspapers and other media) and co-marketing by distance education partners (newsletters, targeted mail outs to local members, etc.).

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7.B E-Learning, continued

7.B.1 Distance Education Via Videoconferencing, continued

7.B.1.2 Format and Presentation, continued

When designing educational sessions to be delivered via teleconferencing, presenters should consider the following:

Format

- Use large font, 28+, for slides or overheads.
- Keep slides simple.
  – Avoid the use of animations, scanned pictures, etc.
  – Limit the number of slides (maximum 1 slide per 2 or more minutes of presentation).
  – Simple backgrounds work best.
- Choose text colour that contrasts with the background colour.
- Format slides, paper, or overheads in “landscape” rather than “portrait.”

Presentation

- At the start of each session
  – Welcome and introduce each site.
  – Remind each site to mute their microphones until the Q and A period.
- During each session
  – Look periodically into the camera.
  – Think of it as another member of your audience.
  – Do not ignore the local audience.
- Question-and-answer period
  – Leave enough time for questions and indicate when it is time to move on.
  – Encourage participation by asking each site individually if there are any questions and waiting for a response.
  – Ask distant sites for questions first, before fielding questions from the local audience.
- Clothing:
  – Avoid clothing or jewelry that could make a noise.
  – Wear bland, middle-tone colours; avoid bright colours or busy patterns.

Additional Resources

- See Mheccu’s Telehealth Instructions for Presenters **(See Sample 7.A.3)**.
- Calgary Telehealth Program provides
  – Tips for Presenters and a Presenter Handbook.
  – Power Point Templates – examples of Power Point slides for presentations.

> Calgary Telehealth:
http://www.crha-health.ab.ca/telehealth/resources.htm

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7.B E-Learning, continued

7.B.1 Distance Education Via Videoconferencing, continued

7.B.1.3 Curriculum Development

An effective distance education program via videoconferencing will be supported by developing electronic versions of the following materials for each education session:

- an overall outline for the presentation, stating the content area and relevance to mental health (e.g., burden of illness, prevalence)

- a description of each meeting including
  – number of planned meetings (stand-alone session or modules)
  – target audience for each meeting
  – duration of each meeting.

- a list of learning objectives for each planned meeting
- a list of practice-oriented resources (e.g., articles, books, web links) and support materials

- copies of all slides and support materials to be used in each meeting.

Resources

> BC Centre for Curriculum, Transfer and Technology. This site supports and promotes post-secondary educational excellence and training by supporting educators so learners will have access to high quality, relevant learning opportunities:
http://www.c2t2.ca/

> Barriers to Distance Education – Collection of papers and research:
http://www.emoderators.com/barriers/index.shtml

continued

7.B E-Learning, continued

7.B.1 Distance Education Via Videoconferencing, continued

7.B.1.4 Videoconferencing Room Setup for Distance Education Sessions

Room set-up can be a significant factor in the successful delivery of distance education sessions via videoconferencing. A national group of Tele Health Coordinators[47] made the following recommendations:

- Lighting
  - Lights should face the participants.
  - Avoid backlighting.
  - Avoid shining lights a back wall, thereby creating glare.
  - Walls should be a light, neutral colour – avoid stark white.

- Furniture and signage
  - Use a wedge-shaped table in videoconferencing sessions to enable maximum view of all participants.
  - Use neutral colours for furniture – avoid white, black, bright colours and patterns.
  - Display signage to identify the location of each participating site.

- Noise
  - Recognize room limitations, and develop strategies to compensate.
  - Place seating closer to the microphone if noise is a problem.
  - Place the microphone in the centre of the table, and avoid moving it during the session, as this causes disruptive noise at all other sites. Keep microphone on mute unless speaking to other sites.
  - Consider mounting microphones on the ceiling above a plate of plexi-glass. This eliminates table-level noise and gives the microphone a broader range.

- Camera and peripherals
  - Simulate eye contact for group videoconferencing (e.g., through appropriate camera placement and pre-setting the camera).
  - If the presenter likes to stand and move, mark a taped square in an area of the floor that indicates where the presenter can move and be within the range of the camera. Make similar adjustments for any other peripheral device used.

- Security
  - The location of the room should be private and quiet.
  - The room should be appropriately soundproofed, taking account of any sound travel along airshafts, etc.
  - **See 5.B.2: Privacy / Confidentiality** for room considerations relating to patient / client confidentiality.

See also 5.A.2.1: Sample Features of Videoconferencing Rooms and Desirable Enhancements

[47] *Developing Canadian Telehealth Guidelines: A National Workshop for Telehealth Coordinators,* Advisory Council on Health Infostructure (ACHI) Telehealth Working Group, October 2001

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7.B E-Learning, continued

7.B.2 Other Forms of E-Learning

E-learning is a means of providing opportunities for learning through new mechanisms of communication, including computer networks, multimedia learning resources, content portals, search engines, electronic libraries, distance learning, and Web-enabled classrooms. E-learning is characterized by speed, technological transformation, and mediated human interactions.[48]"

Computer Mediated Communications (CMC) can be achieved by the use of networked computers. CMC can be used to promote collaborative learning, particularly for students who may be separated by distance or time. Collaborative learning allows students to work together to explore, discuss, and create meaning. CMC can promote collaboration through both immediate (real-time or synchronous) interaction as well as time-shifted (delayed or asynchronous) interaction that allows time for reflection.

Additional information on CMC and its use for collaborative learning is available at

> University of Plymouth, UK:
http://www.fae.plym.ac.uk/tele/tele.html

The Internet is a widely available technology, with at least 50 million users world-wide (1999 figures). A range of web-based resources has evolved to support the provision of distance learning any time and anywhere.

Online continuing medical education (CME) has grown significantly during the past few years despite the fact that physicians have a relatively low comfort factor with computer-based technology. However, the rate at which medical knowledge is increasing, combined with more demanding licensure and accreditation requirements, is placing pressure on CME to evolve to meet the needs of busy physicians. Several Web-based health education companies work with universities, specialty medical societies and medical schools to put their CME courses on-line.

Web-Based Resources

Web-based educational tools:

> WebEx – Web Conferencing:
http://www.webex.com/

> WebCT – Online provider of technology-enabled learning solutions:
http://www.webct.com/

[48] P. Stokes, *How E-Learning Will Transform Education,* Education Week, September 13, 2000.

continued

7.B E-Learning, continued

7.B.2 Other Forms of E-Learning, continued

Online magazines:

> Telemedicine Journal and E-Health:
http://www.liebertpub.com/tmj/default1.asp

> Journal of Telemedicine and Telecare:
http://www.coh.uq.edu.au/jtt/index.html

Connections to e-learning opportunities and resources:

> Meetings, Organizations and General Resources in Behavioral Healthcare:
http://www.umdnj.edu/psyevnts/psyjumps.html

> Comprehensive list of online CME providers:
http://netcantina.com/bernardsklar/

> Royal College of Physicians and Surgeons of Canada:
http://www.rcpsc.medical.org

> Department of Psychiatry, University of Chicago:
http://psychiatry.bsd.uchicago.edu/grounds

> Manchester Visualization Centre – Computer graphics and virtual environments:
http://www.sve.man.ac.uk/mvc/

> Distance Education and Training in Canada and other countries:
Health Canada website at:
http://www.hc-sc.gc.ca/ohih-bsi/res/educ_e.html

SECTION 8

TECHNICAL SUPPORT

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SECTION 8 TECHNICAL SUPPORT

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8.A Videoconference Orientation and Support

8.A.1 Overview

As part of numerous Telehealth initiatives, videoconference equipment has been supplied and installed at the Centre for Telehealth @ Mheccu on the UBC Campus, as well as at participating sites throughout BC and Yukon.

The room-based videoconferencing system comprises a camera, monitor, computer and microphone on a roll-about equipment cart. A user-friendly remote control device is used to place calls and to control the camera and sound. The network uses dial-up telephone technology, with three ISDN BRI circuits (a total of 6 channels) providing a bandwidth of 336 – 384 kbps. **See Section 2.D** for a more detailed discussion of videoconferencing technology, and **2.D.1** for an illustration of a room-based videoconference system.

Multi-point meetings are commonly arranged by booking bridging services with the service provider (Telus or Northwest Tel in B.C./Yukon). Contacts for booking multi-point meetings are listed in **Section 8.A.2 Resources**. Multi-point meetings are audio-switched – that is, the site with the speaking person is seen and heard by all the participating sites. For this reason, the microphone should be set for 'mute' when participating in a multi-point meeting and switched on only when participants at the local site wish to speak.

Section 8.A.2 Resources provides information on videoconference technical support, including a list of on-line and print resources. Basic videoconferencing instructions are provided in **8.A.2.1**. Basic troubleshooting information is provided in **8.A.2.2**. Sample trouble shooting sheets for posting in videoconference rooms are provided in **8.A.2.3**.

Aside from technical support that may be available locally, technical support is available from Telus by dialing **1-800-339-2033**.

Section 8.A.3 provides information on B.C. Telehealth Initiative site locations and descriptions. On-line resources provided by the Centre for Telehealth @ Mheccu are described in **8.A.3.1**. Each participating videoconferencing site / location will record their equipment and network details on the standardized Sample Blank Site Information Form. Site Details and Site Coordinator contact information is provided for Mheccu and other selected sites in **8.A.3.2**.

Section 8.A.4 provides information on scheduling software and support provided by the Centre for Telehealth @ Mheccu.

All network activity at any participating BC / Yukon Telehealth site is recorded in Videoconference Logbooks **(See Sample 9.A.2.5)** that are maintained in each location by the Local Site Coordinator.

Considerations regarding the location of videoconferencing equipment are discussed in **Section 5.A.2: Coordination**. Room set-up factors (e.g., factors affecting sound and visual quality) are discussed in **5.A.2.1: Features of Videoconference Rooms and Desirable Enhancements** and in **Section 7.B.1.4: Videoconferencing Room Setup for Distance Education Sessions**. Room and equipment security and privacy considerations are discussed in **Section 5.B.2: Privacy / Confidentiality**.

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8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support

TELUS TECHNICAL SUPPORT

- **Telus Videoconference Support Desk:**
  Telephone: **1-800-339-2033**

- **Multi-point bridge sessions can be scheduled by contacting Telus at:**
  – Telephone: **1-800-272-9628**
  > Email: videoconferencing@telus.com

NORTHWESTEL

- **Multi-point bridge sessions can be scheduled by contacting NWT, Yellowknife at:**
  – Telephone: **1-800-661-0790**

THE CENTRE FOR TELEHEALTH @ MHECCU

- **Mheccu Website:**
  The Centre for Telehealth @ Mheccu website provides a range of information including an overview of the BC Telehealth Initiative, information on education sessions and partners, and webcasts. The site is currently being updated to provide detailed information about participating telehealth sites throughout BC and the Yukon **(See 8.A.3.1 for more information)**. An on-line version of this handbook can be downloaded from the site.
  > Mheccu Website:
  http://mheccu.ubc.ca/telehealth/

- **Mheccu Staff Contacts:**
  Manager
  James Coyle
  > Email: coyle@interchange.ubc.ca
  Telephone: **(604) 822-1642**

- **Distance Education:**
  Mheccu distributes information about upcoming distance education sessions on a regular basis.
  See Section 7: Distance Education

- **Scheduling:**
  See 8.D: Scheduling

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8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support, continued

MANUFACTURER SUPPORT

- The manufacturer of the videoconference unit publishes a User Manual that provides information on both basic and advanced equipment set-up and operation. This manual is provided in hard and/or soft copy with the delivery of the purchased system. The manual and other operating information can be accessed on-line.

  For example, Polycom (a major supplier of videoconference equipment) provides a range of user support functions including:

– Short video clips illustrating how to operate the videoconference equipment
– User manual downloads
– Frequently Asked Questions with answers
– Polycom user groups

> Polycom website:
http://www.polycom.com/resource_center

- The manufacturer also provides technical support for the videoconferencing equipment. For example, Polycom provides telephone and email technical support at:

> Polycom Technical Support:
Telephone: 1-800-POLYCOM
Email technical support can be accessed through the company's website shown above

OTHER RESOURCES

- The Ministry of Health has developed a practical guide to assist with the start-up and implementation of telehealth projects in British Columbia, which can be accessed at:

> Telehealth Projects: A Practical Guide, MOH:
http://www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

- *Effective Videoconferencing, Techniques for Better Business Meetings,* Lynn Diamond, Ph.D & Stephanie Roberts, 1996

- *Videoconferencing for the Real World – Implementing Effective Visual Communications Systems,* John Rhodes, 2001

- *Videoconferencing and videotelephony – Technology and Standards,* 2nd Edition, Richard Schaphorst, 1999.

- *Bretford's Guide to Successfully Planning a Video Conferencing Room,* Bretford Manufacturing Ltd, 1999.

- *Smart Videoconferencing – new habits for virtual meetings,* J. Barlow, P. Peter, L. Barlow; October 2002

- *Videoconferencing, The Whole Picture,* 3rd Edition, James Wilcox, 2000.

continued

8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support, continued

8.A.2.1 Sample Handout: How to use the Video Conference Unit

The video-conference unit is easy to use. The hand-held remote control is user-friendly and works much like the one on a television set.

For basic videoconferencing, follow these steps:

1. **Switch on the TV monitor**

   The unit may already be on, but may be waiting on “standby mode” with a blank screen. Moving the remote control will switch it on.

   If this doesn’t work, press the TV monitor power button ‘on’.

2. **(a) Wait for the incoming call**

   If the people are calling you, make sure that the camera is pointing where you want it to point (use the arrow buttons on the remote control) and wait for them to call.

   The machine will ring loudly and then connect.

   OR

3. **(b) Call the far site**

   If you are making the call, OR if there are a lot of problems receiving the call, dial the video number (including area code) using the remote control. The number shows up on the screen and you can use the backup key if you make a mistake. Also set the correct speed if required (this is usually 336 or 384 -- the default is likely to be 384)

   When you’ve finished typing in the number, press the green ‘connect’ button on the remote control, and it will connect to the far end.

4. **End the video conference**

   Press the Mute button .

   Press the disconnect/hang-up button on the remote control to end the call.

   This is a good thing to do even if it appears that the far end site has already disconnected. It avoids any long distance calls continuing by accident.

8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support, continued

8.A.2.2 Sample Handout: Trouble Shooting for the Video Conference Unit

Settings can affect the operation of the Video Conference Unit, so that it may appear that something has gone wrong when there is nothing technically wrong with the system.

Before calling technical support for help, review the following checklist for possible solutions:

Problem:	**Possible Cause:**	**Solution:**
Blank monitor screen	Is the system on 'standby'?	Pick up the remote to see if the monitor resumes functioning.
	Is the screen switched off?	Press the monitor POWER button 'on'
(Multiple screen system only) Blank white or other still image showing on screen	Has the source for the left-hand screen been set to 'View Still Image'?	Press 'Self View' on the remote control
	Is the video source set to use the Document Camera?	Press 'Main Cam' on the remote control
You can't hear the remote site	Is your volume control set to zero?	Adjust volume control on monitor
	Is the microphone switched off at the remote end?	Confirm that microphone at remote site is switched on
The remote site can't hear you	Is your microphone switched off?	Switch on microphone using remote control or press button on microphone
	Is your microphone disconnected?	Check connection
	Is volume control at the remote site set to zero?	Request remote site to check volume control (use visual cues, or call them using the telephone)
Remote site can't connect to you	Is the far end is dialing the correct video number?	Confirm that the remote end appears to be dialing the correct video number and speed If problem persists, as a last resort attempt calling the remote site
Can't connect to the remote site	Are you dialing the correct long distance area code and video number?	Check video number and speed, and redial If problem persists, contact local support staff **If local support staff are not available, call Telus technical support at 1-800-339-2033**

8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support, continued

8.A.2.3 Sample Handout: Trouble Shooting Sheets

SAMPLE

IF YOU ARE EXPERIENCING PROBLEMS DURING A DISTANCE EDUCATION ROUND THAT INVOLVES 3 OR MORE SITES, PLEASE CALL

Telus Technical Support at:

1-800- 339-2033

8.A Videoconference Orientation and Support, continued

8.A.2 Resources for Orientation and Support, continued

8.A.2.3 Sample Handout: Trouble Shooting Sheets, continued

SAMPLE

Troubleshooting
Direct Room Numbers

Mheccu	604-822 0765
Fort Nelson	250-774 7092 (X 27)
Dawson Creek Hospital	250-784 7369
Dawson Creek Health Ctr	250-784 2485
Fort St John Hospital	250 262-5274
Riverview	604 202 5561
Nanaimo	250 754 8780
Ponoka Room A	403-783-7624
Ponoka Room B	403-783 7867
Children's Hosp.	604-875-2000 (X 6536)
Vancouver Hosp.	604- 875 5666 (X 63562)

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8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions

8.A.3.1 Centre for Telehealth @ Mheccu On-line Resources

The Centre for Telehealth @ Mheccu website is being updated to provide current information about the location and description of active telehealth sites throughout B.C. The Telehealth Partner Portal has search capabilities to show details of sites alphabetically, by site type and by jurisdiction. **(See Sample Screen Views: 8.A.3.1.1).**

The Telehealth Partner Portal can be accessed at the Mheccu website:

> Mheccu Website:
http://mheccu.ubc.ca/telehealth/resources.cfm

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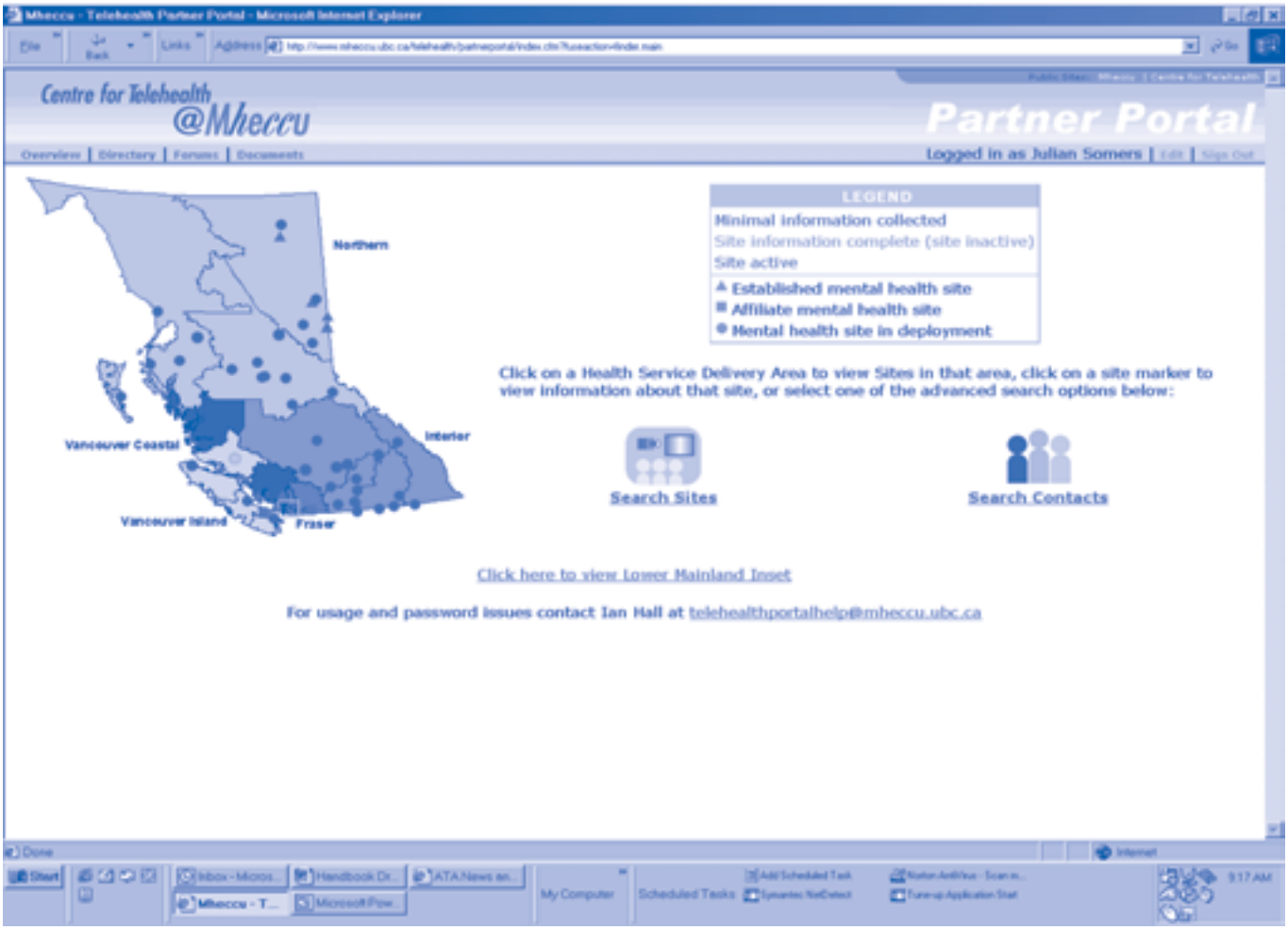
8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.1.1 Screen Views of On-Line Information



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8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.1.1 Screen Views of On-Line Information, continued

continued

8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.2 Sample: Site Details for Selected Sites – 1. Centre for Telehealth @ Mheccu

Site Name:
MHECCU, UBC Site

Address:
2250 Wesbrook Place
University of BC
Vancouver V6T 1Z1

Room Equipment Located In:
Conference Room

Phone Number In Video Conference Room:
(this is for telephone calls – not video conferencing connection)
604-822-0765

Site Coordinator:
James Coyle

Phone:
604-822-7530

Fax:
604-822-7786

E mail:
coyle@interchange.ubc.ca

Type of Network:
ISDN

DIAL THIS NUMBER FOR VIDEO CONFERENCING
604-822-7530

Brand of Equipment:
POLYCOM MP

Max Bandwidth
384 Kbps

Available Peripherals:
Document Camera
VCR
Videoscan converter

continued

8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.2 Sample: Site Details for Selected Sites – 3. BC Children's and Women's Hospital

Site Name:
BC Children's Hospital

Address:
Dept. Biomedical Communications
Room 2H16, 2nd floor
BC Children's Hospital
Vancouver, BC

Room Equipment Located In:
2H16 Dept. Biomedical Communications

Phone Number In Video Conference Room:
(this is for telephone calls – not video conferencing connection)
604-875-2000 Local 6536

Site Coordinator:
Zayna Kunic

Phone:
604-875-3498

Fax:
604-875-2502

E mail:
Telehealth@cw.bc.ca

Type of Network:
Fibreoptic

DIAL THIS NUMBER FOR VIDEO CONFERENCING
Call 604-454-6451 Advise you are booked with Children & Women's Hospital and need the dial in number for the gateway. Calls at 384 speed
Not applicable

Available Peripherals:
VHS camera
Document camera
VCR

If unable to connect with Site Coordinator, please call: 604-875-2312

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8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.2 Sample: Site Details for Selected Sites – 4. Vancouver General Hospital

Site Name:
VANCOUVER GENERAL HOSPITAL

Address:
Basement
Biomedical Communication Office
700 10th street
Vancouver, BC

Room Equipment Located In:
Room 13

Phone Number In Video Conference Room:
(this is for telephone calls – not video conferencing connection)
604- 875-5666 ext. 63562

Technical Coordinator:
For technical problems call:
David MacDonald

Phone:
604-875-5020

Type of Network:
ISDN

DIAL THIS NUMBER FOR VIDEO CONFERENCING
604-872-5436

Brand of Equipment:
Picturetel

Max Bandwidth
384 Kbps

Available Peripherals:
Document camera
VideoScan converter
2nd camera
VCR

For booking purposes call Virqinia Grosman at 604-822-7177

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8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.2 Sample: Site Details for Selected Sites – 5. Alberta Ponoka Hospital

Site Name:
ALBERTA PONOKA HOSPITAL

Address:
Box 1000
PONOKA, ALBERTA
T4J 1R8

Room Equipment Located In:
Room A
Room B

Phone Number In Video Conference Room:
(this is for telephone calls – not video conferencing connection)
Phone in Room A: 403-783-7624
Phone in Room B: 403-783-7867

Site Coordinator:
Patti Pugh

Phone:
403-783-7731

Fax:
403-783-7641

E mail:
Patti.pugh@amhb.ab.ca

Type of Network:
Switch 56 , Fractionated T1

DIAL THIS NUMBER FOR VIDEO CONFERENCING
Room A 403-783-8309
Room B 403-783-8342

Brand of Equipment:
VTel

Max Bandwidth
336/384 Kbps

Available Peripherals:
Document camera
VideoScan converter
VCR
Smartboard

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8.A Videoconference Orientation and Support, continued

8.A.3 Telehealth Site Locations and Descriptions, continued

8.A.3.2 Sample: Site Details for Selected Sites – 6. Telus Bridge

Site Name:
TELUS BRIDGE SITE ARRANGED BY PONOKA

Contact:
Bernd Stephan

Phone:
1-800-339-2033

E mail:
bernd.stephan@telus.com

Second Number:
403-540-3097

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8.A Videoconference Orientation and Support, continued

8.A.4 Scheduling

The Centre for Telehealth @ Mheccu has been responsible for scheduling clinical and distance education sessions and distributing calendars to each participating site on a regular basis **(See 6.A.2.7 for Sample Monthly Calendar)**.

The scheduling function typically involves repeated contacts with clinicians, educators and support staff to request, confirm, book, cancel and reschedule various videoconference facilities. As new sites are added to the Telehealth Initiative, the scheduling function has increased significantly in complexity.

Scheduling becomes particularly complicated when:

- Changes are made frequently
- Resources are in high demand, or in conflict with other activities;
- Multi-point connections are desired to bring together multiple participants at many sites;
- Many different parties would like to be involved in different parts of schedule development

Mheccu is now planning to introduce secure scheduling software that will address security, flexibility and multi-site / multi-level requirements.

The new videoconference scheduling system will be provide a user-friendly means of scheduling telehealth sessions and accessing related information. Specifically designed for use with a provincial telehealth videoconferencing network, it will be accessible by a number of people at a variety of security levels and locations. It will enable users from different sites to make scheduling updates and changes easily and efficiently. It will also facilitate the automated capture of information about scheduled events for analysis and reports, for example for evaluation purposes **(See Section 9: Evaluation)**.

See 8.A.4.1 for a sample screen view of the new system.

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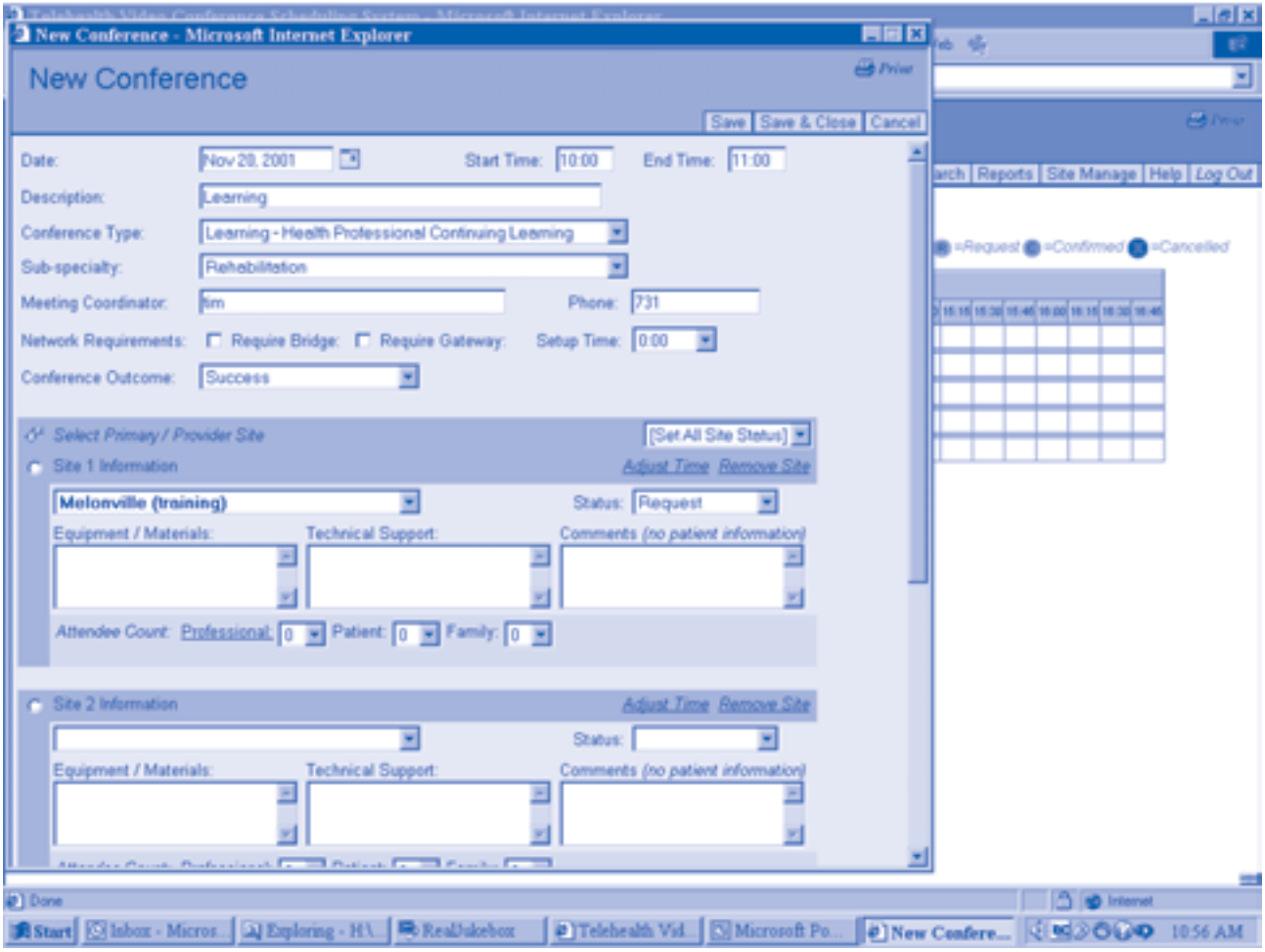
8.A Videoconference Orientation and Support, continued

8.A.4 Scheduling, continued

8.A.4.1 Screen View of Videoconference Scheduling System



SECTION 9

EVALUATION

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SECTION 9 EVALUATION

9.A Telehealth Initiative Evaluation Overview

In 1999, Mheccu responded to a request of the Adult Mental Health Division, British Columbia Ministry of Health, and the Health Authorities in the Peace Liard Health Region of northeastern BC to implement a pilot telehealth project **(See Section 2.B.3 for a detailed description of the project)**.

The pilot was intended to establish, review and refine processes prior to expansion to other locations in the province. The Telehealth partnership headed by Mheccu was subsequently successful in obtaining Health Canada CHIPP funding) for a more comprehensive evaluation of the process of implementation as it expands into other regions throughout BC and Yukon, as well as the effects of the program.

Objectives of the CHIPP initiative are to

- improve access to mental health services in rural and remote areas of British Columbia and Yukon
- improve the efficiency and quality of mental health services to consumers in rural and remote areas of British Columbia and Yukon
- provide mental health services more cost effectively to rural and remote areas of British Columbia and Yukon (e.g., by reducing cost of travel, time lost from work
- improve access to distance education programs for consumers, mental health professionals and physicians in British Columbia, Yukon, and Alberta.

The purpose of the evaluation is to determine program effectiveness as well as to identify challenges and make recommendations for program improvements.The evaluation methodology incorporates process, impact and outcome approaches and will utilize both quantitative and qualitative data **(See 9.B.1: Types of Evaluations** for discussion of terminology).

Evaluation domains include

- *outcomes* of education and clinical service sessions
- *satisfaction* of participants regarding clinical, educational and technological aspects of service
- *changes in access and utilization* with respect to clinical services (inclusion of telehealth in local networks of care and education, reduced consumer travel or waiting periods, increased number of consultations and follow-up assessments, innovative applications, and autonomous use)
- *implementation* of technology-intensive services, with a focus on lessons learned and impacts
- *cost-comparison* analysis of cost outcomes associated with distance consultations and distance education sessions
- *technology* performance in meeting community and clinical needs.

continued

9.A Telehealth Initiative Evaluation Overview, continued

The **Evaluation Framework** is summarized in **9.A.1** and an **Evaluation Protocol** for local sites is outlined in **9.A.2**.

The evaluation will make use of a variety of administrative information sources, including Intake Forms and Consultant Activity Logs. In addition, several evaluation forms have been developed for use immediately after each consultation and education session, including

- **9.A.2.1: Patient / Family Member Consultation Evaluation Form**
- **9.A.2.2: Local Service Provider Consultation Evaluation Form**
- **9.A.2.3: Consultant Evaluation Form**
- **9.A.2.4: Distance Education Evaluation Form.**

A Videoconference Logbook **(See 9.A.2.5)** has also been developed to monitor equipment use. The logbook will monitor a variety of uses of the videoconferencing equipment in addition to its primary purposes, including administrative meetings, case conferences, employment interviews, etc. This will help document the expanding uses of the equipment, and any technical problems experienced over the course of the implementation.

For those users interested in conducting independent evaluations of telehealth initiatives, **Section 9.B** provides a brief discussion of evaluation approaches. Types of evaluations are discussed in **9.B.1** and practical approaches are discussed in **9.B.2**. **Section 9.B.3** suggests evaluation tools that could be adapted for use, and **Section 9.B.4** provides references to other evaluation resources.

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9.A Telehealth Initiative Evaluation Overview, continued

9.A.1 Evaluation Framework

Framework (CHIPP)
Evaluation of the Tele Mental Health Program

Domains	Questions	Types of Measures, Examples
Outcomes – Educational Services for Health Professionals Outcomes – Clinical Services Evaluation	Do educational sessions satisfy learning objectives for participants? How do TH educational sessions complement other CPD or educational activities? Is TMH a sensitive enough medium to deliver clinical service?	Evaluation forms (including Comments sections) Narrative accounts post-implementation and at conclusion of Program Consultation throughout Program
Satisfaction with clinical TMH Services **Satisfaction** with educational TMH services **Satisfaction** with technology of TMH services	Will all users (even first-time users) find TMH services satisfying for clinical consults? How satisfying? Will all users (even first-time users) find TMH services satisfying for educational sessions/professional development/continuing medical education? How satisfying? From the perspective of consumers, family members and providers, how does the Program affect the quality of services/care provided (i.e., effects on accessibility, quality, and efficiency of health, health services, and health care)? Is technology/medium suitable for addressing your particular concerns?	Evaluation forms (including Comments sections) Narrative accounts post- implementation and at conclusion Consultation throughout Program
Satisfaction with technology performance	Did the technologies used meet standards for effective use? (Criteria for the technologies: simplicity/user friendly, interoperability, low-cost/availability, sustainability, open standards, portability, scalability, reliability, privacy/confidentiality)	Evaluation forms (including Comments sections) Narrative accounts post-implementation and at conclusion of project
Activity – basic activity, innovative applications and autonomous use	How does the Program affect access to, or utilization of, health services? Is the program (TMH) associated with changes in activity and levels of service in the health care system, and in rural and remote regions? How often are telehealth services utilized and for what purpose(s)?	Evaluation forms (including Comments sections) VC Log Forms/Phone records/Activity Logs/Administrative data, and other Records of use between partners Narrative accounts post-implementation, and throughout project

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9.A Telehealth Initiative Evaluation Overview, continued

9.A.1 Evaluation Framework, continued

Domains	Questions	Types of Measures, Examples
Implementation	Does the program influence scheduling and consultation patterns? How? In what ways does the Program foster integration, coordination and/or collaboration of health services within and between partner communities? What are the intended and unintended consequences of establishing a telehealth infrastructure? What proved to be the most innovative aspects of the Program? What kinds of health and related impacts have occurred as a result of the Program? What is the impact of the technology infrastructure on the community environment and health provider environment, including health team consumers & family members, advocacy and other groups?	Evaluation forms (including Comments sections) VC Log Forms/Activity Data Health Records Relationship to Outreach Narrative accounts post-implementation and at conclusion of project
Implementation – Post-Impressions, Data Sum-up	What lessons have we learned in developing and implementing the Program that might be useful to other jurisdictions/regions/settings, and to other programs? What went well? What did not go well? What would we do differently if we were to begin again?	Evaluation forms (including Comments sections) Qualitative data from project administrators, clinicians, community members, consumers and family members, NGO partners (in the form of focus groups and/or interviews)
Cost- Analysis	What are the fixed and variable costs of a TMH service? How do these costs compare to the costs of receiving outreach psychiatric care(e.g., cost of travel for services, lost time at work)? What are the costs of continuing education, CPD, and public education initiatives?	Evaluation forms (including Comments sections) Health records Budgets Financial tracking and Specific Cost-Analysis Methodology Cost of urban services Cost of the telehealth service for clients, providers, and health care system as compared to the alternatives Narrative accounts post-implementation and at conclusion of project

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9.A Telehealth Initiative Evaluation Overview, continued

9.A.1 Evaluation Framework, continued

Domains	Questions	Types of Measures, Examples
Technology Performance **a. Community needs** **b. Clinical needs** **c. Technology capabilities**	How well did the technology meet the Project requirements? Did the technology meet community and user criteria for success (e.g. scalability, portability, reliability, privacy controls, etc.) How does technology-mediated service complement alternatives?	Evaluation forms (including Comments sections) RFP process/Company Training Guide Assessments Dialogue/narrative review at 12 months Activity logs Ratings by consumer, community health professionals, and consultant of apparent appropriateness and effectiveness of technology

continued

9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol[49]

1/ The Local Site Coordinator will be responsible for completing an "Intake Form" for each patient / client scheduled for a telehealth consultation.

2/ The Local Site Coordinator will complete the "Consultant's Schedule" form. This form is then to be faxed to the Consultant along with an "Intake Form," other relevant referral information (determined in consultation with the consultant), and a copy of the "Consultant Evaluation Form".

3/ Following the consultation, the Local Site Coordinator (or that person's designate) will ask the patient (or attending family member) to complete a Patient/Family Member Consultation Evaluation Form and ask the attending health care professional to complete a Local Service Provider Consultation Evaluation Form. The Local Site Coordinator (or that person's designate) will then collect and forward these completed forms to Mheccu's Telehealth Coordinator.

4/ Following the consultation the Consultant will complete the Consultant Evaluation Form, which he/she will forward to the Local Site Coordinator along with the completed reimbursement form "Certificate of Services". The Local Site Coordinator will forward these forms to Mheccu's Telehealth Coordinator.

5/ The Local Site Coordinator (or that person's designate) will be responsible for ensuring that all participants in Education sessions receive a Distance Education Evaluation Form to complete. These will be collected at the end of the session, and forwarded to Mheccu's Telehealth Coordinator.

6/ The Local Site Coordinator (or that person's designate) will be responsible for ensuring that a Videoconference Logbook form is always posted with the teleconferencing equipment, so that all who use it can document that usage. The Local Site Coordinator will periodically forward completed forms to Mheccu's Telehealth Coordinator.

Cross-References

Intake Forms:

- Sample Adult Geriatric Intake Form: **6.A.2.4**
- Sample Child and Youth Intake Form: **6.B.2.2**
- Sample Mood Disorders Patient Information Questionnaire: **6.C.1.1**
- Sample Cross-Culture Psychiatry Form: **6.C.2.1**

- Sample Consultant's Schedule Form: **6.A.2.5**
- Patient / Family Member Consultation Evaluation Form: **9.A.2.1**
- Local Service Provider Consultation Evaluation Form: **9.A.2.2**
- Consultant Evaluation Form: **9.A.2.3**
- Sample Certificate of Services Form: **6.A.2.6**
- Distance Education Evaluation Form: **9.A.2.4**
- Videoconference Logbook Form: **9.A.2.5**

[49] **Section 9.A.2** is intended to provide a checklist of duties for coordinators re: the evaluation function; it summarizes duties previously outlined in **Sections 6: *Clinical Services* and 7: *Distance Education***

9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol, continued

9.A.2.1 Patient/Family Member Consultation Evaluation Form

Centre for Telehealth @ Mheccu Mental Health Evaluation & Community Consultation Unit

p/fm CONSULTATION EVALUATION

NAME (OPTIONAL) _____ DATE _____ LOCATION _____

1 **Was this your first videoconference?** ☐ YES ☐ NO

2a Ethnicity ☐ CAUCASIAN ☐ FIRST NATIONS ☐ SOUTH EAST ASIAN ☐ OTHER (PLEASE SPECIFY): _____

b Gender ☐ MALE ☐ FEMALE

3 How much do you agree with each of the following statements?	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
a I was satisfied with the session.	☐	☐	☐	☐	☐
b I was able to present the same information I would have presented in person.	☐	☐	☐	☐	☐
c I felt the doctor listened to me.	☐	☐	☐	☐	☐
d There was enough time to deal with everything that needed to be covered.	☐	☐	☐	☐	☐
e I felt supported and encouraged.	☐	☐	☐	☐	☐
f I felt less distress after having this consultation.	☐	☐	☐	☐	☐
g I was comfortable with my ability to talk with the consultant.	☐	☐	☐	☐	☐
h The technology allowed me to express my concerns.	☐	☐	☐	☐	☐
i The equipment was easy to use.	☐	☐	☐	☐	☐

4 **Was there anything that you would have liked to have seen done that was not done because this was not a face-to-face consultation?**

☐ YES ☐ NO

If Yes, please specify:

5 How beneficial was the telehealth consultation in relation to the following?	EXTREMELY BENEFICIAL	SOMEWHAT BENEFICIAL	NOT AT ALL BENEFICIAL
a I started treatment earlier.	☐	☐	☐
b I did not need to miss work.	☐	☐	☐
c I did not need to travel.	☐	☐	☐
d Avoided admission to hospital.	☐	☐	☐
e Other (please specify):			

6 **Do you have any other comments?**

Please return completed form to your Site Coordinator. Thank you for taking the time to complete this survey!

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9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol, continued

9.A.2.2 Local Service Provider Consultation Evaluation

Centre for Telehealth @ Mheccu Mental Health Evaluation & Community Consultation Unit

lsp CONSULTATION EVALUATION

NAME _____ DATE _____ LOCATION _____

1 **Was this your first videoconference consultation?** ☐ YES ☐ NO

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
2	**How much do you agree with each of the following statements?**					
a	I was satisfied with the session.	☐	☐	☐	☐	☐
b	I was able to present the same information I would have presented in person.	☐	☐	☐	☐	☐
c	I believe the patient was satisfied with the session.	☐	☐	☐	☐	☐
d	Both the consultant and the patient seemed comfortable with the technology.	☐	☐	☐	☐	☐
e	I was comfortable with the technology.	☐	☐	☐	☐	☐
f	There was enough time to deal with everything that needed to be covered.	☐	☐	☐	☐	☐
g	The referral was appropriate for participation in a video consultation.	☐	☐	☐	☐	☐
h	The technology performed adequately to meet the needs of this consultation.	☐	☐	☐	☐	☐

3 **Who was present at the consultation / conference?** (please note all that apply)

☐ CLIENT ☐ PSYCHIATRIST ☐ FAMILY PHYSICIAN
☐ MENTAL HEALTH CLINICIAN ☐ SPOUSE ☐ OTHER FAMILY MEMBER
☐ OTHER (PLEASE SPECIFY):

		EXTREMELY BENEFICIAL	SOMEWHAT BENEFICIAL	NOT AT ALL BENEFICIAL
4	**How beneficial was the telehealth consultation in relation to the following?**			
a	Initiated treatment earlier.	☐	☐	☐
b	Patient did not miss work.	☐	☐	☐
c	Patient did not need to travel.	☐	☐	☐
d	Prevented deterioration of condition.	☐	☐	☐
e	Avoided admission to hospital.	☐	☐	☐
f	Other (please specify):			

5 **Do you have any other comments?**

9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol, continued

9.A.2.3 Consultant Evaluation Form

Centre for Telehealth @ Mheccu Mental Health Evaluation & Community Consultation Unit

CONSULTATION EVALUATION C

NAME _____ DATE _____ LOCATION _____

1 **Have you treated this patient before?** ☐ YES ☐ NO **If Yes, was it in person?** ☐ YES ☐ NO

2 **Was this your first video conference?** ☐ YES ☐ NO

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
3	**How much do you agree with each of the following statements?**					
a	I was satisfied with the consultation.	☐	☐	☐	☐	☐
b	I was able to present the same information I would have presented in person.	☐	☐	☐	☐	☐
c	I believe the patient was satisfied with the session.	☐	☐	☐	☐	☐
d	The technology allowed me to attend to the same signs and symptoms that I would otherwise attend to in person.	☐	☐	☐	☐	☐
e	I was comfortable with the technology.	☐	☐	☐	☐	☐
f	There was enough time to deal with everything that I needed to cover.	☐	☐	☐	☐	☐
g	I was comfortable with my ability to interact with the patient.	☐	☐	☐	☐	☐
h	I would utilize video conference technology to consult on similar referrals in the future.	☐	☐	☐	☐	☐
i	The referral was appropriate for participation in a video consultation.	☐	☐	☐	☐	☐

4 **Are there any improvements to the technology that would have enhanced the consultation?**

☐ YES ☐ NO

If Yes, please specify:

5 **Was there anything you would have liked to do that was not done because this was not a face-to-face consultation?**

☐ YES ☐ NO

If Yes, please specify:

6 **In your opinion:**

a **What are the primary benefits of current telepsychiatry in B.C.?** (please check all that apply)

☐ TIMELY SERVICES TO PATIENTS ☐ CONVENIENCE TO SPECIALISTS ☐ FINANCIAL SAVINGS IN PATIENT CARE

☐ INCREASED CONSULTATION BETWEEN PROFESSIONALS ☐ IMPROVED QUALITY OF CARE

☐ OTHER (SPECIFY):

b **What are the primary limitations of current telepsychiatry in B.C.?** (please check all that apply)

☐ INCREASED BURDEN OF CARE ON SPECIALISTS ☐ UNCLEAR REFERRAL PATTERNS ☐ INAPPROPRIATE REFERRALS

☐ UNDEVELOPED REMUNERATION PROCEDURES ☐ TECHNOLOGY COMPROMISES CLINICAL EFFECTIVENESS

☐ OTHER (SPECIFY):

7 **What follow-up was advised based on this telehealth consultation?**

☐ OUTREACH FOLLOW-UP ☐ COMMUNITY-BASED TREATMENT ☐ RECOMMEND ADMISSION TO HOSPITAL

☐ TELEHEALTH FOLLOW-UP ☐ NO FOLLOW-UP

☐ OTHER (SPECIFY):

8 **Do you have any other comments?**

Please return completed form to your Site Coordinator. Thank you for taking the time to complete this survey!

9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol, continued

9.A.2.4 Distance Education Evaluation Form

DISTANCE LEARNING EVALUATION

Centre for Telehealth@Mheccu Mental Health Evaluation & Community Consultation Unit

DATE _____ SESSION TITLE / TOPIC _____

PRESENTER _____ PRESENTER'S LOCATION _____ YOUR LOCATION _____

Was this your first videoconference? ☐ YES ☐ NO

Are you a: ☐ PHYSICIAN ☐ PSYCHOLOGIST ☐ NURSE ☐ SOCIAL WORKER ☐ OT/PT
☐ MENTAL HEALTH WORKER ☐ CONSUMER/FAMILY MEMBER ☐ OTHER: _____

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1 How much do you agree with each of the following statements?					
a The presenter appeared comfortable with the technology.	☐	☐	☐	☐	☐
b I was comfortable with the format of this presentation.	☐	☐	☐	☐	☐
c I would be willing to participate in future videoconference sessions.	☐	☐	☐	☐	☐
d The technology was well suited to this type of learning session.	☐	☐	☐	☐	☐
e The inclusion of other sites enhanced the quality of this session.	☐	☐	☐	☐	☐
f There was enough opportunity for questions and discussion.	☐	☐	☐	☐	☐
g I increased my level of understanding on the topic presented.	☐	☐	☐	☐	☐
h I would recommend this session to others in my community.	☐	☐	☐	☐	☐
i The quality of this videoconference session is better than other sources of mental health information that I use.	☐	☐	☐	☐	☐

	NOT ADEQUATE	ADEQUATE	NOT FUNCTIONAL / N/A
2 Please rate the following items on a three-point scale:			
a Picture quality	☐	☐	☐
b Sound quality	☐	☐	☐
c Room environment	☐	☐	☐
d Location of the session	☐	☐	☐
e Ease of equipment use	☐	☐	☐

	AT LEAST ONCE/DAY	AT LEAST ONCE/WEEK	AT LEAST ONCE/MONTH	LESS THAN ONCE/MONTH	NEVER
3 How frequently do you take advantage of the following sources of information on mental health:					
a Hospital rounds	☐	☐	☐	☐	☐
b Community-based rounds	☐	☐	☐	☐	☐
c Journals	☐	☐	☐	☐	☐
d Mental health professionals / colleagues	☐	☐	☐	☐	☐
e Internet	☐	☐	☐	☐	☐
f Conferences	☐	☐	☐	☐	☐

g Other publications (please specify) _____

h Other sources (please specify) _____

4 Would you recommend any technical/logistical improvements that could enhance future TELE-learning sessions?

5 Do you have any other comments or suggestions about today's presentation?

Please return completed form to your Site Coordinator. Thank you for taking the time to complete this survey!

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9.A Videoconference Orientation and Support, continued

9.A.2 Evaluation Protocol, continued

9.A.2.5 Videoconference Logbook

VIDEO CONFERENCE LOGBOOK

TELE MENTAL HEALTH PROGRAM | BC / YUKON CHIPP

your community:

Centre for Telehealth @ Mheccu — Mental Health Evaluation & Community Consultation Unit

DATE	START TIME	END TIME	# PERSONS IN ROOM THIS SITE	# PERSONS AT CONNECTING SITE/S	WHAT SITES DID YOU CONNECT TO? underline site of origin	PRIMARY PURPOSE OF ACTIVITY see session codes below	COMMENTS appropriateness of technology, technical difficulties, problems, or unique applications of telehealth

SESSION PURPOSE CODES

① Clinical Session
Add # of clients—new or follow-up
② Case Conference
③ Case Management Rounds
④ Physician Education
⑤ Mental Health Professional Education
⑥ Consumer/Family Education
⑦ Other Education (specify above)
⑨ Administration—Recruitment
⑩ Technical test / training
⑪ Other (specify above)

Please fax completed log for each week on Friday to:
Centre for Telehealth @ Mheccu,
Attn: Matthew Queree, Research Assistant
Fax 604.822.7786 **E-mail** queree@interchange.ubc.ca

9.B Evaluation Approaches

For those users interested in designing and conducting independent evaluations of telehealth initiatives, this section provides a brief discussion of evaluation approaches. Types of evaluations are discussed in **9.B.1** and practical approaches are discussed in **9.B.2**. Section **9.B.3** suggests some evaluation tools, and section **9.B.4** provides references to other evaluation resources.

9.B.1 Types of Evaluations

PURPOSE OF EVALUATION

There are five basic purposes for conducting research[50], which fall along a continuum from theory to action.

1/ Basic research:
To contribute to fundamental knowledge and theory

2/ Applied research:
To illuminate human and societal concerns

3/ Summative evaluation:
To determine program effectiveness

4/ Formative evaluation:
To improve a program

5/ Action research:
To solve a specific problem.

For the purpose of evaluating a newly implemented telehealth program, the primary focus will be on one or both of the following:

Summative Evaluation

The purpose of a summative evaluation is to judge the overall effectiveness of a program to inform major decisions about such matters as whether to

- continue a program
- expand a pilot project to new sites
- move a program from temporary to permanent funding
- expand the scope of clinical applications (e.g., by adding different specialties).

In order to determine effectiveness, decision-makers are interested in the impacts of a program, measuring standardized outcomes, and utilizing controlled comparisons and larger samples with statistical pre-post and follow-up results. For these reasons summative evaluations rely heavily on quantitative data, with qualitative data used to add depth, detail and nuance to quantitative findings.

Formative Evaluation

The purpose of a formative evaluation is to improve a specific program. Formative evaluations rely heavily on process studies, implementation evaluations, and case studies. They

[50] *Qualitative Research and Evaluation Methods,* 3rd edition. Thousand Oaks, CA: Sage Publications, 2002.

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9.B Evaluation Approaches, continued

9.B.1 Types of Evaluations, continued

utilize qualitative methods to a much larger degree than do summative evaluations. Findings are specific to the program being studied and cannot be generalized to other situations.

Included in the broad category of formative evaluation are the following approaches:

- developmental evaluation – ongoing evaluation for the purpose of program and/or organizational development and learning
- participation evaluation – empowering local stakeholders (e.g., consumers and families) through their participation in program evaluation
- process use – using the processes of evaluation to build staff capacity for data-based decision-making and continuous improvement.

To a lesser extent, program evaluation may also utilize **action research** to solve a specific problem. Action research becomes part of the change process by engaging the people involved in the program in studying and solving their own problems. Research methods tend to be less systematic, more informal, and specific to the problem and people involved.

EVALUATION PROCESSES

There are many methods that can be used when conducting an evaluation. Frequently used approaches include the following:

Process Evaluation

Monitors and tracks key aspects of project implementation, and measures how the project is operating and progressing toward meeting its goals and objectives. Process evaluation describes program delivery and stakeholder concerns including

- project goals and objectives
- reach and recruitment
- level of participation
- resources (Inputs)
- program activities (Outputs)
- stakeholder issues / participant concerns
- successes, challenges, lessons learned.

Impact Evaluation

Refers to the immediate and intermediate changes that result from a program or activity. It asks the question: “Did the program reach its defined objectives?” Examples of impacts could include

- changes in access to clinical services and/or distance education
- changes in the quality of clinical services and / or professional development
- changes in the cost-effectiveness of clinical services and / or distance education.

Outcome Evaluation

Considers the overall results of the program and the extent to which it affects the longer-term health status of the target population at the individual or community level. These long-term outcomes are theoretically linked to the shorter-term changes measured through impact evaluation.

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9.B Evaluation Approaches, continued

9.B.1 Types of Evaluations, continued

Examples of outcomes include

- changes in client/patient health status
- changes in client/patient quality of life
- changes in population health status.

Depending on the purpose of the program evaluation (i.e., summative and/or formative, see discussion previous page) some combination of the above approaches can be utilized. For example, the degree to which the program accomplishes its stated goals could be informed primarily through outcome evaluation; the degree to which it meets its defined objectives could be determined through impact evaluation; and the degree to which it carries out program activities in pursuit of those objectives could be determined through process evaluation.

DATA MEASUREMENT

Each of the above evaluation approaches can utilize quantitative and/or qualitative data using various indicators (measures used to show change), as shown in the following table (below).

Evaluation Approach	Type of measure	Example of Indicator
Process evaluation	Quantitative	Program activity: Number of clinical sessions delivered through videoconferencing
	Qualitative	Stakeholder concerns: Focus group or interviews with key stakeholders
Impact evaluation	Quantitative	Distance education cost-effectiveness: Staff travel costs
	Qualitative	Impact of telehealth on community: focus group interviews
Outcome evaluation	Quantitative	Client health status: Changes in hospital utilization rates
	Qualitative	Client health status: focus group interviews

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9.B Evaluation Approaches, continued

9.B.2 Practical Approaches to Evaluation

A practical approach to program evaluation could include the following steps:

1/ Identify the purpose of the telehealth project.
Describe the key project goals, objectives, and activities of the project. Possible objectives include:

- to improve access to clinical services by clients / patients throughout the region
- to improve the efficiency and quality of clinical services delivered in the region
- to improve the cost-effectiveness of clinical services and professional development provided in the region
- to improve access to distance education programs by health care providers, thereby supporting recruitment and retention of health professionals within the region.

2/ Identify the purpose of the evaluation.

- Determine whether the purpose of the evaluation is primarily to determine program effectiveness (summative), to make recommendations for program improvements (formative), or both.
- Establish evaluation objectives that can be used to determine
  – whether the goals and objectives of the telehealth project are being accomplished
  – what outcomes the project is achieving
  – which elements of the project are working well, which are not, and why
  – how the operation and provision of telehealth services could be enhanced or improved.
- Identify the audiences for the evaluation, for example,
  – clients / patients and their families
  – health service providers
  – administrators
  – educators
  – funding sources
  – federal and / or provincial agencies.
- Identify resources available to support the evaluation, including
  – timeline
  – financial resources
  – people and other organizational resources
  – access, connections.

3/ Develop the key evaluation questions to be answered.
While the overall project objectives provide the 'big picture,' they tend to be so general that they are difficult to measure or assess. Evaluation questions relate to the objectives but are more specific and easier to answer.

For example, if one objective of the program is to improve access to clinical services, an evaluation question might be framed as follows: "Does the telehealth application provide clinical services in a more timely manner than before?"

It is important to consider how these questions will be formulated. For example, will the evaluation compare clinical services delivered via the telehealth program with

- clinical services delivered in the region prior to the implementation of the telehealth program
- alternative clinical services provided within the region (i.e., direct in-person clinical sessions provided by a psychiatrist on an outreach basis) and/or outside of the region (i.e., travelling to the

continued

9.B Evaluation Approaches, continued

9.B.2 Practical Approaches to Evaluation, continued

lower mainland to receive specialized clinical services not available otherwise within the region) during the same time period as the telehealth program
- clinical services provided in other remote areas of the province where telehealth services are not available?

4/ Develop indicators.
The next step is to determine what data will answer or illuminate the evaluation questions posed above (e.g., to answer the question, "Does the telehealth application provide clinical services in a more timely manner than before?" possible indicators could include the number of clients on waitlists and/or the average wait time to receive the service). Some mix of quantitative and qualitative data will likely be used.

5/ Determine how data will be collected.
Ideally, data collection and analysis is should be as simple and straightforward as possible. In determining what data sources and data collection methods to use, it is helpful to consider the following factors:
- ease, convenience and cost
- expertise required to collect and / or analyze the data
- potential spin-off benefits of the data collection activity
- how the data will be used
- sustainability of the data collection activity over time.

Data collection methods can include
- review of program records
- secondary data (e.g., health outcome data from Vital Statistics, health service utilization data accessed through provincial databases)
- questionnaires, surveys
- interviews (Individual, focus groups)
- field observations.

Developing forms, questionnaires, interview guides, observer rating scales, and other data collection instruments can be time-consuming. It is advisable wherever possible to use or adapt existing instruments that have already been developed and pre-tested by others **(See 9.B.3: Evaluation Tools**).

Data collection procedures will identify issues such as the timing of data collection, who is considered a participant for data collection purposes, sampling, who collects the data, and confidentiality protection.

Technical details of data collection and analysis (e.g., sample size statistics and selection methods, frequency of administration, administration procedures, obtaining adequate response rates, and obtaining accurate reliable data) are best determined by obtaining expert advice and/or by reviewing appropriate resource material **(See 9.B.4: Evaluation Resources)**. Whatever methods are used, the process should be:
- transparent – others can see how you did it and they could repeat the process
- rigorous – the methods are adhered to for all participants.

continued

9.B Evaluation Approaches, continued

9.B.2 Practical Approaches to Evaluation, continued

6/ Test, refine and implement the measurement system.
Conduct and monitor a trial run of the measurement system to identify problems and potential refinements, as well as to gain a clear picture of what the system is requiring in terms of time, money, and other resources.

7/ Report and use your findings.
It is not sufficient to simply present data to the various program audiences. Discussions and explanations of evaluation findings will help readers understand what the numbers mean, and why they may appear higher or lower than expected. Visual presentations in tables and charts will also make data more understandable.

Evaluation findings may be used internally to

- suggest outcome targets
- identify potential strategies for program improvement
- support annual and long-range funding
- guide budgets and resource allocations.

Evaluation findings may be used externally to enhance interaction with various publics to help

- enhance public image
- identify partners for collaborations
- retain and increase funding
- recruit and retain qualified physicians and other clinical staff.

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9.B Evaluation Approaches, continued

9.B.3 Evaluation Tools

Mheccu has developed various tools for the evaluation of the Tele Mental Health Initiative described in **Section 9.A**. These tools may be utilized and/or adapted as needed to support the independent evaluation of other telehealth initiatives.

Tools developed by Mheccu include

- **9.A.1: Evaluation Framework**
- **9.A.2: Evaluation Protocol**
- **9.A.2.1: Patient / Family Member Consultation Evaluation Form**
- **9.A.2.2: Local Service Provider Consultation Evaluation Form**
- **9.A.2.3: Consultant Evaluation Form**
- **9.A.2.4: Distance Education Evaluation Form**
- **9.A.2.5: Videoconference Logbook.**

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9.B Evaluation Approaches, continued

9.B.4 Evaluation Resources

On-Line Documents and Resources

> Mheccu website:
http://www.mheccu.ubc.ca/telehealth/

The Ministry of Health has developed a practical guide to assist with the start-up and implementation of telehealth projects in British Columbia. Section 6 of the guide discusses telehealth project evaluation. The guide can be accessed at

> Telehealth Projects: A Practical Guide, MOH
http://www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

Health Canada has developed a document that summarizes a review of telehealth evaluation literature and describes a recommended evaluation framework developed by the Institute of Medicine. This document can be accessed at

> Evaluating Telehealth 'Solutions': A Review and Synthesis of the Telehealth Evaluation Literature, Health Canada, March 2000
http://www.hc-sc.gc.ca/ohih-bsi/ pubs/2000_tele/tele_e.html

The Centre for Mental Health Services, US. Department of Health and Human Services has developed a summary report on Telehealth Services. Section 3 of this report describes some system and client outcomes. Available literature on telehealth outcomes addresses organizational changes, cost/benefit analyses, and changes in mental health service use as a result of telecommunications technology. This document can be accessed at

> Telehealth: Delivering Mental Health Care at a Distance
http://telehealth.hrsa.gov/pubs/mental/home.htm

The Australian New Zealand Telehealth Committee of the Commonwealth Department of Health and Aged Care has conducted a comprehensive literature review on evaluation in telehealth that describes evaluation design and methods, including economic and outcome evaluation. The document can be accessed at

> Review of the Literature on Evaluation in Telehealth:
http://www.telehealth.org.au/discussion_papers/litreview.html

continued

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9.B Evaluation Approaches, continued

9.B.4 Evaluation Resources, continued

Print Resources

Measuring Program Outcomes: A Practical Approach. United Way of America, 1996.

Qualitative Research and Evaluation Methods 3rd ed. M.Q.Patton. Thousand Oaks CA: Sage Publications, 2002.
> Order directly from Sage Publications:
http://www.sagepub.com/

Guide to Project Evaluation: A Participatory Approach. Health Canada, 1996.

Telemedicine: A Guide to Assessing Telecommunications in Health Care. Washington, D.C: National Academy Press, 1996.
> Order directly from National Academy Press:
http://www.nap.edu/catalog/5296.html?se_side

The Telemedicine Bibliographic Database contains citations of articles on telemedicine, many of which discuss aspects of telehealth program evaluation. Articles available for document delivery can be accessed at
> The Telemedicine Information Exchange (TIE)
http://tie.telemed.org/

continued

SECTION 10

RESOURCES IN TELEHEALTH

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10.A Key Resources

ONLINE RESOURCES

> **Centre for Telehealth @ Mheccu** website:
http://www.mheccu.ubc.ca/telehealth/

> **Telehealth Information Exchange (TIE):**
http://tie.telemed.org/

> **B.C. Ministry of Health Telehealth – MOH website:**
http://www.hlth.gov.bc.ca/bctelehealth/projects.html

> ***Telehealth Projects: A Practical Guide,* Ministry of Health Planning and Ministry of Health Services, August 2001:**
www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

> **Health Canada: – OHIH website:**
http://www.hc-sc.gc.ca/ohih-bsi/menu_e.html

> ***Evaluating Telehealth 'Solutions': A Review and Synthesis of the Telehealth Evaluation Literature,* Health Canada, March 2000**
http://www.hc-sc.gc.ca/ohih-bsi/pubs/2000_tele/tele_e.html

> **Centre for Mental Health Services, US. Department of Health and Human Services Telemental Health: *Delivering Mental Health Care at a Distance,* 1998.**
http://telehealth.hrsa.gov/pubs/mental/home.htm

continued

10.A Key Resources, continued

PRINT RESOURCES

- *Effective Videoconferencing, Techniques for Better Business Meetings,* Lynn Diamond, Ph.D & Stephanie Roberts, 1996
- *Videoconferencing for the Real World – Implementing Effective Visual Communications Systems,* John Rhodes, 2001
- *Videoconferencing and videotelephony – Technology and Standards,* 2nd Edition, Richard Schaphorst, 1999.
- *Bretford's Guide to Successfully Planning a Video Conferencing Room,* Bretford Manufacturing Ltd, 1999.
- Smart Videoconferencing – new habits for virtual meetings, J. Barlow, P. Peter, L. Barlow; October 2002
- Videoconferencing, The whole Picture, 3rd Edition, James Wilcox, 2000.

OTHER RESOURCES

Telus Support Desk
Telephone: 1-800-339-2033

10.B Complete List of Resources by Section

SECTION 2 ABOUT TELEHEALTH

2.A Definitions

> The Telemedicine Research Centre (TRC) Telemedicine Primer:
http://trc.telemed.org/telemedicine/primer.asp

> Telemedicine Information Exchange (TIE) Telemed 101:
http://tie.telemed.org/telemed101/

> Telehealth Projects: A Practical Guide, Ministry of Health Planning and Ministry of Health Services, August 2001
www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

> University of Plymouth website:
http://www.fae.plym.ac.uk/tele/tele.html

> Office for Advancement of Telehealth, U.S. Dept of Health and Human Services, Glossary and definitions:
http://telehealth.hrsa.gov/pubs/mental/glossary.htm

> Calgary Health Region, Telehealth definitions:
http://www.crha-health.ab.ca/telehealth/definitions.htm

> Health Canada:
http://www.hc-sc.gc.ca/ohih-bsi/theme/tele/index_e.html

2.B History of Use

> Telemedicine Information Exchange (TIE): History of Telemedicine:
http://tie.telemed.org/telemed101/understand/tm_history.asp

> Current Searchable International Programs Database:
http://tie.telemed.org/programs/

> TELEHEALTH: Delivering Mental Health Care at a Distance: A Summary Report:
http://telehealth.hrsa.gov/pubs/mental/home.htm

> UK NHS Information Authority Portal:
http://www.nhsia.nhs.uk/def/home.asp

> Australia and New Zealand Telehealth Committee website:
http://www.telehealth.org.au/

> International Society for Telehealth (based in Norway):
http://www.isft.org/

> Hong Kong Telemedicine Association:
http://ruby.med.cuhk.edu.hk/~hktma/

continued

10.B Complete List of Resources by Section, continued

> History of Telemedicine in France, Norway, Portugal, Spain and Greece:
> Manual De Telemedicines Para Estudiantes, Editor Dr. Olga Ferrer Roca.
http://conganat.uninet.edu/ICVHAP/conferencias/017/history.htm

2.B.2 In Canada

- *Telehealth Projects/Programs in Canada,* developed by Jocelyn Picot for the National Telehealth Coordinators Workshop, October 2002

> MUN Telemedicine Centre
http://www.med.mun.ca/telemed/

> Nova Scotia Telehealth Network:
http://www.medicine.dal.ca/innovprog/telemedicine.htm

> Réseau québécois de télésanté élargi:
http://www.rqte.qc.ca

> Health Canada's OHIH website:
http://www.hc-sc.gc.ca/ohih-bsi/menu_e.html

> Canadian Society of Telehealth:
http://www.cst-sct.org/

> Canadian Health Network: Non-profit web-based health information service
http://www.canadian-health-network.ca/ customtools/homee.html

> CANARIE: Canada's advanced Internet development organization:
http://www.canarie.ca/about/about.html

> Alberta Wellnet:
http://www.albertawellnet.org/

> Saskatchewan Health Information Network:
http://www.shin.sk.ca/

> Manitoba Telehealth:
http://www.mbtelehealth.ca/

> Quebec Health Telecommunication Network:
http://www.msss.gouv.qc.ca/rtss/

2.B.3 In BC

> BC Health Industries Network:
http://www.hinetbc.org/telehealth/bcprojects.html

> B.C. Ministry of Health Telehealth:
http://www.hlth.gov.bc.ca/bctelehealth/projects.html

> Centre for Telehealth @ Mheccu website:
http://www.mheccu.ubc.ca/telehealth/

continued

10.B Complete List of Resources by Section, continued

2.C.1 Research Examples

- *Procedural and Methodological Issues in Telepsychiatry Research and Program Development.* B. Frueh et al., Journal of Psychiatric Services, December 2000.

> APA Abstract:
http://tie.telemed.org/citations2.asp?citation=9675&key=1295540705&page=1&pagecount=1

- *Systematic review of evidence for the benefits of telemedicine,* Hailey,D., Roine, R, Ohinmaa,A, Journal of Telemedicine and Telecare, 2002.

> Abstract:
http://tie.telemed.org/citations2.asp?citation=12468&key=7336412462&page=1&pagecount=1

- *Telemedicine for the Medicare Population.* Summary, Evidence Report/Technology Assessment: Number 24. AHRQ Pub.# 01-E011, Feb 2001. Agency for Healthcare Research and Quality (AHRQ), Rockville, MD.

> Summary:
http://www.ahcpr.gov/clinic/epcsums/telemedsum.htm

- *Telepsychiatry Likely to Become Prevalent Form of Treatment.* A. Levy, American Psychiatric Association, November 2000.

> Summary:
http://www.newswise.com/articles/2000/11/TELEPSYC.APA.html

- *Clinical Applications of Telehealth in Mental Health Care.* B. Stamm. Professional Psychology: Research and Practice. Vol. 29, No. 6, December 1998.

> Summary:
http://www.apa.org/journals/pro/pro296536.html

- *Distance Therapy,* S.X. Day, P.L. Schneider, Journal of Counseling Psychology, Oct 2002.

> Summary:
www.apa.org/monitor/oct02/distance.html

- *Telepsychiatry as a routine service: The perspective of the patient.* Simpson, J., Doze, S., Urness, D., Jacobs, P, Journal of Telemedicine and Telecare, 2001.

> Abstract:
http://tie.telemed.org/citations2.asp?citation=10410&key=6354452997&page=1&pagecount=1

> Telehealth: Delivering Mental Health Care at a Distance
http://telehealth.hrsa.gov/pubs/mental/home.htm

> Agency for Healthcare Research and Quality:
http://www.ahcpr.gov/clinic/epcix.htm

2.C.2 Cost-Effectiveness

- *Review of the Literature on Evaluation in Telehealth.* Australian New Zealand Telehealth Committee, Commonwealth Department of Health and Aged Care: November 1999.

> Summary:
http://www.telehealth.org.au/discussion_papers/litreview.html

- *Systematic review of cost effectiveness studies of telemedicine interventions.* P. Whitten, F. Mair, A.Haycox, C.May, T. Williams, S. Hellmich, British Medical Journal (BMJ) June 15, 2002.

> Abstract:
http://tie.telemed.org/citations2.asp?citation=12468&key=7336412462&page=1&pagecount=1

continued

10.B Complete List of Resources by Section, continued

2.D Videoconferencing Technology

- *BC Telehealth Program: Technology Architecture, Information and Support.* Ministry of Management Services, Draft Revision A-1 March 2002

> University of Plymouth website:
http://www.fae.plym.ac.uk/tele/vidconf.html

Glossaries and definitions of technical terminology:
> Office for Advancement of Telehealth, U.S. Dept of Health and Human Services, Glossary and definitions:
http://telehealth.hrsa.gov/pubs/mental/glossary.htm

> Calgary Health Region, Telehealth definitions:
http://www.crha-health.ab.ca/telehealth/definitions.htm

SECTION 3 APPLICATIONS IN MENTAL HEALTH

3.A Clinical Service Delivery

- CPA Position Paper on Telepsychiatry

> Telehealth Information Exchange (TIE):
http://tie.telemed.org/

- *Clinical Applications of Telehealth in Mental Health Care,* Stamm, B.H, Professional Psychology: Research and Practice, American Psychological Association, December 1998.

> Abstract:
http://www.apa.org/journals/pro/pro296536.html

3.B Distance Education

> Mheccu Website:
– Upcoming Sessions:
http://www.mheccu.ubc.ca/telehealth/upcoming.cfm

– Previous Sessions:
http://www.mheccu.ubc.ca/telehealth/previous.cfm

- CPA Paper on Telepsychiatry

SECTION 5 OPERATIONAL ASPECTS

5.A Facilitating Clinical Services

> Telehealth Projects: A Practical Guide:
www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

5.A.1 Recruitment

- *Telepsychiatry: Implications for Licensing and Credentialing,* H. Karlinsky. Canadian Psychiatric Association, The Bulletin, March 2001.

continued

10.B Complete List of Resources by Section, continued

5.A.2 Coordination

5.A.2.1 Sample Features of Videoconference Rooms and Desirable Enhancements

- *Features of Videoconference Rooms: A Proposal to Enhance Existing Spaces at Mheccu,* Centre for Telehealth @ Mheccu, 2002.
- *Effective Videoconferencing, Techniques for Better Business Meetings,* Lynn Diamond, PH.D & Stephanie Roberts, 1996.
- *Videoconferencing for the Real World – Implementing Effective Visual Communications Systems,* John Rhodes, 2001.
- *Videoconferencing and Videotelephony – Technology and Standards,* 2nd Edition, Richard Schaphorst, 1999
- *Bretford's Guide to Successfully Planning a Video Conferencing Room,* Bretford Manufacturing Ltd., 1999

5.A.3 Clinician Payment

- *Telepsychiatry and Physician Reimbursement,* H. Karlinsky. Canadian Psychiatric Association, The Bulletin, June 2000.
- *Peace Liard TeleMental Health Evaluation: Lessons Learned,* Peace Liard Health, December 2001.
- *Telehealth Update,* M. Borsellino, Medical Post Vol. 38, No. 04, January 29,2002

5.B Legal and Ethical Issues

5.B.1 Consent

- Developing Canadian Telehealth Guidelines, A National Workshop for Telehealth Coordinators, October 2001

5.B.2 Privacy/Confidentiality

> Freedom of Information and Protection of Privacy, British Columbia
http://www.mser.gov.bc.ca/FOI_POP/

- Developing Canadian Telehealth Guidelines, A National Workshop for Telehealth Coordinators, October 2001

5.B.3 Information Management

> B.C's Ministry of Health's Health Information Management Website:
http://www.hlth.gov.bc.ca/him/

> Telehealth Projects: A Practical Guide, Ministry of Health Planning and Ministry of Health Services, August 2001
www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

continued

10.B Complete List of Resources by Section, continued

SECTION 6 CLINICAL SERVICES

6.A.1 Overview of Adult / Geriatric Clinical Services

- APA Resource Document on Telepsychiatry Via Videoconferencing, 1998.

> *Telemental Health: Delivering Mental Health Care at a Distance.* Centre for Mental Health Services, US. Department of Health and Human Services. Rockville MD, 1998.
http://telehealth.hrsa.gov/pubs/mental/section2.htm

SECTION 7 DISTANCE EDUCATION

7.B.1.2 Format and Presentation

> Calgary Telehealth:
http://www.crha-health.ab.ca/telehealth/resources.htm

7.B.1.3 Curriculum Development

> BC Centre for Curriculum, Transfer and Technology:
http://www.c2t2.ca/

> Barriers to Distance Education – Collection of papers and research:
http://www.emoderators.com/barriers/index.shtml

7.B.2 Other Forms of E-Learning

> University of Plymouth, UK:
http://www.fae.plym.ac.uk/tele/tele.html

> Web-based educational tools:

– WebEx – Web Conferencing:
http://www.webex.com/

– WebCT – Online provider of technology-enabled learning solutions:
http://www.webct.com/

> Online magazines:

– Telemedicine Journal and E-Health:
http://www.liebertpub.com/tmj/default1.asp

– Journal of Telemedicine and Telecare:
http://www.coh.uq.edu.au/jtt/index.html

> Connections to e-learning opportunities and resources:

– Meetings, Organizations and General Resources in Behavioral Healthcare:
http://www.umdnj.edu/psyevnts/psyjumps.html

continued

10.B Complete List of Resources by Section, continued

– Comprehensive list of online CME providers:
http://netcantina.com/bernardsklar/

– Royal College of Physicians and Surgeons of Canada:
http://www.rcpsc.medical.org

– Manchester Visualization Centre – Computer graphics and virtual environments:
http://www.sve.man.ac.uk/mvc/

– Distance Education and Training in Canada and other countries – Health Canada website at:
http://www.hc-sc.gc.ca/ohih-bsi/res/educ_e.html

SECTION 8 TECHNICAL SUPPORT

8.A.2 Resources for Orientation and Support

- Telus Videoconference Support Desk:
  Telephone: 1-800-339-2033

- Multi-point bridge sessions can be scheduled by contacting Telus at:
  – Telephone: 1-800-272-9628
  – Email: videoconferencing@telus.com

> Mheccu Website:
http://www.mheccu.ubc.ca/telehealth/

> Polycom website:
http://www.polycom.com/resource_center

- Polycom Technical Support:
  – Telephone: 1-800-POLYCOM
  Email technical support can be accessed through the company's website shown above

> Telehealth Projects: A Practical Guide, MOH:
http://www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

- *Effective Videoconferencing, Techniques for Better Business Meetings,* Lynn Diamond, Ph.D & Stephanie Roberts, 1996

- *Videoconferencing for the Real World – Implementing Effective Visual Communications Systems,* John Rhodes, 2001

- *Videoconferencing and videotelephony – Technology and Standards,* 2nd Edition, Richard Schaphorst, 1999.

- *Bretford's Guide to Successfully Planning a Video Conferencing Room,* Bretford Manufacturing Ltd, 1999.

- *Smart Videoconferencing – new habits for virtual meetings,* J. Barlow, P. Peter, L. Barlow; October 2002

- *Videoconferencing, The whole Picture,* 3rd Edition, James Wilcox, 2000.

continued

10.B Complete List of Resources by Section, continued

9.B.1 Types of Evaluations

- *Qualitative Research and Evaluation Methods,* 3rd edition. Thousand Oaks, CA: Sage Publications, 2002.

9.B.4 Evaluation Resources

> Mheccu website:
http://www.mheccu.ubc.ca/telehealth/

> Telehealth Projects: A Practical Guide, MOH
http://www.hlth.gov.bc.ca/bctelehealth/pdf/practicalguide.pdf

> Evaluating Telehealth 'Solutions': A Review and Synthesis of the Telehealth Evaluation Literature, Health Canada, March 2000
http://www.hc-sc.gc.ca/ohih-bsi/pubs/2000_tele/tele_e.html

> Telehealth: Delivering Mental Health Care at a Distance
http://telehealth.hrsa.gov/pubs/mental/home.htm

> Review of the Literature on Evaluation in Telehealth:
http://www.telehealth.org.au/discussion_papers/litreview.html

- *Measuring Program Outcomes: A Practical Approach.* United Way of America, 1996.

- *Qualitative Research and Evaluation Methods* 3rd ed. M.Q.Patton. Thousand Oaks CA: Sage Publications, 2002.

> Order directly from Sage Publications:
http://www.sagepub.com/

- *Guide to Project Evaluation: A Participatory Approach.* Health Canada, 1996.

- *Telemedicine: A Guide to Assessing Telecommunications in Health Care.* Washington, D.C: National Academy Press, 1996.

> Order directly from National Academy Press:
http://www.nap.edu/catalog/5296.html?se_side

> The Telemedicine Information Exchange (TIE)
http://tie.telemed.org/

SECTION 11

FORMS, HANDOUTS & SAMPLES

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SECTION 11 FORMS, HANDOUTS & SAMPLES

This section provides a complete list of forms, handouts and samples included throughout the document.

List of Forms, Handouts and Samples

4.D.1 Sample Site Coordinator Job Description

5.A.2.1 Sample Handout:
Features of Videoconference Rooms and Desirable Enhancements

5.A.2.2 Sample Telehealth Promotion Documents
a) Letter to Physicians
b) Invitation to Telehealth Launch Event
c) Poster

5.B.2.1 Room Signage
a) Education Session in Progress
b) Clinical Session in Progress

6.A.2 Adult / Geriatric Clinical Protocol Followed by The Centre for Telehealth @ Mheccu

6.A.2.1 Sample Consent for Adult / Geriatric Mental Health Services

6.A.2.2 Sample Consent for Telehealth Consultation

6.A.2.3 Sample Telehealth Consultation Information Sheet

6.A.2.4 Sample Intake Form Adult / Geriatric Clinical Services

6.A.2.5 Sample Consultant's Schedule

6.A.2.6 Sample Certificate of Services

6.A.2.7 Sample Monthly Program Calendar

6.B.2 Child and Youth Clinical Protocol Followed by The Centre for Telehealth @ Mheccu

6.B.2.1 Sample Consent Forms for Child and Youth Mental Health Services

6.B.2.2 Sample Intake Form Child & Youth Clinical Services

6.B.2.3 Sample Certificate of Services

6.C.1.1 Sample Mood Disorders Patient Information Questionnaire

6.C.2.1 Sample Intake Form Cross-Culture Psychiatry

Sample Educational Needs Assessments:
7.A.2.1 Sample Consumer and Family Members Educational Needs Assessment

7.A.2.2 Sample Mental Health Professionals Education Needs Assessment

7.A.2.3 Sample Family Physicians Educational Needs Assessment

continued

7.A.3 Sample Handout: Instructions for Distance Education Presenters

7.A.5 Sample Distance Education Sign In Sheet

7.A.6 Sample Audience Instruction Sheet

Sample Educational Flyers:

7.A.7.1 Sample Mental Health Professional Flyer

7.A.7.2 Sample Educational Flyer – Consumer and Family Distance Education

7.A.9 Sample Local Host Duties and Responsibilities

8.A.2.1 Sample Handout:
How to use the Videoconference Unit

8.A.2.2 Sample Handout:
Trouble Shooting for the Videoconference Unit

8.A.2.3 Sample Handout:
Trouble Shooting Sheets

Evaluation Forms:

9.A.2.1 Patient / Family Member Consultation Evaluation Form

9.A.2.2 Local Service Provider Consultation Evaluation Form

9.A.2.3 Consultant Evaluation Form

9.A.2.4 Distance Education Evaluation Form

9.A.2.5 Videoconference Logbook

Centre for Telehealth
@Meccu