

# Provincial Telehealth Program Manual

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# 1 TELEHEALTH OVERVIEW

Telehealth is defined as the use of communications and information technology to deliver healthcare services over large and small distances, including remote and rural areas (*Canada Health Infoway*).

Telehealth enables the delivery of equitable health services to clients in Newfoundland and Labrador (NL) regardless of location. By reducing the need for client, family and healthcare provider travel, Telehealth enhances the continuity and capacity of care throughout the health care system. In a province like ours, with its vast geography, dispersed and aging population, harsh weather conditions and growing health care demands, Telehealth works to close the gaps resulting from these challenging realities. Simply put, Telehealth has become a pivotal way of delivering healthcare in Newfoundland and Labrador.

Newfoundland and Labrador was one of the first provinces to explore the use of videoconferencing technology to deliver health care in rural and remote areas and has had some form of Telehealth in place for over 30 years. Telehealth/telemedicine was initially used, under the leadership of Dr. Max House, to enable continuing medical education for physicians in remote locations from Memorial University of Newfoundland. Subsequently the work expanded to explore Telehealth as a vehicle for client care or health service delivery, with active involvement of the various regions in the province. Ultimately, the Telehealth Chronic Disease Management Project was built upon the success of Dr. House's teleoncology project.

Telehealth has become an integral part of health care delivery in our province. With a collaborative partnership of the NL Centre for Health Information (the Centre), the Regional Health Authorities (RHAs) and the Department of Health and Community Services, Telehealth has advanced remarkably with an expanded infrastructure and tremendous growth in usage.

This growth has greatly enhanced the capacity of the province to deliver care via distance. It enables many residents to avail of specialized and critical healthcare services without leaving their communities. Healthcare providers can consult, treat and manage care without having to physically be in the same room with their clients. With a focus in our province on chronic diseases; such as, but not limited to, oncology, nephrology, diabetes, mental health and neurology, the benefits of Telehealth in NL are being realized. The potential for continued growth is significant.

This manual provides telehealth users with the information to manage telehealth initiatives and offers support to the RHAs for the Telehealth Program. The manual:

- Outlines guidelines and standards to meet the needs of healthcare providers, clients and site facilitators;
- Supports staff and providers to be able to provide telehealth services in a consistent and appropriate manner; and,

- Identifies general guidelines and processes related to clinical services, arranging access, consent, privacy and confidentiality, documentation and videoconferencing etiquette. These guidelines and processes are based on current evidence and national best practice.

## 2 KEY PARTNERS

The Telehealth Program relies on the collaboration and support of key partners, such as the NL Centre for Health Information, RHAs, Canada Health Infoway, COACH: Canada's Health Informatics Association, and iScheduler. The following subsection provides a brief overview of the role of each of these key partners.

### **About the Newfoundland and Labrador Centre for Health Information (the Centre)**

The Centre was established by the Government of Newfoundland and Labrador to provide quality information to health professionals, researchers, the public, and health system decision-makers. Through collaboration with the health system, the Centre supports the development of data and technical standards. It maintains key health databases, prepares and distributes health reports, and supports and carries out applied health research and evaluations. The Centre's mandate includes responsibility for the governance of the Provincial Telehealth Program. The Centre's mandate also includes responsibility for the provincial Electronic Health Record. For more information about Telehealth or the Centre, please visit [www.nlchi.nl.ca](http://www.nlchi.nl.ca).

### **About the Regional Health Authorities (RHA)**

Each RHA maintains responsibility for the planning, implementation and evaluation of a broad range of programs and services within its boundaries, which are based in community and facility settings. Telehealth enables increased access to these programs and services for residents and providers. Each regional telehealth program is coordinated by a Regional Telehealth Lead (Manager or Coordinator) who provides leadership in assessing, developing, implementing, integrating, coordinating and evaluating Telehealth for the RHA. The regional telehealth programs in each RHA are also supported by a Telehealth Technical Lead. These positions support programs and services of the RHA, especially where gaps exist, to assist clients to achieve better health outcomes. More detailed information about each RHA can be found on their respective websites (<http://www.lghealth.ca/>; <http://www.centralhealth.nl.ca/>; <http://www.westernhealth.nl.ca/>; <http://www.easternhealth.ca/>).

### **About Canada Health Infoway**

Canada Health Infoway is an independent, not-for-profit organization funded by the federal government. Infoway jointly invests with every province and territory to accelerate the development and adoption of electronic health record projects in Canada. Fully respecting client confidentiality, these secure systems will provide clinicians and clients with the information they need to better support safe care decisions and manage their own health. Accessing this vital information quickly will help foster a more modern and sustainable health care system for all Canadians. Further information about Canada Health Infoway can be found at: <https://www.infoway-inforoute.ca/en/>.

### **About COACH: Canada's Health Informatics Association**

COACH: Canada's Health Informatics Association is *the voice of health informatics (HI) in Canada*, promoting the adoption, practice and professionalism of HI. COACH represents a diverse community of accomplished, influential professionals who work passionately to make a difference in advancing healthcare through information technology. HI is the intersection of clinical, IM/IT and management practices. Members are dedicated to realizing their full potential as professionals and advancing HI through access to information, talent, credentials, recognition, programs and a broad range of services and specialized resources (COACH, 2016).

### **About iScheduler**

Telehealth in NL is provided through all RHAs, highlighting the need for a centralized scheduling process. The iScheduler application was deployed over the provincial network into all project/regional sites, providing a common shared system for scheduling telehealth consultations. These include the scheduling of single consults and multi-client clinics, as well as the management of resources such as videoconference systems, rooms and support staff. The launch of eRequest in 2017/2018 will allow users to request a telehealth consultation using an online request within the iScheduler program.

## **3 DEFINITIONS**

### **3.1 Clinical Definitions**

**Client** - Refers to patients, clients or residents.

**Clinical Services** - include consultations between any member(s) of the health care team, clients and their families. A team approach to health care means consultative access to clinical providers as part of a supportive care team. Consultations facilitate transfer of knowledge and skills to local providers, support to clients and families, and can result in a reduction in travel for clients and providers.

**Clinical Support** - services that support clinical applications (e.g. interpreter services for client consultations, family education).

**Educational Services** - refers to the education of healthcare providers and/or clients. May include staff education (e.g. medical rounds) as well as public education (e.g. health promotion initiatives).

**Endpoint** - a videoconferencing unit (e.g. Mobile Cart, Desktop Unit, Wall Mounted Unit and PC Software). There can be multiple endpoints at a single site. An example would be a desktop unit in a physician's office in a health care facility and a mobile cart in the dialysis unit at the same facility. There are two endpoints noted in this scenario.

**Healthcare Provider** - the healthcare professional to whom the client is referred and/or who consults with the client via Telehealth (e.g. Physician, Occupational Therapist (OT), Physiotherapist (PT), Social Worker, Registered Nurse (RN)).

**Host or Healthcare Provider Site** - the telehealth site where the consultation originates.

**iScheduler** - the provincial telehealth scheduling system.

**Referral or Client Site** - the telehealth site where the client participates in the consultation.

**Site Contact** - the contact person(s) for telehealth appointments at each site.

**Telehealth/Telemedicine** - is used interchangeably. Telehealth refers broadly to all client and healthcare provider consultations using videoconferencing. The College of Physicians and Surgeons of Newfoundland and Labrador (CPSNL) and Medical Care Plan (MCP) use the term Telemedicine to refer to videoconferencing appointments held primarily for medical consultation.

**Virtual Room** - a virtual meeting room for videoconferencing used to connect two or more sites using a specific call-in number. Each participating endpoint will dial the specific call-in number that has been assigned by the Provincial Scheduling Coordinators or the RHA's Information Management personnel.

### ***3.2 Technical Definitions***

**Bandwidth** – the amount of information that can be transferred at a time over the network.

**Bridge** – a piece of hardware that allows two or more endpoints to connect with each other for a telehealth session.

**Codec** – the hardware that is responsible for the input and output of the video and audio of the telehealth session. The codec allows both endpoints to communicate to each other.

**Drops** – the network cabling that is run from a data closet through the walls or ceiling and connected at a network connection port on the wall.

**Firewall** – a network security system that monitors and controls information in and out of the network through security rules.

**HIN (Health Information Network)** – a set of standards, policies and procedures that allow for the secure exchange of health information over the internet in the province of NL.

**H323** - a standard approved by the International Telecommunication Union (ITU) in 1996 to promote compatibility in videoconference transmissions over IP networks.

**Integrated Services for Digital Network (ISDN)** – the transmission of audio and video over the traditional telephone network. This connection requires four telephone lines.

**IP Address** – the **internet protocol** address: a label on each device connecting over the network identifying each device on the network and providing each device with a local address.

**LAN / WAN** – Local Area Network and Wide Area Network: allow connectivity between devices. LAN is a network that connects computers and other devices in a relatively small area, typically a single building or a group of buildings. WAN is a network that connects multiple LAN's.

**Multi-point** – the connection of multiple endpoints into one telehealth session. A multi-point system, license, or bridging system is required for this connection.

**Point-to-point** – the direct connection between two videoconferencing endpoints. One endpoint is calling the other endpoint's IP address.

**Port/Jack** – where the telehealth unit is connected to the Telehealth network. This port/jack is configured specifically for telehealth usage. The plate around the port/jack will be labeled as "Telehealth" or "Video" along with the port/jack reference name. The port can also reference the internet cable connection on the videoconferencing unit.

**Port speed (100 FULL)** – 100 is the speed setting (data transmission rate) for the port and FULL indicates that data through the port can be sent and received at the same time.

**Router** – a network device that directs the network traffic.

**Session Initiation Protocol (SIP)** - a communications protocol for signaling and controlling multimedia communication sessions. The most common applications of **SIP** are in Internet telephony for voice and video calls, as well as instant messaging, over Internet Protocol (IP) networks.

**Switch** – refers to the connection in the data closet for the drop dedicated for telehealth use. Switches connect computers, printers and other networked devices within a building. A switch serves as a controller, enabling networked devices to talk to each other efficiently.

## 4 TELEHEALTH PROGRAM DESIGN

### 4.1 *Positions Supporting Telehealth*

Telehealth is supported by multiple roles in collaboration with the Centre and the provincial RHAs. These include:

- Provincial Program Manager of Telehealth and the Registry Integrity Unit (Newfoundland and Labrador Centre for Health Information)

- Regional Telehealth Leads:
  - Project Manager of Telehealth (Eastern Health)
  - Regional Telehealth Coordinators (Central, Western and Labrador-Grenfell Health)
- Telehealth Technical Coordinator (Regional Health Authorities)
- Provincial Telehealth Scheduling Coordinators (Newfoundland and Labrador Centre for Health Information)
- Telehealth Nurse Specialist (Eastern Health)
- Service Desk – Computer Support Specialist (Regional Health Authorities)

The regional positions vary between each RHA. Please refer to the most up to date position description within your region.

## **4.2 *Current Telehealth Programs and Initiatives***

There are a number of telehealth projects, pilots and programs that are either provincial or specific to one of the RHAs. Projects can be funded from the Centre, RHA or externally such as through Canada Health Infoway. Projects and pilots are set for a period of time and then reviewed to plan for possible expansion into an integrated program. For the most up to date list of Telehealth Programs and Initiatives contact your RHA Telehealth Lead.

## **4.3 *Telehealth Sites***

Telehealth has been in Newfoundland and Labrador for over 30 years and is constantly growing through new locations and interested healthcare providers discovering its benefits. As of July 31, 2017, there were 100 sites in the province of NL and that number continues to grow. A list of all of the approved health care facilities that provide telehealth can be found in Appendix A.

A Provincial Telehealth Site Map provides a visual of all approved telehealth sites across the province. Note that there can be multiple sites within one area; refer to site list for complete listing. The most recent map can be found in Appendix B.

## **4.4 *Telehealth Contacts***

Each RHA has designated contacts for telehealth: RHA Telehealth Leads as well as site contacts. This list can be received from your RHA Lead. The *Provincial Telehealth Contact List* (Appendix C) provides a listing of the RHA and NLCHI Telehealth Leads. Note that some RHAs use their help desk for telehealth technical support while others have designated support.

## **4.5 *MCP billing codes***

Fee for service physicians can bill for telehealth appointments that are scheduled at an approved telehealth site. The billing code for the clinical area must be set up with MCP. It is the physicians' responsibility to ensure the appropriate billing code is indicated as required for compensation for a telehealth appointment. NLCHI is responsible for regularly updating the list of approved telehealth sites and providing the list to MCP: contact NLCHI for the most current list. Telemedicine billing codes in the *MCP Medical Payment Schedule* can be found in Section C27-

C48 at: [http://www.health.gov.nl.ca/health/mcp/providers/Full MCP Payment Schedule-03 13 14.pdf](http://www.health.gov.nl.ca/health/mcp/providers/Full_MCP_Payment_Schedule-03_13_14.pdf).

## 5 TELEHEALTH PROCESS

### 5.1 *Request for Telehealth Services*

When a new provider, program or site is interested in using telehealth in their service delivery a telehealth services application form must be completed. This application/assessment form is used by the telehealth team to assess readiness and assist with telehealth growth. This can also include expansion of existing telehealth services. When considering such expansion the network capabilities and additional videoconferencing unit or software needs of each site must be determined.

For more information see the Sample Telehealth Services Application Form in Appendix D.

The healthcare provider and clinical program area are responsible for the telehealth appointments they offer. It is the providers' responsibility to work within their scope of practice from their regulatory body and the appropriateness of the consultation. Clinical practice guidelines and policies may also need to be developed. This can be completed through a collaborative effort between the Regional Telehealth Lead and the clinical program area and should include the identification of current research as well as current evidence. **Accreditation Canada provides criteria for telehealth standards.**

### 5.2 *Approval Process*

Upon review and completion of a telehealth services application, approval may be granted by the Regional Telehealth Lead, different levels of management, or the telehealth steering committee within the RHA. This necessary approval level will depend on the nature and impact of the request and will be determined by the Regional Telehealth Lead in consultation with the applicant and others as necessary.

Budget and equipment purchase discussion will take place through this approval process. The Regional Telehealth Lead and/or Technical Lead will complete a site visit as part of this application process. Equipment may be available within the region to use or new purchases may be considered. The most appropriate equipment type and/or software will be determined through discussion between the clinical program and the telehealth program and will be based on factors such as case use, capabilities of equipment/software, cost and room/setting.

### 5.3 *Site and Room Certification*

After approval, all sites must be certified before any telehealth activity can take place. When new telehealth technology or videoconference software (e.g. Cisco Jabber or Polycom Real Presence) is installed the equipment or software must be tested and certified by the Telehealth Technical Lead or designated individual. This process includes the submission of the appropriate *Certification Form* (i.e. Codec or software certification) which can be found in Appendix E.

The Provincial Telehealth Scheduling Coordinator will then certify the site for usage. An endpoint must be certified before a telehealth session can be scheduled provincially.

Out of province consultations will require additional room certification per endpoint and per out of province health care facility. An out of province telehealth session cannot occur without proper certification. The coordination of this process may include the Regional Telehealth Lead, Regional Telehealth Technical Lead and/or the Provincial Scheduling Coordinator. For additional information and testing for out of province consultations contact the Provincial Scheduling Coordinator.

#### **5.4 *Telehealth Education and Training***

Education and training are essential elements to the successful integration of Telehealth. It is critical that users develop knowledge and skills to understand Telehealth and to realize and use it to its full potential. All users will require telehealth training prior to using Telehealth. This training is provided and coordinated by the Regional Telehealth Lead.

Based on the telehealth education/training framework the Regional Telehealth Lead will provide education, training and orientation to healthcare providers, staff and clients. This will include information about the telehealth equipment as well as the standards for telehealth activity. Training can be provided in-person, through e-learning or remotely (through the telehealth system) as required and dependent on regional availability. The level of training required will depend on the application and role of the provider.

##### **Basic training for new initiatives should incorporate:**

- Broad concepts and standards for telehealth practice;
- Videoconferencing etiquette;
- Basic videoconference training – features of equipment, how to use and troubleshooting;
- A review of the process and policies for clinical programs;
- Demonstration of skills/mock encounter; and,
- Quality assurance – review of required surveys and reports

Once required training is completed, providers who will be using telehealth for service delivery (hosting clinician) will be added to the approved telehealth providers list and they can then begin to schedule appointments for clients through the iScheduler system.

## **5.5 *Telehealth Clinical Guideline***

The Provincial Telehealth Program is in the process of developing a Provincial Telehealth Clinical Guideline. This document will provide guidance to clients, healthcare providers, technical support and clinical support for those participating in Telehealth.

## **5.6 *Telehealth Appointments and Meetings***

Telehealth includes multiple appointment types that take place using videoconferencing technology. An appointment refers to the clinical use of Telehealth. An administrative meeting refers to non-clinical uses. Below are examples of the different types of telehealth sessions that can be scheduled.

- Initial Consultation/Assessment
- Follow-up Appointment
- Case Conference
- Consultation
- Clinical Meeting
- Administrative Meeting
- Out of Province Appointment

## **5.7 *Telehealth Appointment Scheduling Process***

### **5.7.1 *iScheduler***

#### **iScheduler Access Form**

All telehealth sites must have a staff person(s) assigned to support the telehealth appointment and booking process. Depending on the size of the telehealth site and the number of program areas and providers using telehealth more than one staff person may be required to have access to iScheduler. All staff that require access will complete a Telehealth iScheduler Access Application (appendix F) and forward to their Regional Telehealth Lead. Once an application is approved and an account is created, iScheduler training will be completed by the Regional Telehealth Lead based on the needs of the provider.

#### **Appointment and Meeting forms**

All clinical appointments and meetings held in NL using telehealth equipment are booked through a centralized scheduling process using the iScheduler program. The initial part of this process includes an iScheduler “Request for Telehealth Appointment” form (appendix G) or “Meeting and Group Session Request Form” (appendix H) which must be completed and submitted to the Provincial Telehealth Scheduling Coordinator via fax or eRequest. Once entered into the program, the telehealth appointment or meeting must be accepted by both the host site and the referral site in order for a session to take place. More information about the process can be found in the “Scheduling an Appointment or Meeting” section below.

### **5.7.2 Pre-Appointment Consent**

Written consent is not required by the NL Telehealth Program for telehealth consultations held in the province. When the client presents for the telehealth consultation consent is implied. However, some RHAs may require consent for the program areas within the respective regions. Therefore healthcare providers should consult their organization's policy around consent for service and their own professional standards for informing clients about the risks and benefits of care.

Out of province consults require written consent for telehealth consultations. The client must review, read and sign the consent form in order to proceed with the appointment. The out of province consent can be found in the "Attachment" tab in the iScheduler appointment. The referral site contact is responsible for faxing the signed consent form to the host site.

### **5.7.3 Scheduling an Appointment or Meeting**

All appointments within the province must be booked through the provincial scheduling system, iScheduler. The appointment and meeting forms are standardized and must be completed in full in order for the telehealth appointment/meeting to be scheduled appropriately.

It is the providers' responsibility to determine the needs of the appointment; such as RN assistance, assessment completed during the appointment, laboratory tests completed prior to an appointment, etc. This information will be conveyed to the referral site through the iScheduler booking process. There may be pre-appointment tests or documentation required to be completed prior to the appointment. These would be indicated on the booking form and entered in the iScheduler appointment under "Appointment Requirements" tab.

Appointments requested will be addressed in order of priority by appointment date. An appointment request is sent to the client/referral site through the iScheduler booking process. The request includes important information such as the date, time, location and other requirements of the appointment. The client/referral site will review the request and action the request by selecting either "accept" or "reject". Once an appointment is actioned a confirmation email is sent to the appropriate site(s) or provider(s).

For any urgent appointments contact the Provincial Telehealth Scheduling Coordinator for assistance. If an appointment occurs urgently and was not previously scheduled the requester or healthcare provider must send the scheduling information within five business days after the consultation for statistical data collection.

The Provincial Telehealth Scheduling Coordinators can be contacted if assistance is required for booking a telehealth appointment or meeting.

Once the appointment is confirmed it is the responsibility of the hosting healthcare provider to let the client know of the details of the appointment. The provider should also discuss the

*Telehealth Client Information Sheet* (Appendix I) and/or mail to the client in advance of the appointment. The client should arrive 30 minutes prior to the scheduled appointment to allow time for registration and the time it may take to get to the specific telehealth space. The client should be notified by their provider if more time is required prior to the appointment for procedures that may be needed as part of the telehealth assessment/follow up (e.g. blood pressure, BMI, etc.).

\*Note: Some clinical programs may need to modify the *Telehealth Information Sheet* to meet their specific needs. Any modifications should be confirmed with the Regional Telehealth Lead.

#### **5.7.4 Out-of-Province Appointments**

For any new out of province telehealth appointments please contact the Provincial Telehealth Scheduling Coordinators prior to booking the appointment. Additional requirements may be needed including a certification call prior to the appointment.

#### **5.7.5 Room Signage**

There must be directions/signage to guide clients and healthcare providers to the location of the telehealth equipment. During any telehealth session the “STOP – Telehealth Session in Progress” (or similar) sign must be printed and posted on the door (Appendix J). This advises that a Telehealth Session is in progress and helps to deter anyone from entering the room and interrupting the session.

### **5.8 Confidentiality and Privacy**

In NL the collection, use and disclosure of personal health information is governed by the *Personal Health Information Act* (PHIA): [www.health.gov.nl.ca/health/PHIA](http://www.health.gov.nl.ca/health/PHIA). The *NL Access to Information and Protection of Privacy Act (ATIPPA)* protects the privacy of all personal information that can identify an individual.

All telehealth activities must comply with provincial and federal privacy legislation, code of ethics and professional practice standards, as well as organizational policies and procedures - to ensure client confidentiality is maintained before, during and after the telehealth consultation.

Telehealth offers the ability for healthcare providers to connect with clients in real time over an encrypted network. The video appointment cannot be recorded using telehealth equipment/endpoint. If a request is made to record a telehealth session, it must be approved by the RHA (e.g. Information Management, Privacy, Quality departments). Applications that are not encrypted are not appropriate for clinical videoconferencing use. As new videoconferencing options become available it is important to ensure that only approved technology or software is used for telehealth clinical appointments.

It is expected that users comply with policies and procedures related to confidentiality and privacy in the respective RHA. The following basic guidelines are applicable to all regions of the province:

- Telehealth equipment should be used in a manner that provides privacy, such as a room designed to prevent interruptions or to limit hearing of conversations by individuals not involved in the consultation;
- The client should be informed of any additional participant that joins the clinical consultation, prior to or after it has commenced, and has the right to refuse the additional participation;
- No medical records should be stored in the same room during a telehealth session;
- Normal practice standards should apply to the use of telephone and facsimile machines during a telehealth session.
- If there are windows in the telehealth room, blinds/coverings should be in place and closed during a session.

## **5.9 *Appointment Registration***

In the case of a telehealth visit, there are two different sites or functional centres potentially involved with a visit; a referral site and a host site. The provincial telehealth registration protocols are currently being reviewed. Once finalized the registration process will be added to this Provincial Telehealth Manual as Appendix K.

Registration is important for the purposes of:

- Accurate identification of the client who receives services within the information system of the RHA,
- Access to the health record belonging to that client;
- Continuity of care;
- Accountability from a risk management perspective;
- Accurate utilization statistics;
- MCP billing – Clients must be registered for the clinical area that they are receiving telehealth services in order for the telehealth codes to apply.
- Client safety – if a client is in a facility for a telehealth appointment is it important to register them in case of an emergency, such as fire.

## **5.10 *Appointment Cancellations and No Shows***

Appointment cancellations, no shows and delays have an impact on service delivery from the client, provider and supporting staff perspectives. When appointments are cancelled by the host site the host is responsible to notify the client and provincial scheduling coordinator. The

scheduling coordinator will notify the client site of the cancellation. When appointments are cancelled by the referral site (e.g. no staff available to support) it is the responsibility of the referral site to notify the provincial scheduling coordinator. This can be completed using the cancel option in the iScheduler program. If the cancellation is of short notice, the referral site should contact the provincial scheduling coordinator directly.

In the case of no shows or delays in appointment start time by the host or referral site, it is the responsibility of the delayed site to advise the other site as soon as possible so that the other site can be made aware. Contact numbers can be found on the iScheduler email appointment notification or iScheduler Whiteboard.

Both the host and referral site should indicate the change in appointment status for cancellations and no shows, in the iScheduler system.

## ***5.11 Telehealth Video Equipment/Software/Room Set-Up***

To ensure a successful telehealth appointment, videoconferencing equipment must be properly set up prior to the appointment. The following subsections outline the recommendations for this process at the client and at the host site. Technical support is available for telehealth appointments. Please contact your Regional Telehealth Lead regarding the type of support available in your RHA.

### **5.11.1 Client/Referral Site**

Prior to the telehealth appointment, the **referral site contact** should:

- Arrive at least 15 minutes prior to the appointment to arrange room and to ensure the equipment is ready:
  - If a mobile cart is required it should be:
    - brought to the telehealth space
    - plugged into the “Video” or “Telehealth” jack
    - displaying the unit’s IP address or unit # on the screen
  - Test all peripheral devices that may be required for the appointment
  - Check lighting - if needed, close curtains
  - Check audio/sound – make adjustments where necessary
  - Check camera – adjust as necessary to ensure client is in optimal viewing area (should mimic face-to-face setting)
- Place the “STOP - Telehealth Session in Progress” sign (Appendix J) on the door to minimize interruptions and ensure privacy;
- Ensure a phone and list of contacts is nearby for technical assistance;
- Have surveys available for the client to complete following the appointment;
- Ensure client is registered as per RHA requirements;
- Inform client of persons involved in/attending the appointment, including any technical support personnel;

- If consult is with an out of province provider, ensure appropriate written consent is obtained;
- Ensure client is informed of how and who to contact for support during the telehealth appointment (if no staff person present during appointment).
- Ensure Telehealth Client Information Sheet is posted in the appointment room. The information sheet displays contact information that a client can use to provide feedback to the program.

### **5.11.2 Health Care Provider/Host Site:**

On the day of the telehealth appointment, the host, site contact or designate should:

- Arrive approximately 15 minutes prior to the consultation to set up equipment
- Place “STOP - Telehealth Session in Progress” sign on the door
- Check that the equipment is functioning:
  - adjust camera and audio as needed
  - complete test call with virtual test room or test unit, if available
- Ensure that a phone is available in case help desk/technical support is required

Refer to the Equipment Set-up and Troubleshooting document for more information. Reference sheets for equipment set up will vary depending on the telehealth equipment and/or software being used (contact your Regional Telehealth Lead). The troubleshooting document can be found in Appendix L.

## **5.12 During Appointment**

### **5.12.1 Duty of Care**

A telehealth appointment mirrors a face-to-face clinical consultation (e.g. between healthcare provider and a client; or between clinicians) via the telehealth system. Healthcare providers are legally responsible to provide services as outlined by their professional association (e.g. CPSNL, ARNNL and NLMA).

The requesting healthcare provider or designate is responsible to explain to the client (or the client's parent/guardian or authorized representative), the process for a telehealth appointment, including:

- Description of what to expect during the telehealth appointment
- Explanation of personnel who may be involved in the appointment
- Opt out option: process to revoke consent

### **5.12.2 Connecting at the Host Site**

For a point-to-point appointment the healthcare provider will choose the site and room from the provincial directory and dial/call the referral site. It is advisable that the host site have the dial in/IP address with them for their call in case there is an issue with the directory. Once connected

the healthcare provider will confirm the video and audio quality, position the camera appropriately for the appointment, and proceed with instructions for the telehealth appointment.

A virtual meeting room can be used to connect more than two sites. For a multipoint session the healthcare provider or support staff will dial into a conference room and the other sites will do the same and the session will begin.

### **5.12.3 Connecting at the Referral Site**

For a point-to-point call the healthcare provider at the host site will dial directly to the referral site. The videoconferencing unit will ring and the client or support staff will answer the call as directed.

For a multipoint call all sites will dial into a videoconference room (virtual meeting room) and the session will begin.

Some sessions require additional support for connection such as bridging for out of province appointments. Details will be provided in the appointment confirmation on how this connection will be made.

## **5.13 *Beginning the Session***

The healthcare provider is responsible to explain the telehealth appointment process to the client. If there are any additional personnel at the host or referral site they must all be visible and identified prior to the beginning of the session. Allow for the client to ask any questions they have prior to starting the appointment.

If there is a healthcare member attending the appointment at the referral site it is important that their role in the appointment be explained to the client prior to the appointment; for example, support with physical assessments.

Use appropriate videoconferencing etiquette:

- Once the appointment has begun do not move the microphone: this interferes with system sound settings.
- Keep the microphone unobstructed by papers, etc.
- Avoid side conversations.
- Pause after speaking to allow participants at the referral site to comment.
- Wait until the speaker is finished before replying.
- Allow time for client questions.
- The microphone should be halfway between the client and the videoconferencing unit. The client/provider does not need to talk directly into the microphone and a normal speaking volume will allow the best transmission of audio.
- There could be possible delays between the audio and the video. If the bandwidth is low then the video quality will be lowered in order for the quality of the audio to remain.

- Minimize background noise (e.g. moving papers, tapping pen, etc.).
- In a group (multisite) call, all sites should keep their microphone muted when they are not speaking.

### **5.13.1 Roles of Healthcare Provider Assisting in Telehealth Appointment**

Some telehealth appointments require a healthcare provider to assist with the appointment. An example may be an oncology appointment that requires an RN/LPN to be present during the appointment to assist with procedures. Another example might be a provider assisting with a telerheumatology appointment. The details of the assistance required will be outlined in the Telehealth Booking Request and will be made known to the assisting provider prior to the appointment. Possible roles may include:

- Completion of procedures required prior to or during the appointment (e.g. blood pressure, height/weight, etc.)
- Assisting with assessment at client site (e.g. examination camera use for telerheumatology)

### **5.13.2 Documentation**

Any clinical intervention conducted through Telehealth must be documented in accordance with professional practice standards and organizational policies. Any exceptions in documentation practices must be outlined as part of the Telehealth Application process.

## **5.14 *Post Appointment***

### **5.14.1 Reporting**

All issues (e.g. technical, operational, etc.) that occurred during the appointment should be reported as soon as possible during or immediately after the appointment. This feedback should be reported to the Regional Telehealth Lead or Technical lead.

### **5.14.2 Follow Up Requirements**

It is the hosting healthcare provider's responsibility to notify the client of any follow up appointments or treatment that will be required. In order to ensure continuity of care, the healthcare provider is also responsible to provide follow up information and details of the telehealth appointment to the referring provider or site (e.g. LTC facility).

It is important that any staff assisting at the referral site share with the referring health care team any information that was collected prior to or during the telehealth appointment that is pertinent to the client care plan (e.g. vital signs, outcome of appointment, etc.).

## 5.15 *Quality Assurance*

A commitment to Quality Assurance ensures the Provincial Telehealth Program provides a quality service which meets the needs of its users. This is validated through data analysis of client and provider surveys, as well as Technical QA processes (e.g. maintenance checklist).

**Healthcare Provider Survey:** It is important to capture healthcare providers' feedback on their experience with the service (appendix M). Surveys are available and are encouraged after initial consultations and throughout the providers' experience with Telehealth. Feedback can be provided anonymously on the survey which is then placed in an envelope provided, sealed, and returned to the Regional Telehealth Lead.

**Client/Family Survey:** After every telehealth appointment the client/family has the option to complete the Telehealth Client/Family Satisfaction Survey (appendix N). This can be completed as many times as the client/family chooses. This feedback can be provided anonymously on the survey which is then placed in an envelope provided, sealed, and returned to the Regional Telehealth Lead.

**Support Staff Survey:** Any staff that assists at the client/referral site has the opportunity to complete the Support Staff Satisfaction Survey (appendix O). This can be completed multiple times as the experiences can change depending on the level of support they are providing. As above, once the survey is completed, it is placed in the addressed envelope and returned to the Regional Telehealth Lead.

**Note:** Some clinical programs create a modified survey to assess more specific needs related to their clinical area. Any modified surveys must follow provincial guidelines and be evaluated in an appropriate manner.

## 5.16 *Infection Control*

After every telehealth appointment the equipment used during the appointment must be cleaned according to infection control policies of the RHA. Telehealth support staff should contact their local environmental services personnel to discuss equipment cleaning and establish a regular schedule for cleaning. Cameras and monitors must be cleaned with a dry dust free cloth.

The following list demonstrates the items typically used in a telehealth session that require infection control:

**Hand Held Examination Camera:** This camera is used primarily during client appointments that require high-resolution examinations. The components of this camera consist of a main camera and detachable lenses.

- If the camera is used with the probe, (e.g. for wound assessment) use the probe cover and discard after each use. **Apply a new one for each client.** Note: The probe covers may contain latex: **do not** use if the client is **allergic** to latex.
- The camera body must be disinfected with an accelerated hydrogen peroxide wipe (e.g. ACCEL wipe) after each use. **Do not** wipe around the lens with the ACCEL wipe.
- If the camera lens becomes contaminated please contact the Regional Telehealth Lead immediately. **Do not** attempt to clean the lens. Place contaminated examination camera in a large Ziploc or biohazard bag and follow the direction from the Regional Telehealth Lead.
- Minimize direct contact between the client and camera to reduce risk of contamination.

**Cords, Remote Controls and Microphones:** These items are most often handled by telehealth users during a telehealth appointment. Use ACCEL wipes or RHA’s recommended surface cleaner/disinfectant to wash down all cords, remote controls and microphones. However, **do not** wipe any metal contacts that are inserted into any equipment.

**Main Videoconferencing Camera:** This camera is located on top or below the monitor depending on the unit type. Please **do not** attempt to clean this camera. The camera can be wiped with a dust free dry cloth. Please contact the Regional Telehealth Technical Lead regarding cleaning procedures for this camera.

**Monitors/Screens:** Ensure monitor/screen is turned off before cleaning. **Never spray or pour** any liquid directly onto the screen. Clean only with a dry dust free cloth.

### ***5.17 After-Hours Telehealth Services***

Planned telehealth appointments scheduled outside regular work hours must be assessed on a case by case basis, in consultation with the Regional Telehealth Lead. These telehealth sessions may not be able to be accommodated at all sites.

### ***5.18 Emergency Telehealth Services***

Telehealth appointments that are required on an emergent or urgent basis are able to be accommodated at identified sites throughout the Province. These sessions are required to be entered in iScheduler. Please contact the Regional Telehealth Lead for further information.

## **6 TELEHEALTH TECHNICAL SUPPORT**

Each RHA has a Telehealth Technical Lead (and/or team) who is responsible for all technical support related to Telehealth. This would include installation, preventative maintenance, and real-time support.

## **6.1 *Technical System Maintenance Checklist***

The Telehealth Technical Lead in each RHA is responsible for the preventative maintenance of the telehealth systems. The *Technical System Maintenance Checklist* (appendix P) is utilized to track this information and is completed on an annual basis, at a minimum. This information is stored in a network folder. Technical issues that arise are addressed in a timely fashion, to provide quality of service.

## **6.2 *Contacting RHA Help Desks***

Each telehealth unit should be labeled with the contact information for Telehealth Technical Support. Some of the RHAs utilize their helpdesk for telehealth technical support, while others have dedicated technical support staff identified specifically for telehealth. Contact information is in Appendix C.

# **7 TELEHEALTH STATISTICS / MONITORING**

## **7.1 *iScheduler Monthly and Yearly Statistics***

Statistics, based on booked appointments in iScheduler, are gathered on a monthly, yearly, and ad hoc basis in each RHA for various programs and providers. These statistics are reported to RHA executive, the reporting director, the Centre (NLCHI) VP and the Provincial Telehealth Advisory Committee. Each RHA may have different requests from programs and providers for capturing the telehealth usage in the region. Statistics are compiled 15 days after the close of a month.

Statistics are categorized as follows:

- Telehealth appointments – appointments which are scheduled between clients and healthcare providers. These appointments can include, but are not limited to, initial, follow-up, pre/post-op, or counselling sessions.
- Clinical support - defined as a virtual meeting which directly impacts client care however the client is not required to attend (e.g. Telepharmacy for verification of prescriptions, peer-peer consultation between providers).
- Clinical Support (Client Education) – group education or support for client and/or family (e.g. Diabetes Education, Improving Health My Way program, Parenting Sessions, etc.).
- Clinical Support (Staff Education) - a virtual meeting which supports client care indirectly (i.e. thermometer training, education of stroke protocols, diabetes education classes, etc.).
- Administrative Use (e.g. Staff Meeting)

## **7.2 *Telehealth Unit Checklist***

Telehealth equipment is used with varying frequency at respective telehealth sites. To ensure that issues are identified in a timely manner, it is recommended that a Telehealth Unit Checklist (appendix Q) be completed by site staff. For equipment that is used infrequently it is important to check the unit on a weekly basis to allow support staff to stay familiar with the technology and

to identify any technical issues that may require attention by the Regional Telehealth Technical Lead. This process will complement the annual System Maintenance completed by the Technical Lead.

### **7.3 *Telehealth Equipment Tracking***

All Telehealth units are monitored independently within each RHA. This includes warranty renewals, data ports, unit/type, etc.

**Equipment Maintenance:** Annual Maintenance is required on all telehealth equipment to ensure all components are working and software updates are current. The *Telehealth Equipment Maintenance Checklist Template* (appendix P) captures the annual maintenance checks and tracks technical issues.

**Equipment Tracking:** All telehealth equipment must be recorded to include: equipment type, serial number, IP address and all related information. This information is required when contacting the service desk or vendor for technical issues. There is a template available to assist in capturing the required information (appendix R).

## **8 TELEHEALTH WORKING GROUPS**

There are several formal, organized committees and working groups that support the provincial telehealth program as well as the related RHA telehealth programs. Other ad hoc working groups are also required to address specific needs (e.g. working group to plan, implement and evaluate a pilot project for a new telehealth initiative).

### **8.1 *Monthly Telehealth Coordinators Meeting***

Meetings are held monthly for the Telehealth Leads of each RHA and NLCHI which focus on provincial and regional updates, initiatives, reports, and statistics review. The majority of the meetings take place over conference call with document sharing. A face-to-face meeting is held at minimum once a year to provide an opportunity for ongoing education, appropriate site visits, team collaboration and ongoing strategic planning.

### **8.2 *Regional Telehealth Leadership Committees***

Each RHA has a telehealth leadership committee which serves as a decision making team, providing direction related to the strategic goals of the RHA which are in line with provincial strategic directions. These meetings follow a standard Terms of Reference and are held on a regular basis. The Regional Telehealth Lead for the RHA may chair/co-chair these meetings and the Provincial Program Manager of Telehealth may attend to provide the provincial update.

### **8.3 *Provincial Telehealth Advisory Committee***

The Newfoundland and Labrador Provincial Telehealth Advisory Committee is responsible for providing leadership, support and guidance for the Telehealth Program. The membership of the committee includes:

- Two representatives from Eastern Health (one will be an executive member)
- Two representatives from Central Health (one will be an executive member)
- Two representatives from Western Health (one will be an executive member)
- Two representatives from Labrador-Grenfell Health (one will be an executive member)
- Two representatives from NL Centre for Health Information (one will be an executive member)
- One representative from Newfoundland and Labrador Medical Association
- One representative from the Association of Registered Nurses of Newfoundland and Labrador
- Two representatives from the Department of Health and Community Services (Regional Services Branch and Population Health Branch)

See appendix S for the Terms of Reference for the Provincial Telehealth Advisory Committee.

### **8.4 *Telehealth Technical Group***

On a monthly basis the technical staff who support Telehealth within each RHA meet to discuss regional work and challenges, and to provide feedback and support regarding the RHA telehealth programs. This group consists of a representative from each RHA (Telehealth Technical Lead) and the Provincial Program Manager of Telehealth. The meeting is chaired by one of the Telehealth Technical Leads. See Telehealth Technical Group Terms of Reference for more details (appendix T).

## **9 TECHNOLOGY**

### **9.1 *Types of Telehealth Technology***

There are several types of videoconferencing technology used for Telehealth in NL. The types of technology available depends on the RHA and the awarded tenders. Some brands of equipment and software currently utilized within NL RHAs include, but are not limited to, Cisco, Avizia and Polycom. Within these brands there are different styles of units. Please contact your Regional Telehealth Lead for more information.

**Desktop Unit** – A desktop unit looks similar to a computer, however, its intended function is videoconferencing. This unit has the camera, codec and screen built into the unit. A desktop unit is designed as a stationary unit and is suitable for a healthcare provider to use in a private office setting.

**Mobile Cart** – The mobile cart has the codec, camera and television screen mounted on a wheeled cart. This cart can be wireless or may require physical connection to the RHA network. The cart can be moved between rooms to maximize its use. The cart is ideal when shared between spaces or in a clinical area. This cart is also known as a clinical cart.

**Mobile Devices** – These include smart phones and tablets that utilize secure, encrypted videoconference software. The mobile device allows for videoconferencing using the RHAs wireless network or cellular data.

**Peripheral Devices** – These devices attach to the videoconferencing equipment and may include fine-focused cameras, digital stethoscope, dermascope, etc. Healthcare providers may consider adding peripheral devices to enhance the quality of their appointments.

**Software Program Solutions** – These solutions allow telehealth to be provided from a computer (stand-alone, laptop or mobile device) utilizing an approved high definition (HD) camera or webcam. Cisco Jabber Client and Polycom Real Presence are examples of this software and include licenses which enable the user to install the software on the PC or mobile device creating a software solution as opposed to traditional hardwired units. This is a low cost secure option for telehealth appointments. All software used for Telehealth purposes must comply with security and PIA processes of the RHA.

**Stationary Unit** – A stationary unit includes the codec and camera built into the screen and then mounted on a stand. This is designed for a larger room setting, such as a boardroom. An example of this would be the Cisco MX200 G2 or Polycom Group Series 500.

**Wall-Mounted Unit** – A wall mounted unit is designed to have the codec and camera mounted below a television. This unit can be used in a clinical room or a boardroom setting.

## 9.2 *Basic troubleshooting*

When there is an issue with the telehealth equipment there are basic troubleshooting tips (appendix L) that the healthcare provider or support staff can try before contacting technical support. If the troubleshooting guidelines do not resolve the issues then the telehealth technical support should be contacted.

The telehealth technical support (Technical Lead or help desk) can gain remote access to a telehealth unit. Remote access is used for troubleshooting and testing purposes.

## 10 RESOURCES

### 10.1 *Provincial Telehealth Site Manual*

The Provincial Telehealth Site Manual is used to support telehealth programs and/or providers with key information and guidelines for Telehealth. The manual is distributed to all telehealth sites, new programs and/or providers and is updated yearly.

### 10.2 *COACH*

It is recommended that the Provincial Program Manager, Regional Telehealth Leads, and other key telehealth members are members of COACH. COACH is Canada's Health Informatics Association that focuses on eHealth initiatives. There are many groups and committees available regarding eHealth in Canada. The Canadian Telehealth Forum (CTF) is made up of key members from across the country involved in Telehealth. This group enables the sharing of information among members to help strengthen the knowledge, support, and successes of Telehealth in Canada. Additional information about COACH can be found at: <https://www.coachorg.com/en/>

### 10.3 *Promotion*

The Provincial Telehealth Program has developed brochures and posters for the promotion of telehealth services, the benefits of, and a map of provincial telehealth sites. Regional promotional materials may also be developed for the specific programs within each RHA (e.g. Long Term Care, Telestroke, etc.).

### 10.4 *Additional Resources*

*A Three Year Provincial Telehealth Strategic Plan for Newfoundland and Labrador (2005)*

*2015 Canadian Telehealth Report*

*2016-2017 Canadian Telehealth Accreditation Standards*

## 11 Appendices

Appendices associated with this manual can be found in the document "NL Provincial Telehealth Manual Appendices".

Newfoundland and Labrador Centre for Health Information

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