Clinical Telehealth Equipment Guide (Avizia CA300)

First Nations Health Authority

Health through wellness

For technical support
with your equipment please
contact FNHA HelpDesk
(eHealth Support) at:
1-844-364-7878 or
ehealthsupport@fnha.ca

First Nations Health Authority
Health through wellness

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Purpose

Welcome

This training manual has been compiled as a result of a partnership between the First Nations Health Authority and the UBC Centre for Excellence in Indigenous Health. As a part of the Centre, the UBC Learning Circle initiative has been providing distance education using telehealth technology since 2007 and has a wealth of knowledge and experience to share in developing training materials for educational and administrative telehealth.

We also acknowledge the contributions of two working groups that supported the creation of this material. A Training Working Group comprised of health care professionals and technology experts from regional health authorities and educational institutions provided feedback and input on the educational and administrative training. A Clinical Working Group oversaw the development of clinical processes and guidelines. Within this document the term 'Telehealth' refers to videoconference-based clinical services only. The First Nations Health Authority Telehealth program wishes to thank the regional health authorities that contributed to this work: Island Health, Fraser Health, Vancouver Coastal Health, Interior Health, Northern Health, and the Provincial Health Services Authority.

Many First Nations communities across BC are in rural and remote locations, and access to clinical telehealth services can support people in building and improving health and wellness without leaving their community. Telehealth can be defined as "a complementary health care delivery service that uses information and communication technologies to connect health care providers, patients/clients and educators over distance" (BC Ministry of Health, 2014).

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA
Centre for Excellence in Indigenous Health

First Nations Health Authority
Health through wellness

UBC LEARNING CIRCLE
Embracing Community Solutions

Introduction

Clinical telehealth has requirements that differ from using this technology for non-clinical (educational and administrative) purposes. This guide addresses the use of the Avizia CA300 clinical telehealth cart and the processes that are involved to ensure a clinical telehealth session is successful from an equipment perspective. For information on the clinical components of telehealth based upon 'best practices' please refer to the 'Clinical Telehealth Guidelines' document. This document is not intended to provide medical advice nor does it provide information about medical conditions or treatments.

1.1 Clinical Telehealth

Clinical telehealth has additional security and privacy concerns that are not present in non-clinical applications as these sessions may include the transmission of patient information, medical history, lab results and prescription history. Rooms that are used for clinical telehealth consultations should meet the same standards required for clinical consultations that take place in-person.

Clinical Telehealth Room Requirements

Rooms used for clinical telehealth differ from what is required for educational and administrative telehealth. There are slightly different considerations for sites hosting patients and providers.

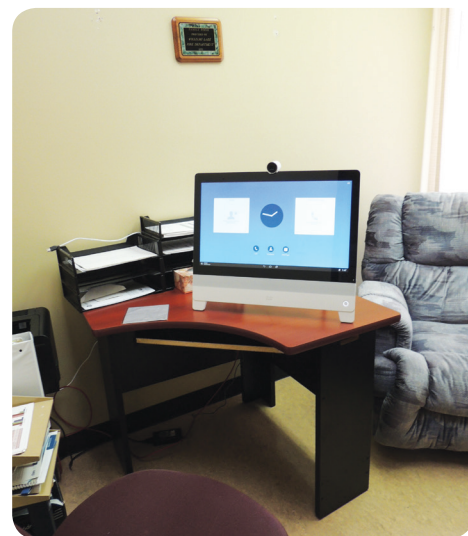## 2.1 Clinical Telehealth Room for Patients Site

The room(s) selected in a health centre or nursing station for clinical telehealth should be easily accessible for all patients. A room that is already identified as suitable for clinical consultations will also be suitable for clinical telehealth. In addition to housing the clinical telehealth cart, Telehealth room(s) should also include:

- Enough power outlets for the devices used in that room
- Desk phone (to call for technical support when required)
- Data/network connection(s) for the telehealth cart as well as any other computers/devices that require them
- Have a lockable door
- A minimum of 2 chairs
- Blinds/curtains for windows

2.2 Clinical Telehealth Room for Provider Site

A private office or clinical room can be used by providers who deliver services via telehealth. The requirements for these rooms are similar to those outlined for patient sites. The main exception is that the equipment used by a provider will differ. Software-based programs or desktop-style video-conference units will typically be used.

Using your Equipment (Avizia CA300)

Adjustable display and camera bracket

HD Display

PrecisionHD Camera

Console with button panel, I/O, and integrated microphone, and downward-facing speakers

Impermeable work surface

Handle

Storage bin

Locking drawer

Height-adjust lever

Cable wrap

Power inlet Ethernet, and system breaker switch

Hospital grade locking casters
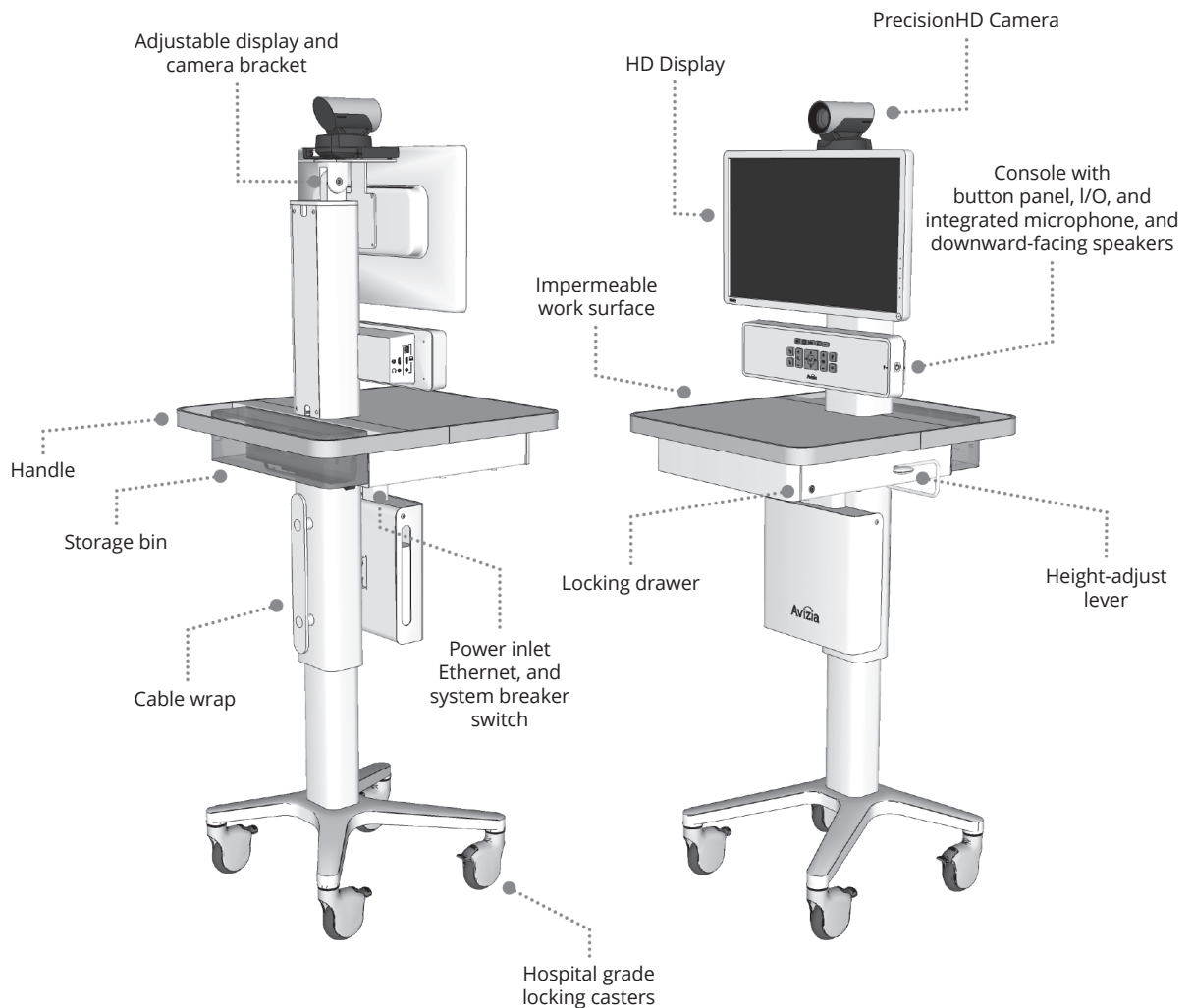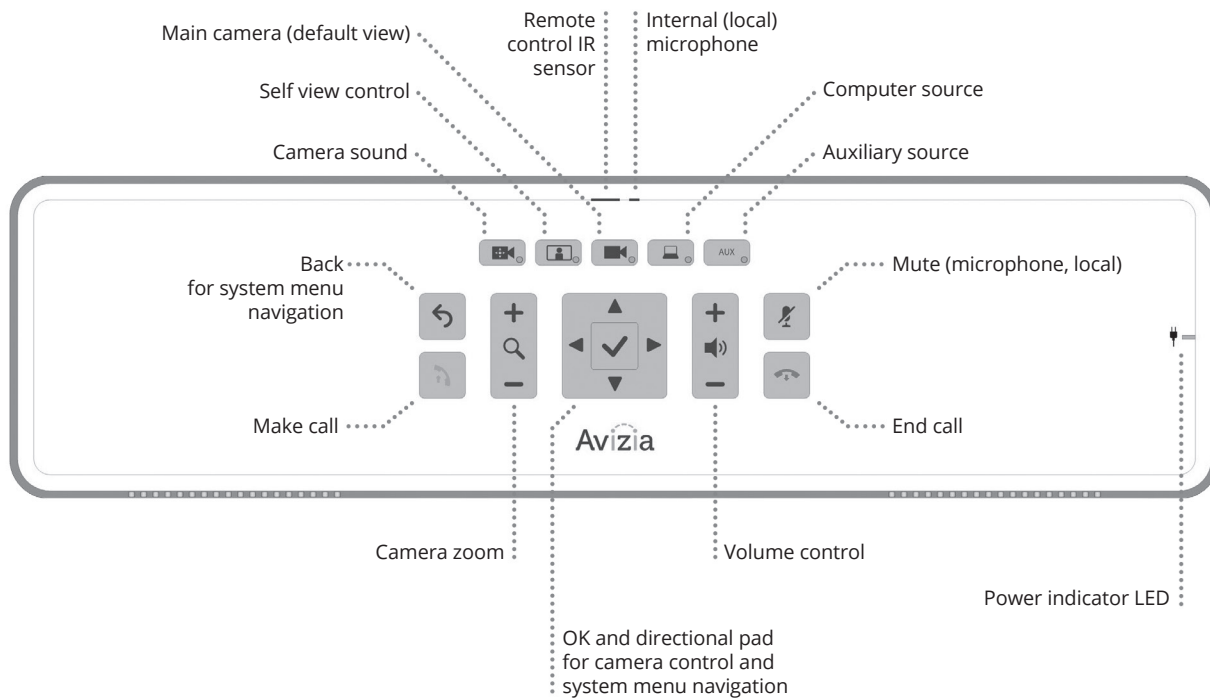
The Avizia CA300 (the 'Telehealth cart') comes with an integrated display monitor, camera and video-conferencing unit all-in-one. The cart is mounted on wheels so it can be moved around easily. It may be configured to operate on a wireless internet connection depending on the facility you are working in. For quick reference please refer to Appendix A.

3.1 Turning on your Telehealth Cart

Main camera (default view)
Self view control
Camera sound
Back for system menu navigation
Make call
Camera zoom

Remote control IR sensor
Internal (local) microphone
Computer source
Auxiliary source
Mute (microphone, local)
End call
Volume control
Power indicator LED

OK and directional pad for camera control and system menu navigation

Ensure that the telehealth cart has been plugged in. Press the power button on the side of the cart – it takes about 45-90 seconds for the unit to turn on and the camera to be ready to operate. Ensure that the display monitor has been turned on if you do not see anything displayed. To turn the unit off, press and hold the power button until the unit shuts down.

Your telehealth cart will 'go to sleep' if it isn't being used after several minutes. To 'wake' it up just pick up the remote and this will be detected by the sensor. You can start using it again as long as the display monitor is on and the power is still plugged in. You can also wake the unit up by quickly pressing the power button.

The majority of calls that are made will use 'point-to-point' dialing (one unit to another). If you need to connect with more than one site, please refer to Section 5 on Multi-Site Dialing.

3.2 Placing a Call

Place a call by entering the name or number of your contact from the main screen by using the remote. Depending on where you are dialing, the address might look like one of the following:

- **Using the directory (phone book)**
  - Some contact information will be saved in the directory. To access this press the phone book button on the remote and use the arrow keys to scroll through the menu to look for the contact you are looking for. You can also search for a contact by entering their name.

- **Dialing the videoconference unit extension number**
  - You will be able to dial another site simply by entering the appropriate extension number combination. This works in a similar way to the directory e.g. 73000 or 71999.

- **user@domain.com** – **Alias**
  - An Alias looks like an e-mail address but doesn't work the same way. (You won't be able to 'dial' an actual e-mail address with your videoconference unit). Aliases are linked to an IP address, so you only need to know one of the two in order to place a call e.g. FNHA_UK_CART@fnha.ca

- **10.11.12.13 – IP address** (don't forget the dots)
  - An IP address can be either internal (used within your organization's network only) or external (anyone outside your organization can dial). This is similar to how you might call a coworker at their extension (internal) but need to dial a full phone number for someone outside of your organization (external).

If you make a mistake at any point when entering information, press the 'C' button to delete your last entry. After you've entered the number, press Call (the green button that looks like a telephone receiver) and the videoconference will dial the other site.

3.2.1 Answering a Call

To answer a call, press the green button that looks like a telephone receiver. When you are receiving a call, you will hear a ring tone and see a notification on the screen asking if you would like to accept or reject the incoming call. Press the green button to accept and the red button to reject.

3.2.2 Muting the Microphone

To mute your microphone, press the Mute button on the remote control. You can also press the Mute button on top of the microphone itself. When the light is red, it's muted, and when it's green, everyone can hear what's going on in your room. It's recommended to mute your microphone when 3 or more sites are taking part in your telehealth session. This reduces background noise and helps you to communicate in a good way.

UNMUTED   **MUTED**

3.2.3 Adjusting the Volume

Adjust the volume using the videoconference remote. Press the Speaker Volume button either up or down to select the desired volume.

3.2.4 Ending a Call

Press the red Hang Up button on the remote. If the system asks you to confirm you want to end the call, select 'yes.'

3.3 Using the Camera

To move the camera, press the directional arrow keys on the remote. The camera takes a second to start moving, and once it starts moving it can move rather quickly. It takes a little time to get used to this so don't be afraid to practice. You can also zoom in and out. The same controls are also available on the control panel beneath the display monitor.

NOTE: It is important to always use the remote control to adjust the camera – never adjust it manually. The camera is a sensitive piece of equipment and can be easily damaged if forced to move.

3.4 Using the Peripheral Exam Devices
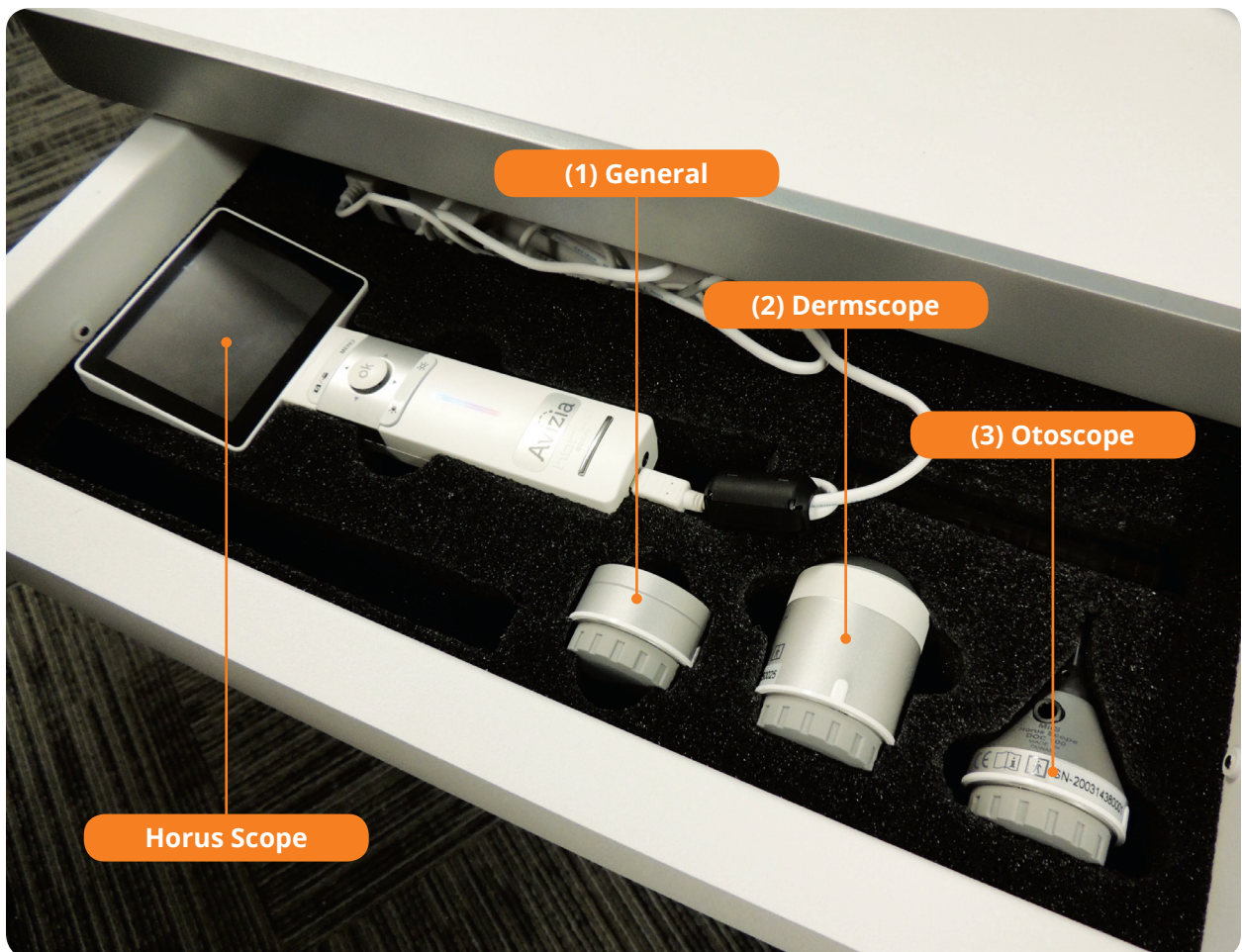
The clinical telehealth cart has a drawer that includes a JEDMED Horus Scope Camera that has three different, changeable peripheral exam devices: (1) a general exam scope, (2) dermscope and (3) otoscope (ENT). Power up the handle unit and plug it into the AUX input on the side of the cart. Attach the peripheral exam device you wish to use. Press the AUX button underneath the display monitor to display the image on the scope.

Once the peripheral exam device has been attached use the wheel to focus the image and adjust the lighting with the light level buttons (sun icons).

NOTE: A peripheral exam device must be attached to the Horus Scope in order for an image to be displayed.

3.4.1 General Exam Scope

The general exam scope attachment can be used when you wish to examine in greater detail than the mounted camera allows.

3.4.2 Dermscope

The dermscope requires direct skin contact for an image to be displayed. It should not be used on open wounds or lesions. This attachment should be wiped down with 70% ethyl alcohol after each use.

3.4.3 Otoscope (ENT Scope)

This attachment can be used to examine the ear, nose or throat. Ensure a new plastic cover is used each time.

3.5 Equipment and Maintenance

The JEDMED Horus Scope Handle and exam peripherals should be handled with care. To clean and disinfect this equipment:

- Power off the device before cleaning
- Disinfect the control unit with a soft cloth and 70% ethyl alcohol
- It is recommended to clean the optical lens with a cleaning cloth or lens cleaning tissue

NOTE: The Horus Scope is not intended to be sterilized.

Scheduling

Scheduling for clinical telehealth sessions is currently being supported by the Provincial Health Services Authority (PHSA). Because health authorities transmit confidential patient information, extra security in the form of a 'firewall' exists on these networks. A firewall is a software program or piece of hardware that helps screen out hackers and viruses that try to reach your computer over the internet. Because of this added layer of security, clinical telehealth sessions need to be requested 48 hours in advance in order to use these secured connections.

4.1 Scheduling Form

NOTE: *If you are requesting a clinical event with a patient please do not include personal information or personal health information in your request via e-mail. If this information is needed the telehealth office will collect this via telephone.*

The PHSA 'Video Conference Request Form' is required when connecting with (a) two telehealth sites hosted on separate networks or (b) three or more telehealth sites must be present in a single call. Access this form from: http://www.phsa.ca/health-professionals/professional-resources/telehealth/booking-and-support/booking-a-telehealth-session and use the 'External Telehealth Request Form'.

If you are unsure if your session requires a 'Video Conference Request Form' please contact the FNHA HelpDesk at 1-844-364-7878 or e-mail eHealthSupport@fnha.ca.

Please pay particular attention to the following fields (A filled-in example of the form follows):

a) **Event Title** - Create an event title that makes sense to you. Telehealth Coordinators will be using this title in any correspondence with you.

b) **Conference ID number** – leave blank as this is usually not applicable

c) **Event Type** - Indicate Clinical; Clinical with Patient; Education or Administrative.

d) **Pre-Test Time** - If you require a test done before a meeting, indicate what time you would like the test to start at. You might want to select this option if you recently moved the equipment, or if you've been having recent Internet issues. A rule of thumb is to set the test time to 15-30 minutes prior to your meeting start time. This will allow the opportunity to troubleshoot before your session begins. 15 minutes for most sessions is adequate while 30 minutes is recommended for when there are large numbers of participants (5 or more videoconference units). This will allow for the opportunity to troubleshoot before your session begins.

e) Start Time/End Time - Enter the meeting start time (including time zone) and the time the meeting will end. If you think you need some extra time it's best to include it in your initial request.

f) Host Site Name - Enter the name of your site.

g) Alias/IP - This is how the bridge will find your videoconference unit.

h) Site booked? Choose 'Yes' to indicate the host site venue is booked and ensure that you have the room booked according to the procedures in place at the facility.

i) Number of Participants – Total number of participants, not including the host site

j) Participating Sites

    I. **Site/Community/Facility** - enter the name of the health centre or band office.

    II. **Room #** - enter the name of the room that the videoconference equipment is located in. This is especially important if the facility has more than one unit. If there is only one videoconference unit then this field can be left blank.

    III. Enter the **Alias or IP address** for each videoconference site that will be participating.

    IV. **Site booked** – in most cases indicate 'Yes' – PHSA scheduling can only assist with availability for rooms they have calendar information for.

    V. Include the participating site's **Contact** name in case the Telehealth Coordinator or HelpDesk needs to get a hold of someone at the site.

k) Additional Information - If there are additional sites that won't fit in the "Participating Sites" box, enter them here. You can also indicate if there are any special requests, or if you would like to request a recording of the session. Ensure proper consent is obtained if this is the case.

VIDEO CONFERENCE REQUEST FORM

Please complete this form and submit it to the Telehealth office for processing.

Requestor Information

Name: Stevie P	Telephone: 250-555-XXXX
Email: name@healthcentre.ca	Department/Organization: Local Health Centre
Event Title: Specialist appointment	Conference ID number: *(If applicable)* n/a

Event Type: *(Clinical/Clinical with Patient/Education/Administrative)*

Clinical

If you are requesting a clinical event with a patient, the Telehealth office will call you to collect the following information to complete the booking: patient first and last name, date of birth, PHN, and gender. Please do not send this information by email

Date: *(ex: Jul 21 2013)* Sept 30 2015	Pre-test Time: *(indicate time zone)* 9:45AM Pacific	Start Time: *(indicate time zone)* 10:00AM Pacific	End Time: *(indicate time zone)* 11:00AM Pacific
Host Site: Local Health Centre		Alias/IP/ISDN Address: 7XXXX@fnha.ca	
Site booked?: ☑ Yes ☐ No		Number of Participants: 3	

Participating Sites *(Please use the Additional Information box below if you need to add more sites.)*

Site/Community/Facility	Room #	Alias/IP/ISDN	Site Booked	Contact
Band Office	Boardroom	14.15.16.17	☑ Yes ☐ No	Dede
FNHA Sinclair Centre	Juniper Spruce	88-70021	☑ Yes ☐ No	Sean
Another Health Centre		alias@healthcentre.ca	☑ Yes ☐ No	Elsa
			☐ Yes ☐ No	

☐ Yes ☑ No **Separate Audio Line Required**

Additional Information
Please use this space to identify additional sites, special requirements, or if you would like to request recording of the session.

48 hours notice is required for all revisions, additions and/or cancellations
Please refer to video conference as titled on this confirmation form when requesting cancellation
Failure to comply with this request may result in your site not being connected to the video conference

SUBMIT

BCHA.0005 | SEP.2013

4.1.1 Where to submit your Request Form

Send the completed form as an email attachment to telehealth@phsa.ca. 48-hours advance notice is needed for all revisions, additions and/or cancellations. Please ensure your form is submitted ahead of time in order to allow time for changes.

4.2 Scheduling Multi-Site Telehealth Sessions

Sometimes you may need to have a meeting with more than one location at the same time. In order to do this, a special piece of electronic equipment called a "bridge" is required to connect multiple locations. A videoconference bridge connects videoconference rooms located at different sites into one video-conference call so participants can see and hear one another. PHSA currently processes these requests. The process involves filling in the form described in Section 4.1

When you have multiple sites connected at once, you will notice that the view on your TV screen will change from time to time depending upon which site has unmuted their microphone. It's sort of like an electronic talking stick – the videoconference gives priority to a single speaker by making their site appear larger on the screen than all of the other sites.

For assistance with participating in a meeting with multiple sites, contact the FNHA HelpDesk at the at 1-844-364-7878 or e-mail eHealthSupport@fnha.ca

For security reasons, it is recommended that your administrative and educational sessions use a video-conference bridge when needed. A videoconference bridge is used to securely connect videoconference rooms located at different sites into one call so participants can see and hear one another.

There are some exceptions to going through the FNHA videoconference bridge. If you are unsure please contact the FNHA HelpDesk for assistance.

The FNHA Telehealth team helps schedule telehealth sessions all over the province, so it's important to book as early as possible, as clinical use is priority for the videoconference units. Your form should be submitted 48 hours prior to the start of your session. This deadline also applies to any additions or changes that you need to make to your session.

Glossary

Alias
A unique identifier (that looks like an e-mail address) allowing videoconference units to locate each other on the internet.

Codec
The box on your videoconference unit which allows the machine to connect to other locations by dialing an IP address or alias.

Firewall
Hardware or software that prevents unauthorized access to a single computer or a network of computers.

FNHA HelpDesk (eHealth Support)
The FNHA Helpdesk provides assistance for your videoconferencing needs and helps solve any technical problems you may have with the equipment.

High definition (HD)
Refers to the quality of video resolution or how clear the picture is. HD resolution.

Informed consent
The process of getting permission before proceeding with an activity (e.g. recording a videoconference session).

IP address
A series of numbers that allow videoconference units to locate each other. 'IP' stands for 'internet protocol'.

Point-to-point
A videoconference session that involves one site dialing directly into another.

Telehealth
Is the delivery of healthcare/wellness services and education at a distance through live, interactive videoconferencing.

Telehealth coordinator(s)
An individual or team responsible for scheduling, coordinating and confirming telehealth events. Each health authority has their own telehealth coordinator(s).

Videoconferencing
The use of video, audio and computer technology to communicate with other sites at a distance.

Videoconference bridge
An electronic bridge that connects videoconference rooms located at different sites into one call so participants can see and hear one another.

Videoconference Etiquette

10 Quick Tips To Look Like a Videoconferencing Pro:

1. **Be ready for your guests:** Test your videoconference equipment ahead of time. Remember it's not just your face on the camera, it's also everything on the table, background, etc. Remember also to close the door to keep out background noise when the conference begins.

2. **Dress for the camera:** Striped shirts or shirts with intricate patterns do not transmit well on camera, because they are visually distracting. Red, white and black are also poor choices. Go for soft or other light coloured clothing.

3. **Speak clearly:** Speak naturally but slowly and do your best to pronounce each word clearly.

4. **Maintain eye contact with the camera:** Keep your focus on the camera. The worst thing is having your audience look at the top of your head because you are typing or looking down at notes – or worse – at your cell phone.

5. **Be courteous to other participants:** Introduce yourself before speaking so that everyone knows who is talking and can address you by name. Take note of the other speakers so that you can also address them by name. Lastly, turn off the sounds on your cell phone and avoid texting.

6. **Keep body movements minimal:** Large movements can distract your audience and do not transmit as readily as still images.

7. **Smile, you're on camera!** People sometimes fail to remember that everything that they do is seen on camera. You cannot hide whispers, winks, etc. and everyone will see you checking your phone!

8. **Wait for an opening in the conversation.** A good rule of thumb in a virtual meeting is to wait 2 seconds after a speaker has completed a thought, in order to avoid speaking over each other.

9. **No need to yell!** If someone can't hear you, then adjust the volume on the microphone or TV and make sure it's not covered by anything else.

10. **Minimize distracting sounds:** Avoid typing on your keyboard, turn off all sounds on your phone, and close the door to cut down background noise.

Room Requirements

Lighting

- Is the room bright enough - so that faces can be easily seen on camera?
- If the room is too bright or too dark it will be hard to see details such as people's faces. Adjust the curtains/blinds if the room is too bright or turn on lighting/let in extra light if you can't see yourself easily on camera

TOO BRIGHT **TOO DARK**

Sound

- Watch out for loud noises!
- If there are other machines (e.g. refrigerator, printer/copier) in the room with the videoconferencing equipment try to avoid using it until your videoconference is over

Furniture

- There should be some furniture for comfortable seating
- Make sure the room is comfortable for people of all ages to sit in front of camera for a period of time
- Arrange furniture so that all participants can be easily shown on camera
- Adjust the camera if needed

Privacy

- Ensure that participants have enough privacy
- Ensure participants have privacy during the session with closed doors and some degree of sound proofing if possible

More Privacy

- It is always polite to ask who would like to be on camera or not
- Be mindful of who is and isn't in the camera's view
- Tilt, focus, or zoom in or out of those who should be on camera

DO NOT DISTURB

CAMERA

For technical support

with your equipment please
contact FNHA HelpDesk
(eHealth Support) at:
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ehealthsupport@fnha.ca

First Nations Health Authority
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Telehealth Session *In Progress*

First Nations Health Authority
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Avizia CA300
Clinical Telehealth Cart Guide

Avizia CA300
Clinical Telehealth Cart

Display Monitor

Camera

Power Button for Display Monitor

Console

Height Adjustment Handle

Storage Drawer for peripherals

Casters with Brakes

Avizia CA300
Console

Camera Control

Self View

Main View

Computer Source

Auxiliary Source (for Scope & Attachments)

AUX

Back

Mute

AUX

Make Call

Zoom

Arrows / OK & Enter

Volume

End Call
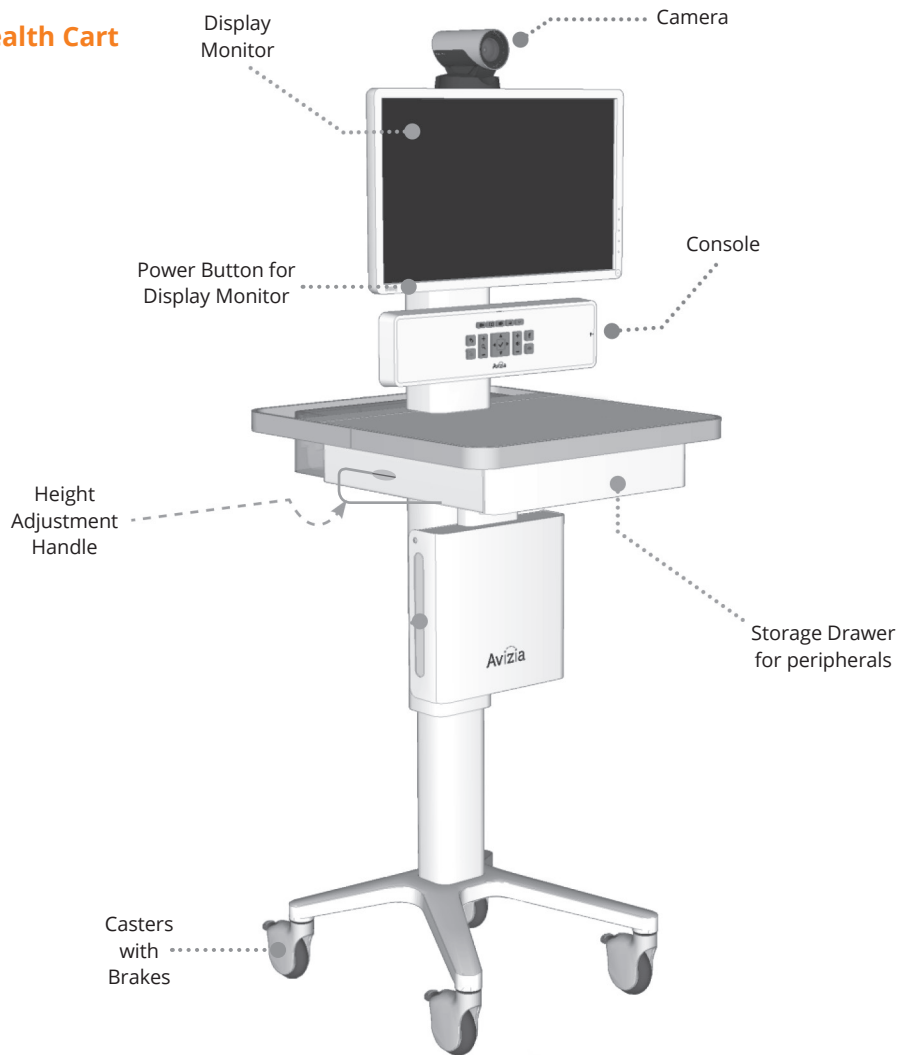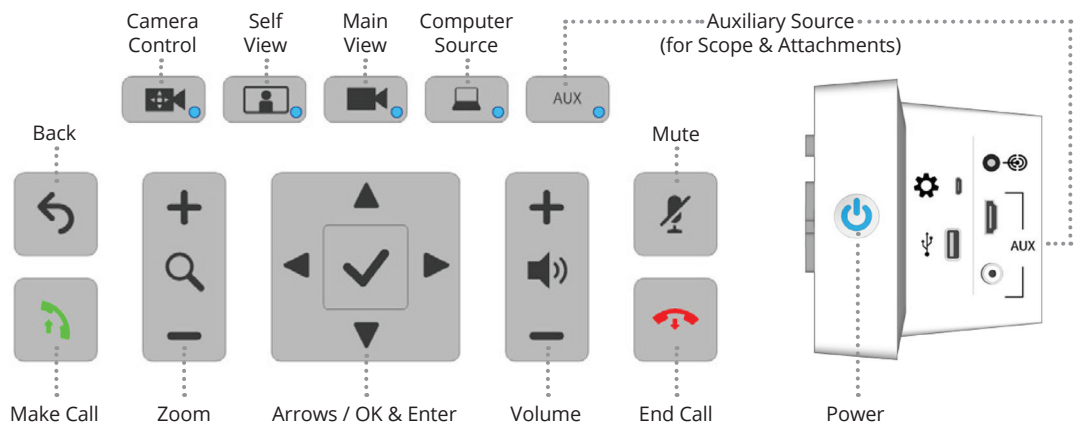
Power

Attachments

OTOSCOPE   DERMSCOPE   GENERAL VIEWING SCOPE

User Interface

POWER BUTTON
(20-30 seconds for startup)

MICROPHONE

SCOPE CONNECTOR INTERFACE

LCD MONITOR

PICTURE/VIDEO MODE
(switching time about 5 seconds)

MENU

OK
NAVIGATION, CAPTURE, ENTER

FOCUS WHEEL

REDUCE LIGHT LEVEL
(ZOOM OUT ON RECORDED IMAGES)

INCREASE LIGHT LEVEL
(ZOOM IN ON RECORDED IMAGES)

BATTERY COVER

POWER INDICATOR

MINI USB PORT (CHARGING)

AV OUT (3.5MM) (DISPLAY/AUXILARY SOURCE)

Power Indicator

● **Blue coloured light**
Battery is more than 25% full when the unit is ON or in STANDBY.

● **Orange coloured light**
Battery is less than 100% full when the unit is OFF and connected to the charger or computer.

No light
Unit is OFF and not connected to the charger or computer.

SCOPE ASSEMBLY
ALIGNMENT GUIDES

Connecting a lens

1. Press the Power button and allow for 20-30 seconds for the unit to power up.

2. Align the scope assembly alignment guides for both the Optical Scope and the Control Unit.

SCOPE CONNECTOR
INTERFACE
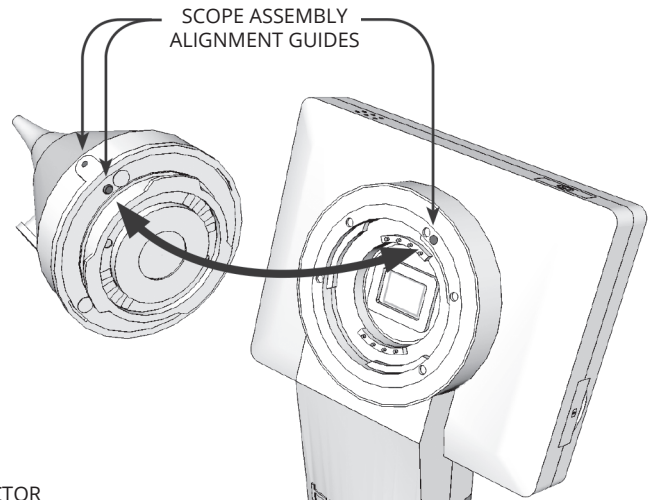
3. Insert the Optical Scope into the scope connector interface of the Control Unit.
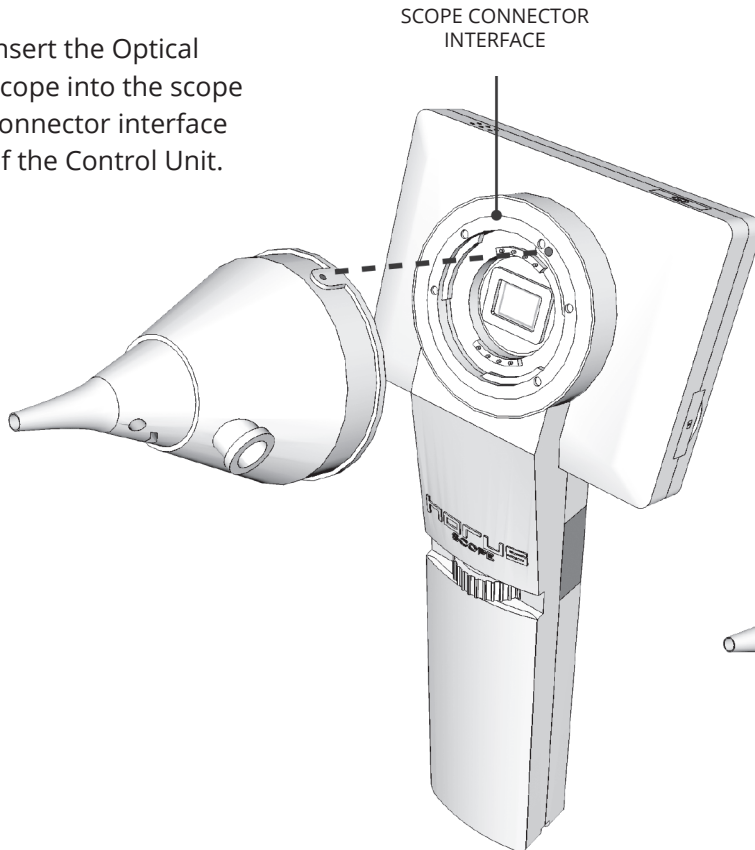
4. Rotate the Optical Scope gently, until it stops, to fasten as shown.

5. Connect the cable to the AUX input and press the AUX button.

How to use the Directory

• Press the **Directory** key on the remote.

• Use the arrow keys to navigate to **My Contacts**

• Select the site you wish to call, press the **Call** button

• To add a site to the directory, press the **Directory** Key

• Use the arrow keys to navigate to **My Contacts**

• Select **Add New Contact**

• In the **Name** field, use the number keys to input a name, cycling through the numbers to get to the correct letter.

• In the **Number** field, enter the **IP Address** of the site you are adding into the directory.

How to Make a Call on the Video Conference Unit

• Begin to input the call information you wish to dial. A box will appear as soon as you enter the first number.

• When entering an **IP address**, press the * key in between the numbers. This * will turn into a dot (.) after the third * to complete the **IP address**. (E.g. You want to dial the IP address 204.244.62.30)

• Enter 204*244*62*30 on the remote.

• Once you have entered the call information, press the **Call** button.

• You can also make a call by entering the correct videoconference unit **Extension Number** (e.g. 71999) or **Alias** (e.g. FNHA_UK_Cart@fnha.ca).

How to use Recent Calls

• Press the **HOME** Key

• Select the **Call** option

• Select **Recent Calls**

• Use the **ARROW** keys to select the site you would like to call and press the **CALL** button.

Camera Controls

• To move your camera around, use the **Arrow** keys to move your camera from side to side or up and down.

• You can zoom in and out with the **Zoom** key located to the right of the arrow keys.

How to Mute your Microphone

• To mute your microphone you can either press the button on the microphone itself or press the mute button on the remote.

• When the microphone has a **RED** button it has been muted. When the button is **GREEN** it is unmuted and on.

Mute

Display laptop

Volume

Zoom

Arrow Keys

Directory

Call - Back - Hang Up

Number Keys

Questions?

If you have any questions, please call the FNHA help desk: **1-844-364-7878** or e-mail: **eHealthSupport@fnha.ca**

Notes

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