GlobalMed

eNcounter®
Learner Guide

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Contents

WHO WE
ARE?

GlobalMed powers the world's most advanced virtual health technology platform and wellness applications that support a patient at any point in the continuum of care. Providers are enabled with integrated software and data-capturing tools to deliver a complete and accurate patient eNcounter® for evidence-based treatment and improved patient outcomes. Providers looking to manage capacity, reduce costs, expand patient care and deliver responsible medicine, will get all they need from one platform.

WHAT WE
DO?

Specializing in both federal and commercial spaces, GlobalMed technology has enabled approximately 60 million consults in over 40 countries. Its highly secure virtual health platform has earned the U.S. Defense Health Agency's Authority to Operate on the DoD network and is used worldwide from the VA to rural American hospitals, correctional facilities, oil rigs, and even villages in Africa. Founded in 2002 by a Marine Corps Reserve Veteran still serving as CEO.

Learner Guide - How to

Get Familiar With The Guide: Start by flipping through the guide to get a general overview of what it covers. **This will give you an idea of the scope of the training** and help you identify areas that you may need to focus on.

Understand The Objectives: Pay particular attention to the learning objectives outlined in the guide. These objectives should guide your study and practice. **Your goal should be to master each objective by the end of your training**.

Follow The Structure: Most learner guides are structured in a way that gradually builds on knowledge. **It's best to follow the guide from beginning to end, rather than skipping around**. This way, you ensure that you're building on a solid foundation of knowledge.

A World Without Disparity of Care®

Take Notes: As you read through the guide, **jot down notes or underline important points**. This active engagement helps with memory retention. You will find note pages throughout each section.

Review Periodically: Don't just read through the guide once. **Regular review is key to long-term retention of what you've learned**. Review previous sections of the guide before moving on to new material.

Stay Motivated: Learning can be challenging and sometimes frustrating. But remember why you're doing this, **keep your end goals in sight, and stay motivated**.

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To improve lives throughout the world by delivering transformative health and wellness solutions across the continuum of care.

Objectives

By the end of this training you will be able to:

☑ **Recall the main features of eNcounter®** and the steps involved in scheduling and conducting virtual healthcare visits.

☑ **Understand the purpose and benefits of using eNcounter®** for virtual healthcare, and explain the different types of virtual visits that can be conducted using the software.

☑ **Apply the knowledge of scheduling appointments**, conducting virtual visits, and accessing patient records using eNcounter®.

☑ **Analyze common issues that may arise during virtual visits**, such as internet connectivity, audio and video quality, and troubleshoot these issues using problem-solving skills.

☑ **Evaluate the effectiveness of virtual healthcare eNcounters** conducted using eNcounter®, including identifying areas for improvement and making recommendaions for optimizing patient care.

☑ **Create a plan** for implementing eNcounter®

eNcounter®

OVERVIEW

GlobalMed eNcounter® is software designed to help healthcare providers deliver virtual consultations, appointments, and other healthcare servies to patients, regardless of their physical location.

eNcounter® is a comprehensive platform that provides a wide range of features and tools for healthcare providers, including:

1. **Videoconferencing:** eNcounter® includes a high-quality videoconferencing tool that allows healthcare providers to connect with patients in real-time.

2. **Medical Device Intergration:** eNcounter® intergrates a broad set of specialty devices to support healthcare providers in assesing a patient's presenting condition.

3. **Interoperability:** eNcounter® can be integrated with a mulitude of health information systems to facilitate the exchange of clinical data in support of patient care.

eNcounter® is a powerful telemedicine solution that allows healthcare providers to deliver high-quality care to patients no matter where they are located. It is designed to be user-friendly, reliable, and secure.

Launching eNcounter®

GETTING STARTED

To begin using eNcounter®, you will need to create an account and log in to the system. Once you have logged in, you will be taken to the main dashboard. From here, you can access all of the features of the software, including scheduling appointments, conducting virtual visits, and accessing patient records.

LAUNCHING ENCOUNTER® STATION

- **Click** the eNcounter® desktop icon to launch eNcounter® Station.

- **Enter** your **username** and **password**.

- Select **Ensure all devices are cleared of previous patient data**.

- Click **Sign In**.

OTHER MODES

- **Emergency Mode:** Click Emergency to enter a consult in case of an emergency.

- **Offline Mode:** Click the eNcounter® Station icon to access the consult screen in case of no internet connection.

Configuration Settings

CONFIGURATION SETTINGS OVERVIEW

To access the configuration screen, **click on the settings icon located in the top right corner of the screen**. The **"What to configure?"** panel allows users to toggle between settings for Video conference, DICOM communications, medical devices, preferences, as well as advanced settings.

1. The **DICOM communications** option allows users to configure DICOM settings to enable the storage, exchange, and transmission of medical information.
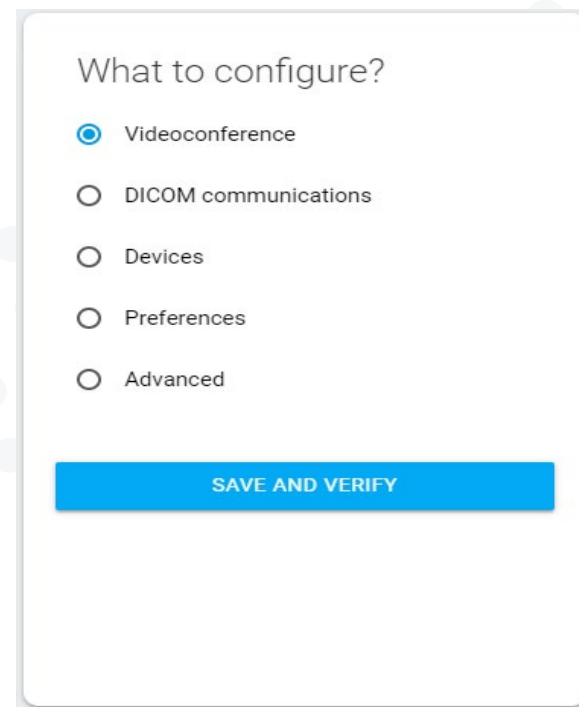
Critical Note: DICOM settings should only be configured by a qualified IT representative with access to information regarding local VistA Imaging servers.

2. The **Devices** option allows users to select a vital signs, ECG, and ultrasound device for use within the application.

3. The **Preferences** option allows users to configure settings such as workflow options, specialized modalities, software functionality options, language selection, session expiration, units of measure, etc.

4. The **Advanced** option allows users to configure settings such as servers and communications as well as active directory.
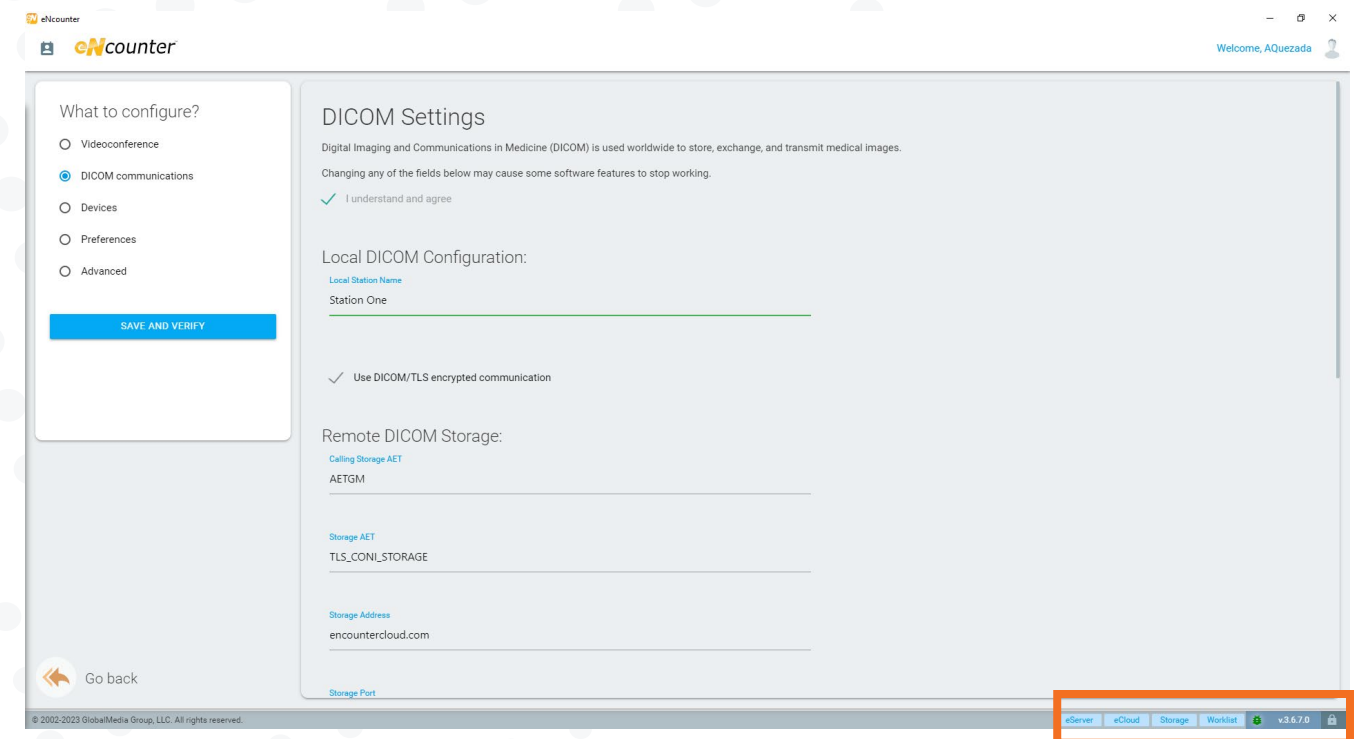
Critical Note: Changing any of the Advanced

Configuration Settings

CONFIGURATION SETTINGS OVERVIEW

6. After the desired configuration settings have been selected, click **Save and Verify**. A notification will appear prompting the user to confirm the new configuration settings, selecting Yes initiates a page refresh and redirects the user to the eNcounter® home screen.

Note: If the DICOM settings have been correctly saved and verified, the eCloud, Storage, and Worklist connectivity indicators in the lower right corner will be highlighted and display with blue text. The eServer will not be highlighted until after the user has logged into eNcounter®.

Configuration Settings

SCHEDULED MAINTENANCE

1. A scheduled maintenance prompt may appear when launching eNcounter® to inform users that eNcounter® is currently performing maintenance protocols, **Click Dismiss to close the notification.**

> **Mainetenance scheduled: 07/06/2023 at 14:00 (UTC)**
>
> **DISMISS**

2. Users will be able to log in and use eNcounter® during scheduled maintenance but may experience limited functionality including limited access to video conferences.
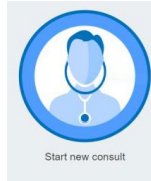
Beginning a Consult

START SCREEN

- **Start new consult:** Choose an existing patient, enter new patient data, or create an anonymous patient.
- **Start video conference:** Begin a conference with your contacts.
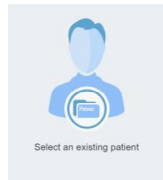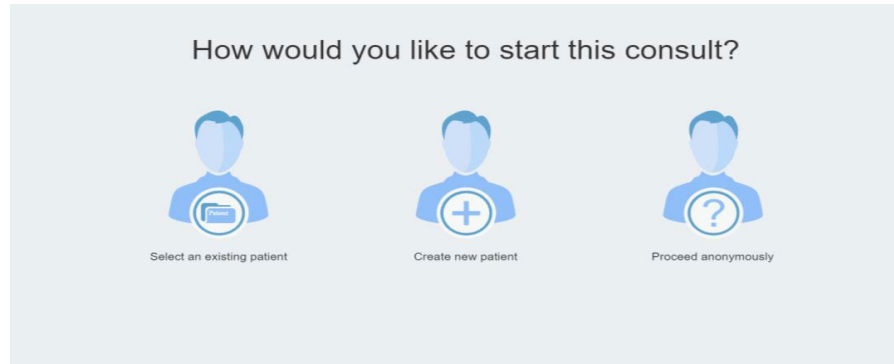- **Direct patient exam:** Proceed directly to the consult screen.
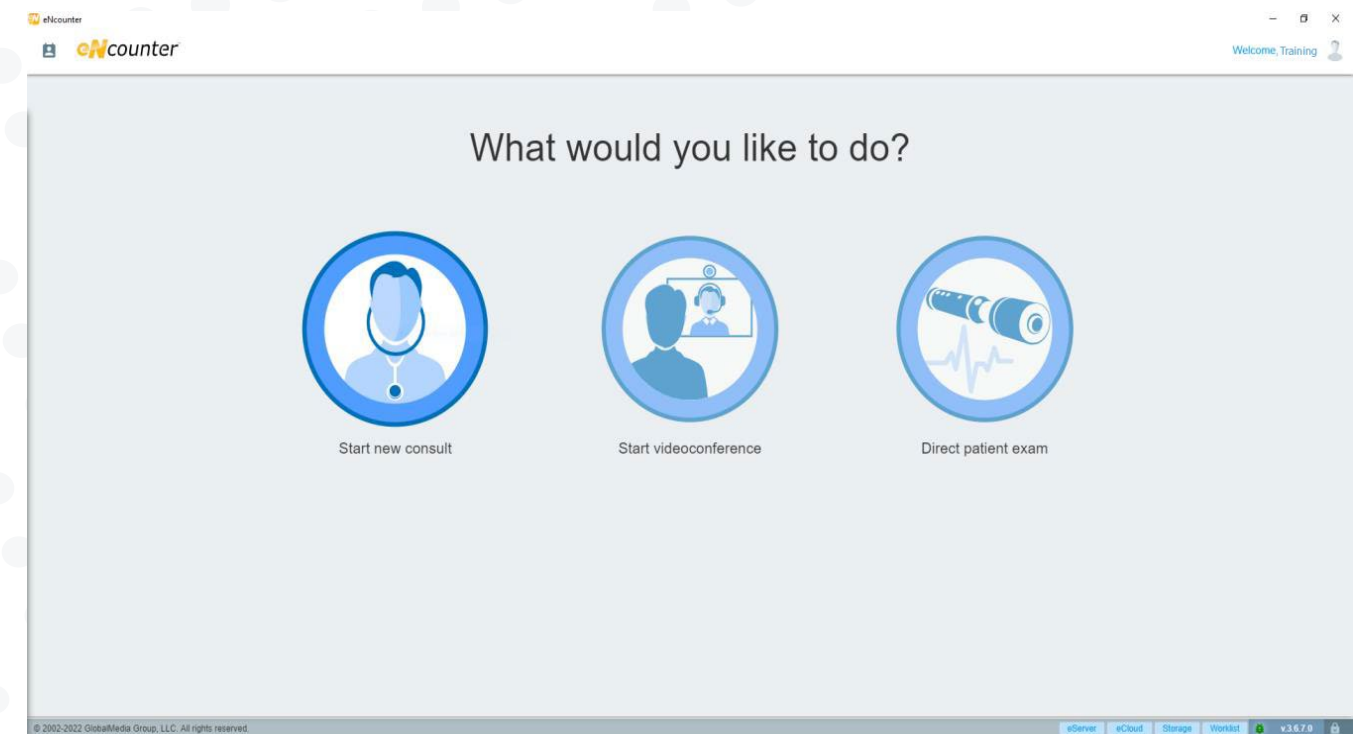
Beginning a Consult

START NEW CONSULT

Selecting this option, prompts the user to select one of three options, **Select an Existing Patient, Create New Patient, and Proceed Anonymously**.


SELECT AN EXISTING PATIENT:

Allows users to choose from a list of existing patients with records stored in eNcounterCloud or another configured PACS.

a. Select **'Search in DICOM Worklist'** to allow eNcounter® to access the worklists in the DICOM database.

b. Search for an existing patient by entering the known patient information and clicking the Search button.

    i. Alternatively, users **can leave the search fields blank and click the Search button to access a list of all patient profiles** in the pending worklists.
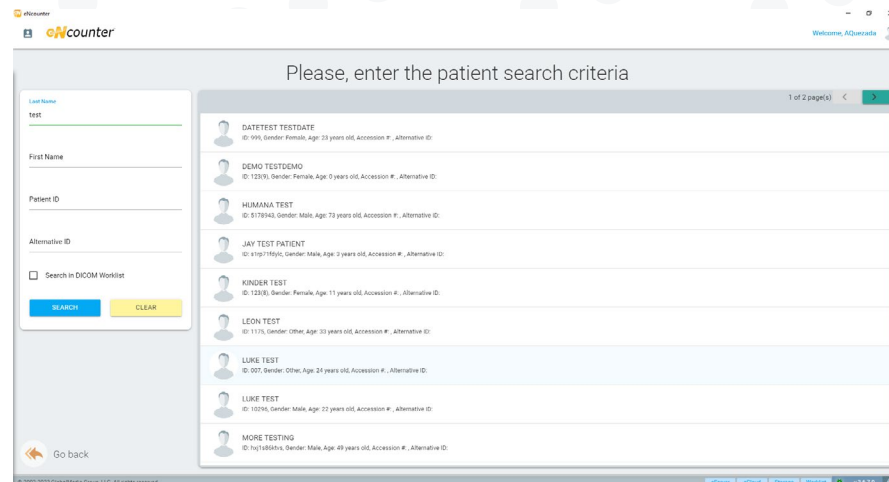
c. Click the applicable patient profile to select it and proceed to the case management screen.

Beginning a Consult
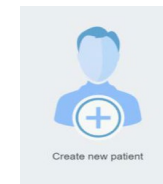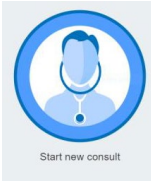
CREATE NEW PATIENT

Allows users to enter information to create a new patient profile.

a. Enter all the applicable patient information and **select Create and continue** to proceed to the case management screen.
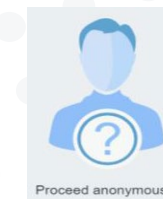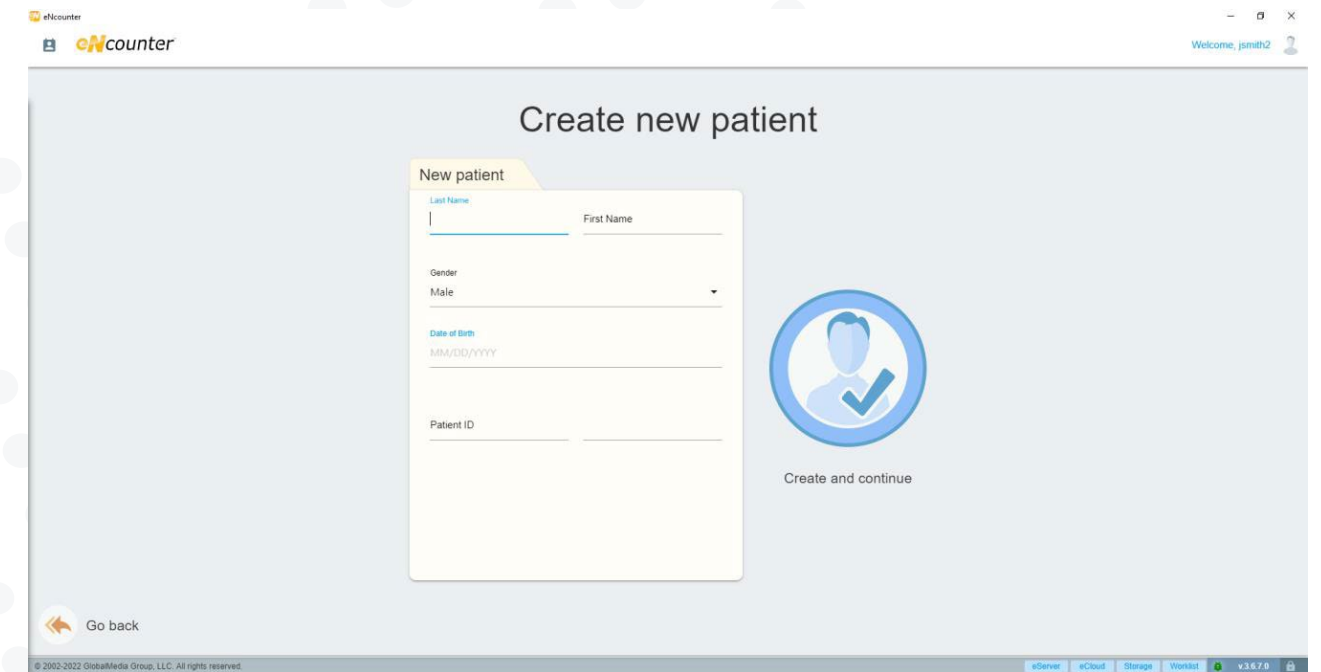
PROCEED ANONYMOUSLY

Allows users to initiate a consult using an anonymous patient profile, which will create an anonymous patient record that can be edited during/after the consult is completed.

a. Enter all the applicable patient information and **select Create and continue** to proceed to the case management screen.

Video Conference

Start videoconference

START VIDEO CONFERENCE

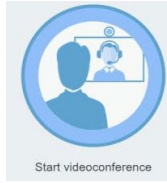Selecting this option, displays the conferencing panel and will begin initiating a video conference. eNcounter® has an integrated conferencing solution called **eNcounterView** to connect participants for live video conferencing calls. eNcounterView enables real-time sharing of medical images, medical device data, and live video feeds from connected exam cameras. In addition, eNcounterView facilitates consult-specific communication between parties by allowing you to annotate images and live video feeds throughout the video conference.
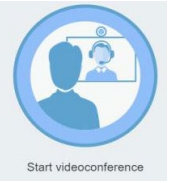
INITIATING A VIDEO CONFERENCE

a. **Click Start video conference** from the home screen which will prompt the user to select the applicable camera/microphone. After selecting the camera/microphone **click OK to open the Conferencing Panel**.
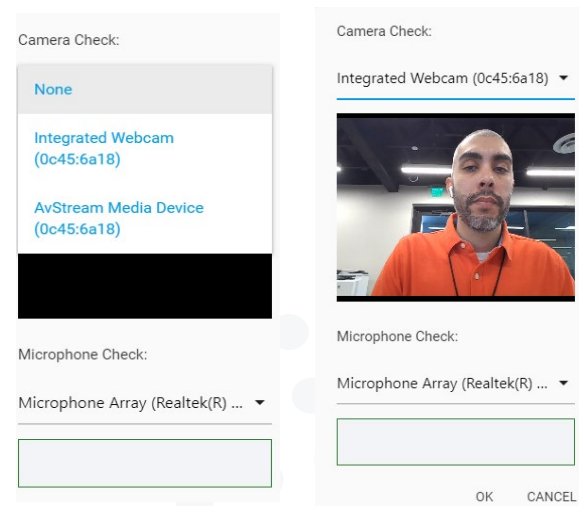
b. Alternatively, users can access the Conferencing Panel by clicking the conferencing icon at the upper left corner of any screen next to the eNcounter® logo.

Tip: The contacts icon can expand or collapse this contact list.

Video Conference

Start videoconference

VIDEO CONFERENCE CONTACT LIST

To access a list of your institution's users, click the Contacts ☐ icon on the Conferencing Panel.

a. **Click a contact's name** to view their information and select from multiple options for initiating a conference:
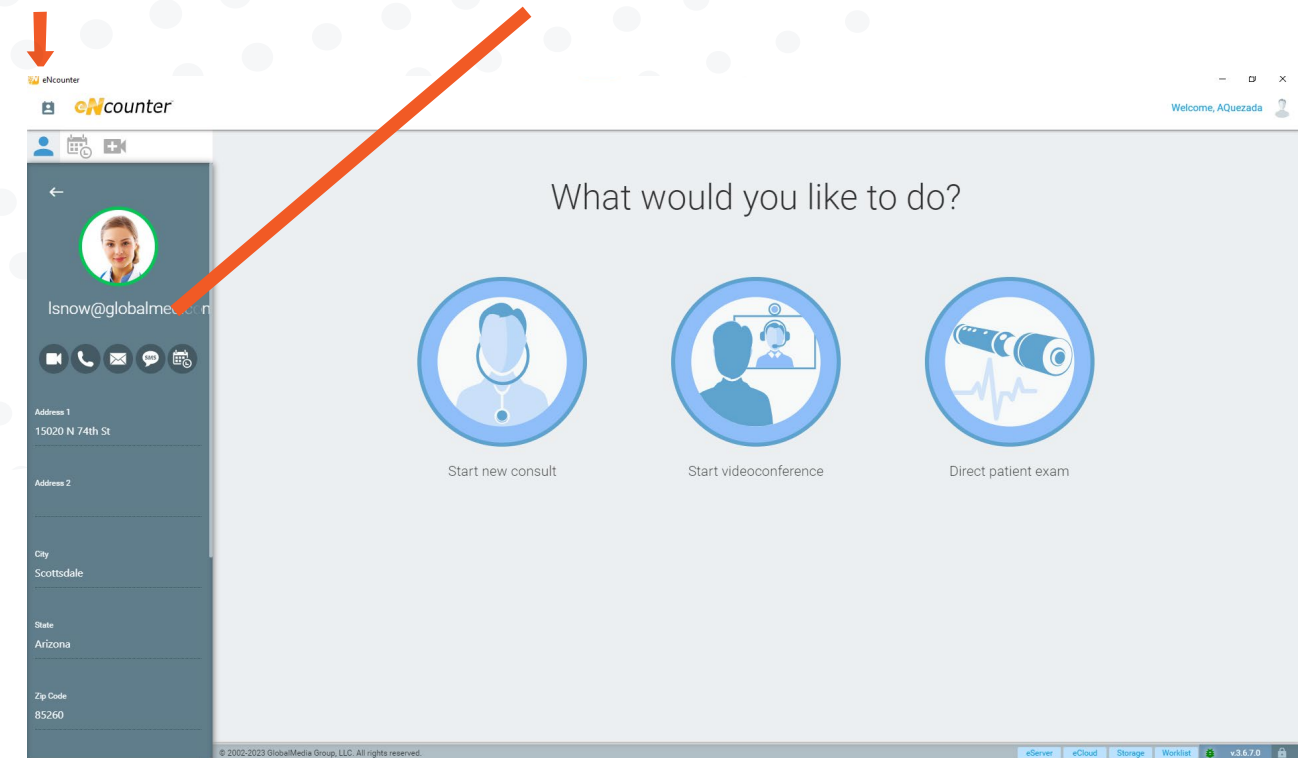
    I.   Start a video call
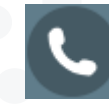
    II. Start an audio-only call

    III. Send an email message to the contact

    IV. Send an SMS message to the contact's phone number. v Schedule a meeting

Video Conference

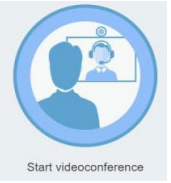Start videoconference

Scheduling a Video Conference

To create a meeting invite for a conference call, click the Schedule meeting icon on the Conferencing Panel.

- a. **Enter a participant's email** in the **Add Participant(s)** field and click the icon to include the email in the participant list. This process can be repeated for additional participants.
- b. **Enter the data/time** details in the applicable fields.
- c. **Click Schedule Meeting** to send the meeting invite and a window will appear that displays the meeting ID as well as an option to Join.

Critical Note: The Meeting ID will be needed if the user intends to join the meeting later. Be sure to make a note of it.

Video Conference

Start videoconference

Joining a Video Conference

To join a scheduled meeting, click the Join Meeting [icon] icon.
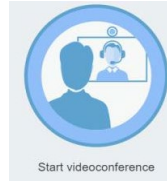
1. **Enter the meeting ID** that was provided when scheduling the meeting.

Note: The meeting ID, along with a hyperlink to join the meeting via eNcounterView, will be listed in the email invite that was sent out to participants when scheduling the meeting.

2. **Click the JOIN button** to join the meeting.

Start Video Conference

Video Conference Window

1. When eNcounter® users and eNcounterView participants are connected via the integrated conferencing module, two or more windows will appear displaying the live camera stream of the user and participant(s). During a call, the additional video sources being utilized such as exam cameras or other participants joining the call, will appear in separate windows on the screen. Each window has its own set of functions/features and can be moved around the screen by clicking and dragging the nametag.

2. **Hovering over** the eNcounter® user's conference window will display the icons that control the available conferencing functions.

Mute/Unmute Microphone

Hide/Unhide Video

Share

Adjust Camera Angle (if capable)
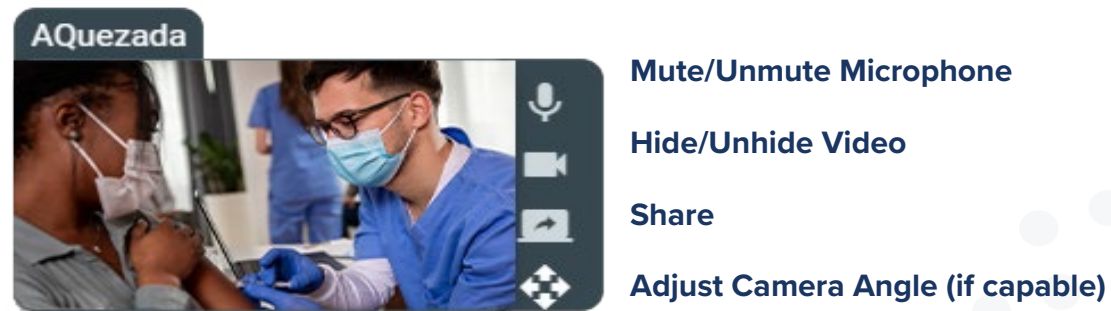
3. **Hovering over** the eNcounterView participant's conference window will display the icons that control the available conferencing functions.

Tip: The Pop-out External Window function displays the camera stream in a separate window, which allows users to move the window to a secondary monitor.

Resize Window

Pop-out External Window

Adjust Camera Angle (if capable)

Start Video Conference
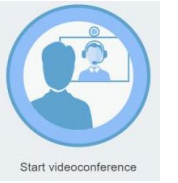
Sharing Screens

1. The screen sharing feature enables users to share a real-time view of their screen to participants

   a. **Hover over** the eNcounter® user's conference window and **click the Screen Share icon**.

   b. **Select the desired screen** or application window and click Share.

2. The shared screen will be displayed in another window. **Click and drag the nametag** on the window to move it to the desired location.

3. To close the shared screen, **hover over** the window and click the X.

Video Conference

Moving the Participants Window to a Secondary Monitor

1. The Pop-out External Window function displays the participant's camera stream in a separate window, which allows users to move the window to a secondary monitor.
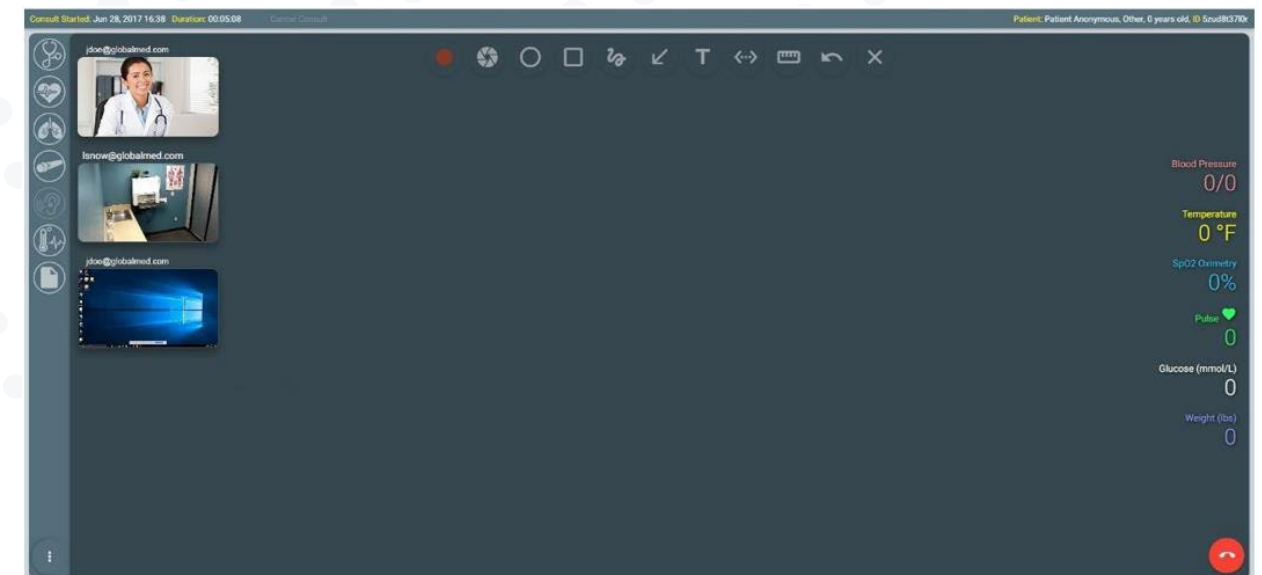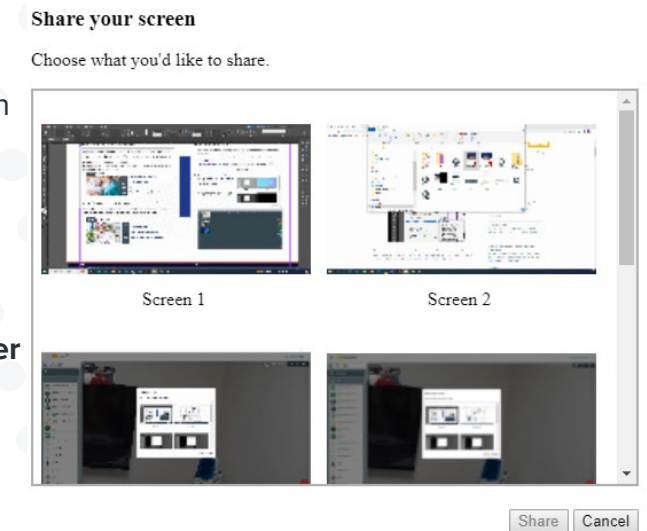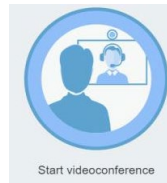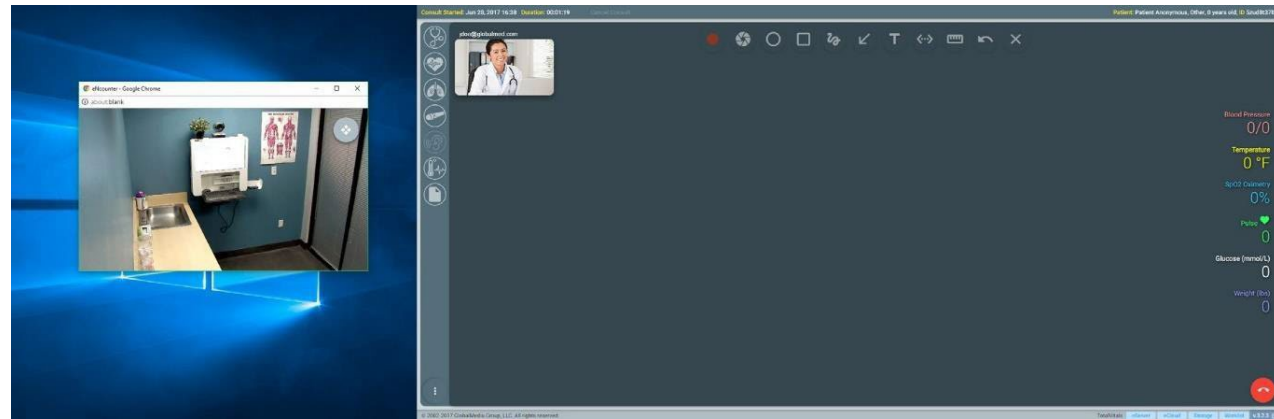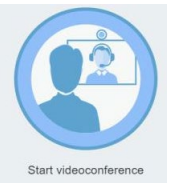
   a. **Hover over** the participant's camera stream window and **click the Pop-out External Window** [icon] **icon**.

   b. The separate window that appears can then be **minimized**, **maximized**, and **dragged** from monitor to monitor.

   c. To return the participant's camera stream back to the window on the original screen, **click the X in the upper right corner**.

Video Conference

Sharing Exam Camera Video Stream

1. Live video stream from connected exam cameras can be shared with participants during a video conference.

   a. If a video conference was initiated from the **eNcounter® Consult Screen**, sharing live video stream can be accomplished by connecting an exam camera to the user's workstation and **clicking the exam camera icon** on the device panel.

   b. If a video conference was initiated using the **Start Videoconference** option on the eNcounter® home screen, the user must minimize the conference window using the [icon] icon and use the **Start New Consult or Direct Patient Exam** options to navigate to the Consult Screen. The live video stream can then be shared by **clicking the exam camera icon** on the device panel.
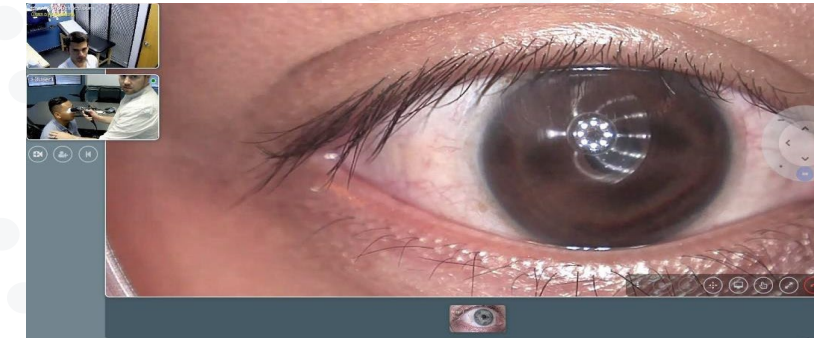
Sharing Collected Consult Data

1. Images, videos, and PDF reports collected during a consult will also appear in the Evidence Tray located at the bottom of the eNcounterView participant's screen. The consult data thumbnails will appear in real-time as they are collected and can be displayed in full screen by **clicking the thumbnail**.
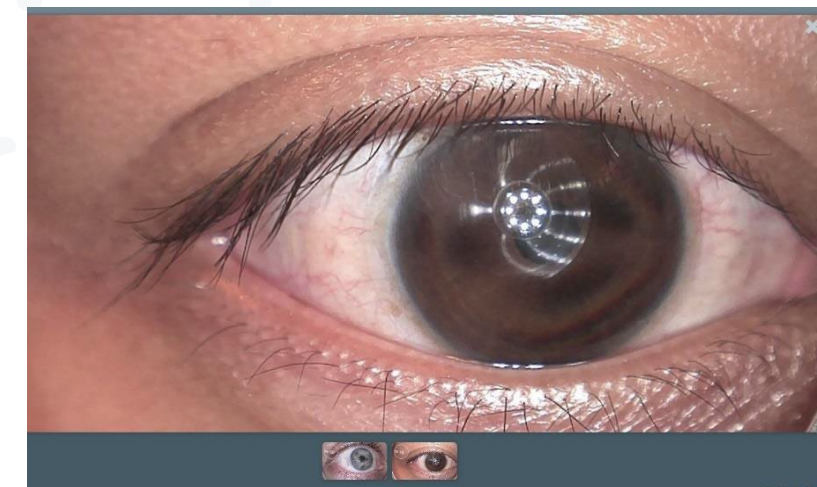
Direct Patient Exam

Selecting this option, will bypass the initial patient profile steps and direct users to the Consult Screen. To associate the information gathered in a Direct Patient Exam with a specific provider and patient, the relevant details will need to be updated on the eNcounter® Information tab found on the Write Report panel.

Consult Screen Features

The following image and table indicate the function of each feature available on the consult screen.

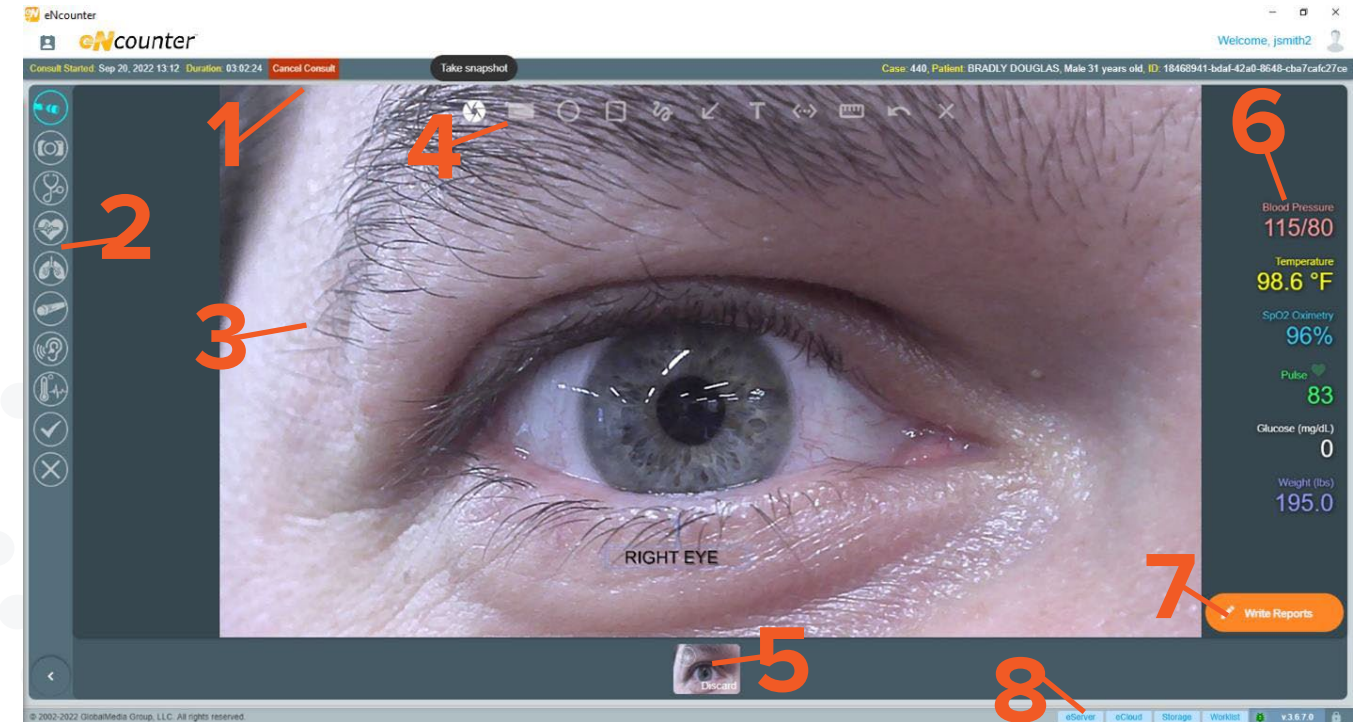|	Feature	Description
1	Header	Displays the date and time of the consult initiation, consult duration, and patient-specific information. Click Cancel Consult, to discard all consult information and return to the home screen.
2	Device Panel	Lists the integrated devices licensed for use in the eNcounter® application. **See Table 3** more information. **Note: The icons displayed on the device panel will be limited when performing an Audiology or Dental consult. The exam camera icons are only displayed when the corresponding devices are connected to the workstation.**
3	Viewing Panel	Viewing area where all video feeds, images, and reports are displayed.
4	Imaging Toolbar	Displays the Take Snapshot and content annotation icons
5	Evidence Tray	Appears when an image, video, or report is captured. Allows users to manage the images and reports captured during the consult. **Click Discard** on the content preview tile to delete it.
6	Vitals Overlay	Lists the patient's vital signs information.
7	Write Report	Displays the consult report panel. The panel allows users to review, edit and generate the consult report.

Direct Patient Exam

Measurement Calibrations

eNcounter® allows users to create a Measurement Calibration that determines the measurement value for each pixel of the displayed image when using the measurement annotation feature. This means the images captured with the camera should be taken at the same distance from the patient that was used when creating the calibration. For example, the real-world distance of a line drawn using the measurement annotation feature will represent a much smaller value when the exam camera is held 1 inch away from the patient compared to 1 foot.
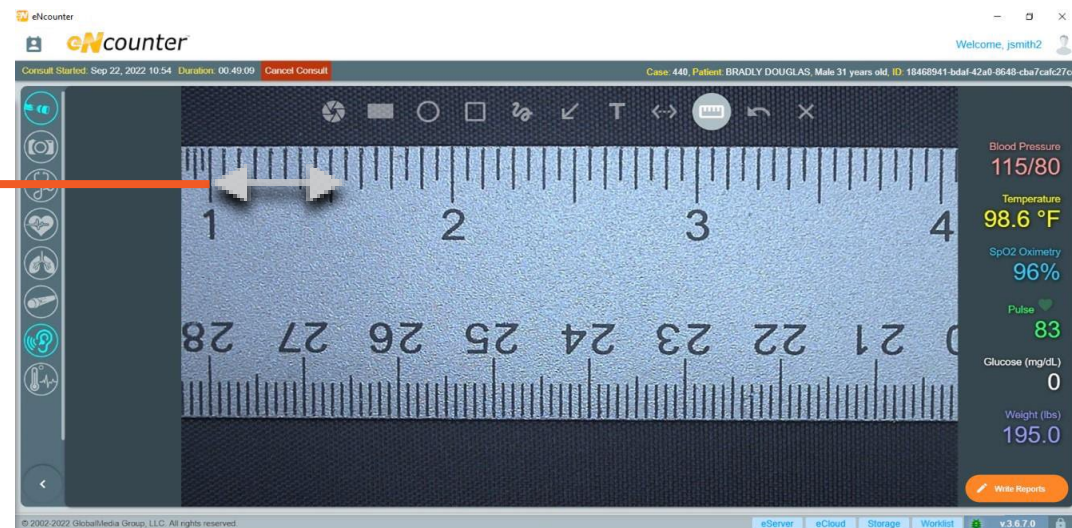
NOTE: Same size line drawn representing different measurements

Direct Patient Exam

Creating a Measurement Calibration

1. Determine which unit of measure (mm, cm, inches) will be used.

2. Position the exam camera to display a ruler or other measuring device that uses the desired units. It is highly recommended that a calibration is created for each camera attachment to ensure an accurate measurement when using the camera. Using an attachment when creating a calibration will guarantee a consistent focal length between the area of interest and the camera lens.

Critical Note: Variations in the focal length used when creating calibrations and capturing an image will cause inconsistencies in measurements.

3. Press the FF button on the exam camera to freeze an image of the ruler.

Note: When using the TotalExam 3 to create a Measurement Calibration, the Auto-Focus head must be installed on the device. See Section 3.4.3 of the appendix for more information regarding how to install the Auto-Focus head.

4. Select the **Calibration** icon on the imaging toolbar and select **New Calibration**.
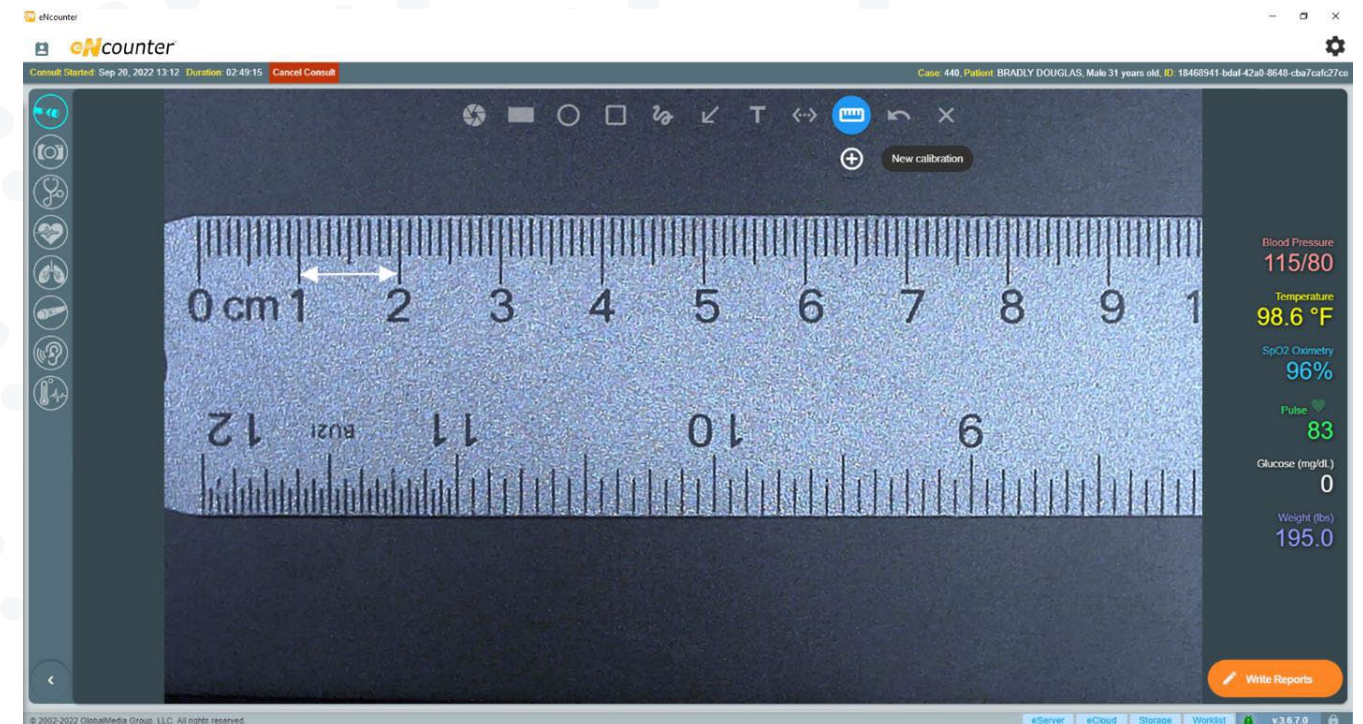
Direct Patient Exam

6. The user must enter a name and a representative value for the drawn calibration select the desired unit of measure and click OK.

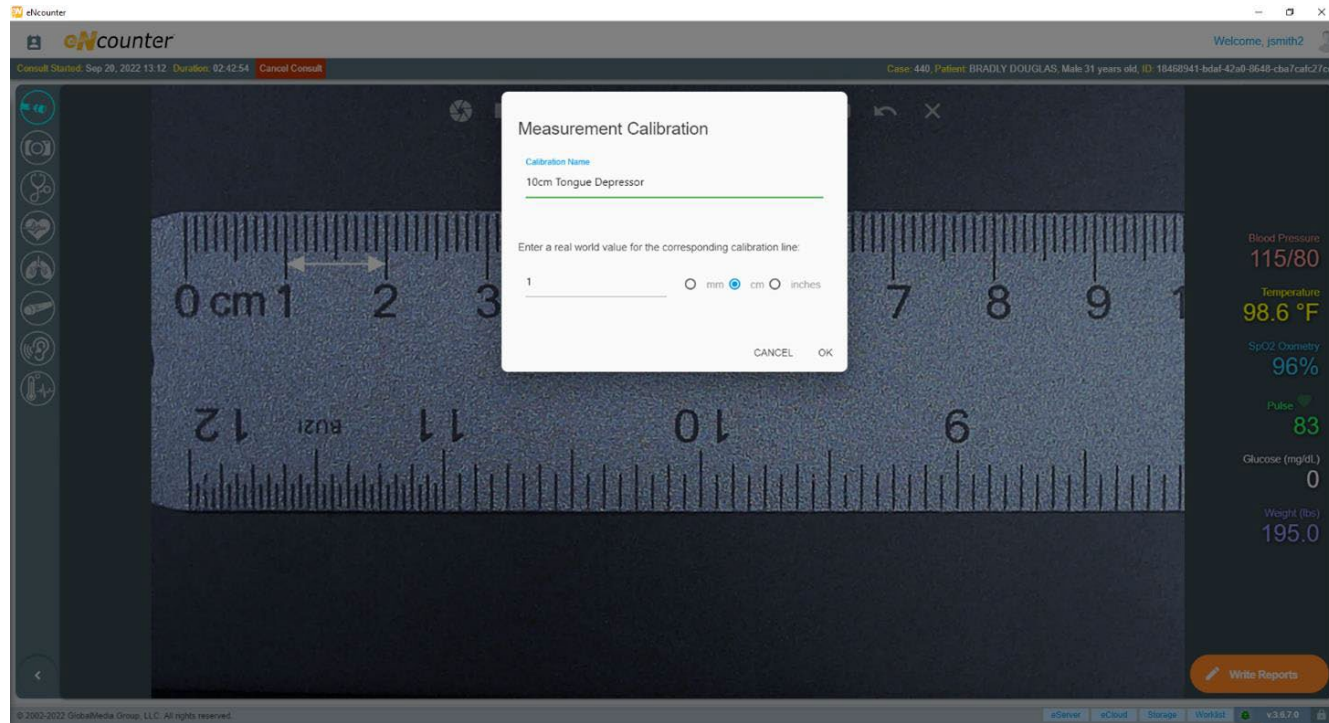**Note: eNcounter® allows the user to create up to 10 unique calibrations and each new calibration must be named. The application defaults to the last calibration used.**

7. Selecting a Pre-Existing Measurement Calibration

8. Select the Calibration icon on the annotation toolbar and select Choose Calibration.

9. Select the desired calibration from the list and click OK.
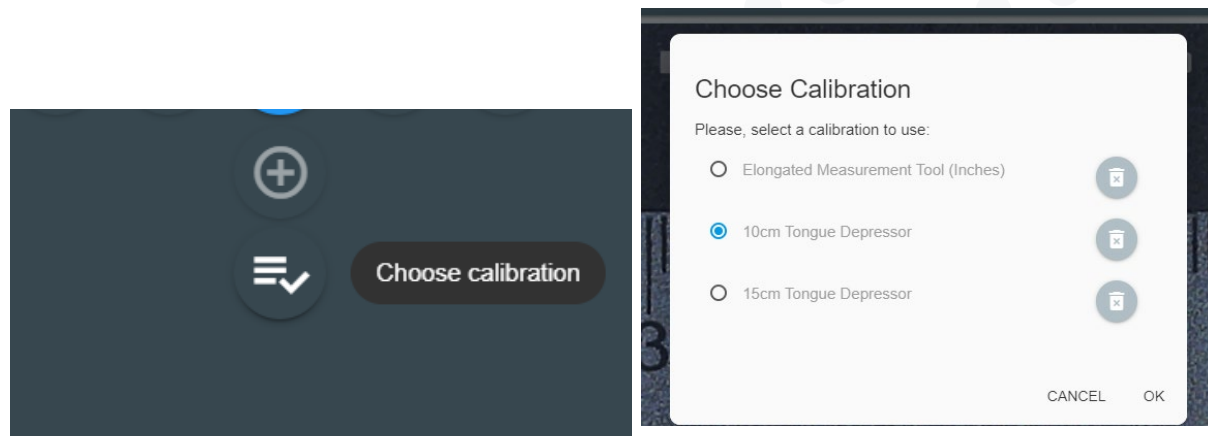
Direct Patient Exam

Capturing Images and Annotations

1. Press the **FF** button on the TotalExam 3 exam camera to freeze/resume the live camera stream and select the **Take snapshot** icon to capture an image. The captured image will appear in the Evidence Tray at the bottom of the consult screen.

2. Clicking the **Take snapshot** icon again will create a new snapshot in the Evidence Tray with any newly added annotations or measurements. **Reference Tables 3-4** for details on the function of each annotation icon.

Critical Note: If the FF button on the exam camera is used after adding annotations, all annotations that were added to the previous image will be deleted. The Take Snapshot icon must be used to include annotations in the captured image that is saved in the Evidence Tray.

Note: Refer to the appendix of this manual for information about audiology image capture as well as general instructions regarding how to configure the TotalExam 3.
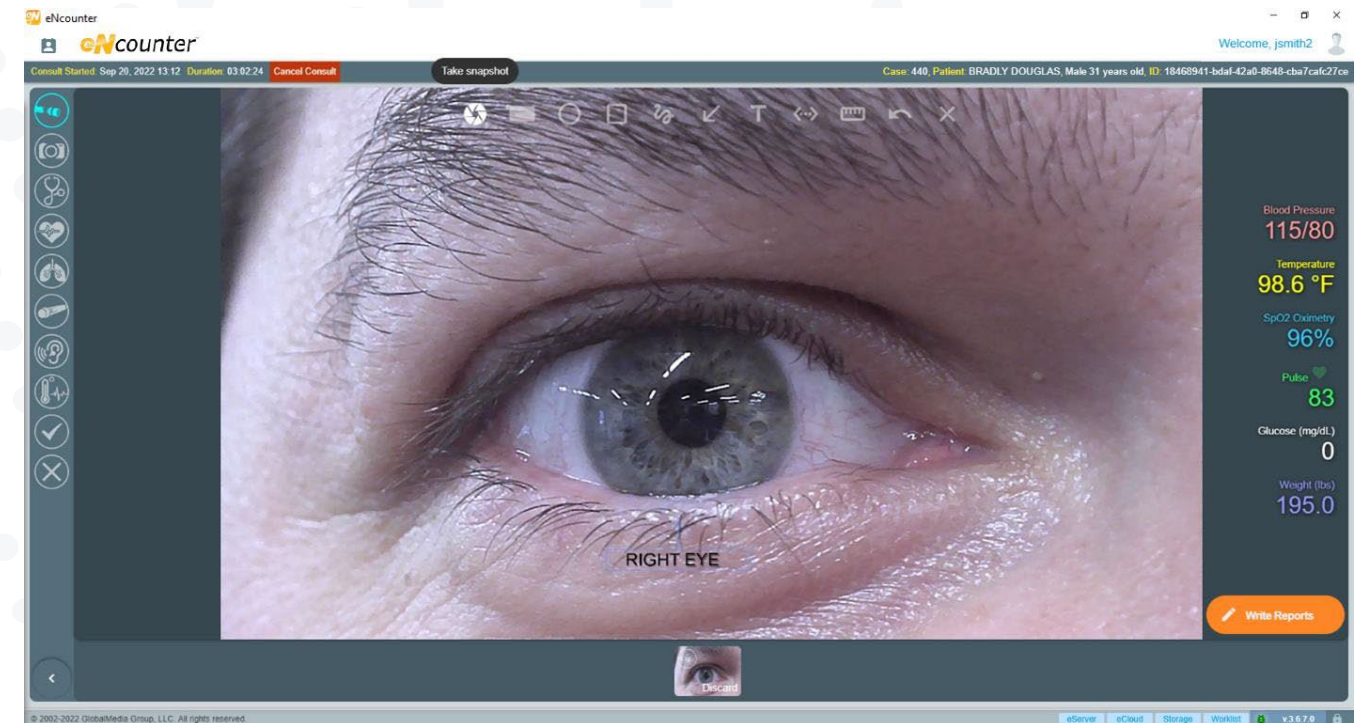
Direct Patient Exam

Completing Consultation

To access the consult report panel and complete the consultation, select **Write Report**.
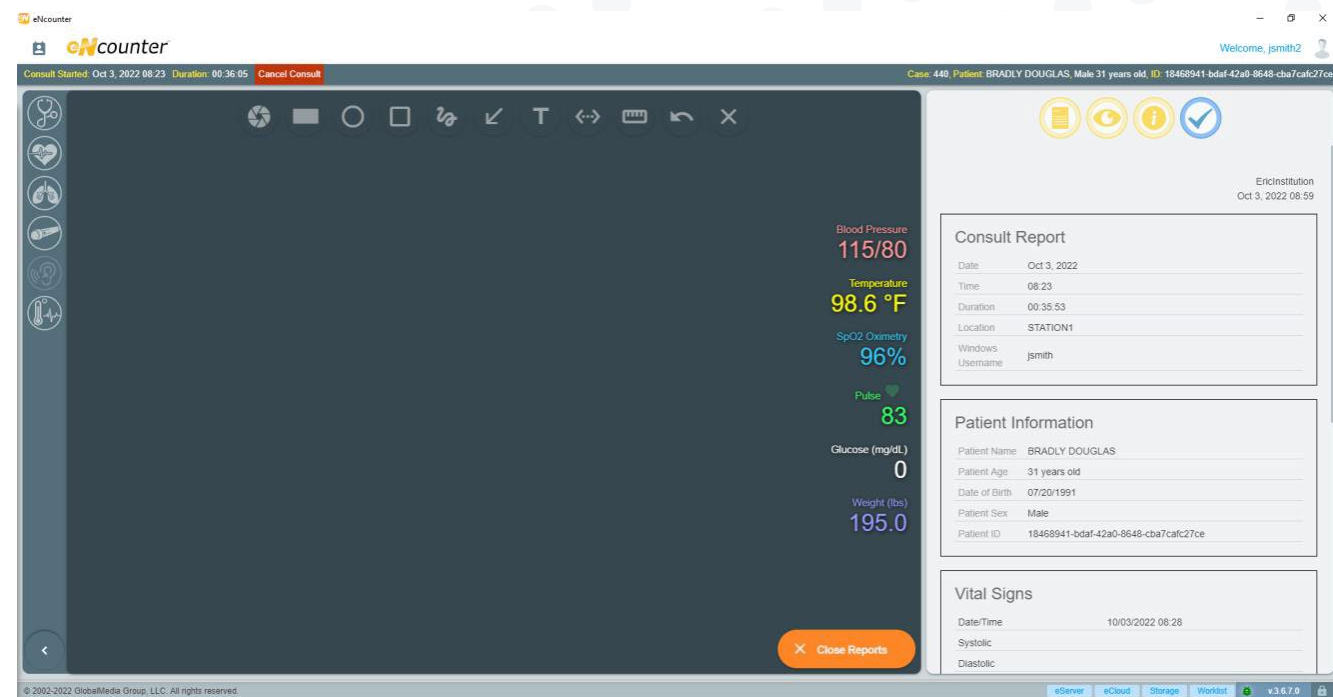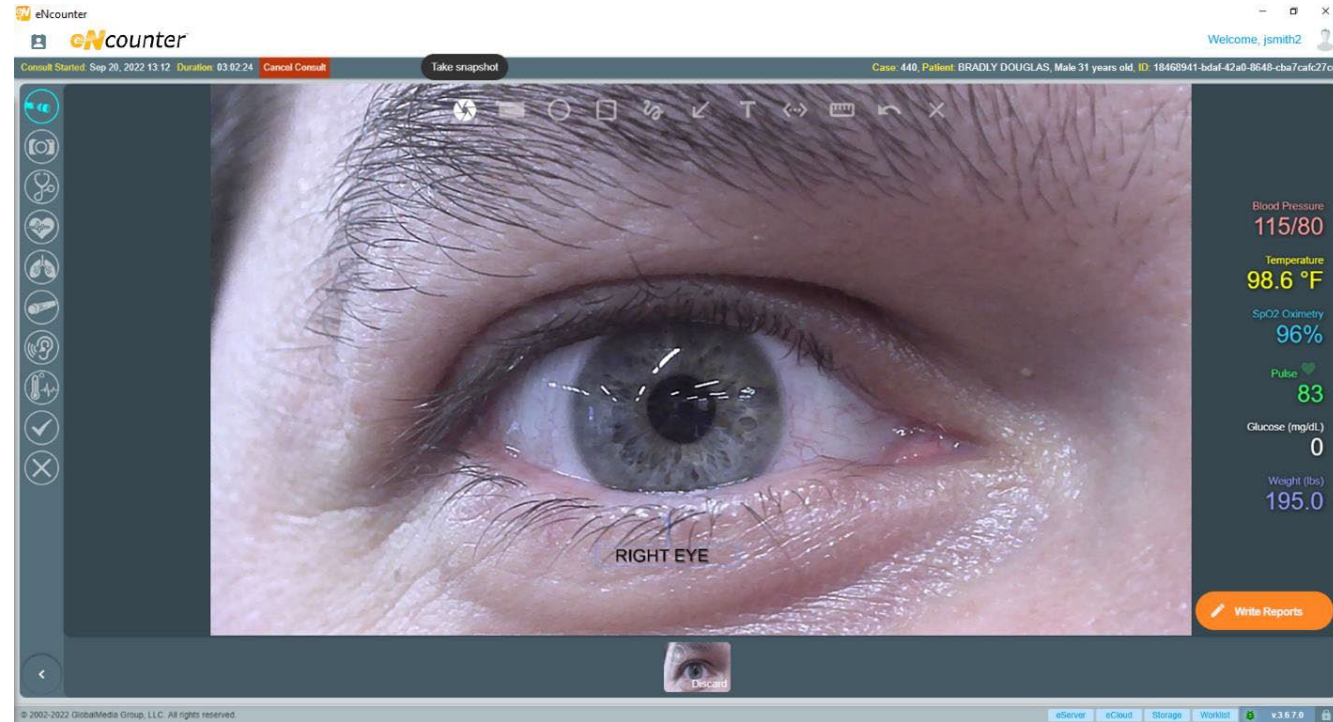
Direct Patient Exam

The consult report panel displays four options.

1. **New Report** – allows users to document SOAP Notes that can be saved and added the consult report.
2. **View Report** – displays basic patient profile information as well as an overview of the consult.
3. **eNcounter® Info** – displays patient profile information as well as allows users to enter the provider email address and phone number.
4. **Finish Consult** – proceeds to the consult finalization screen. The user will choose to upload the consult data to the cloud or purge the data and exit.
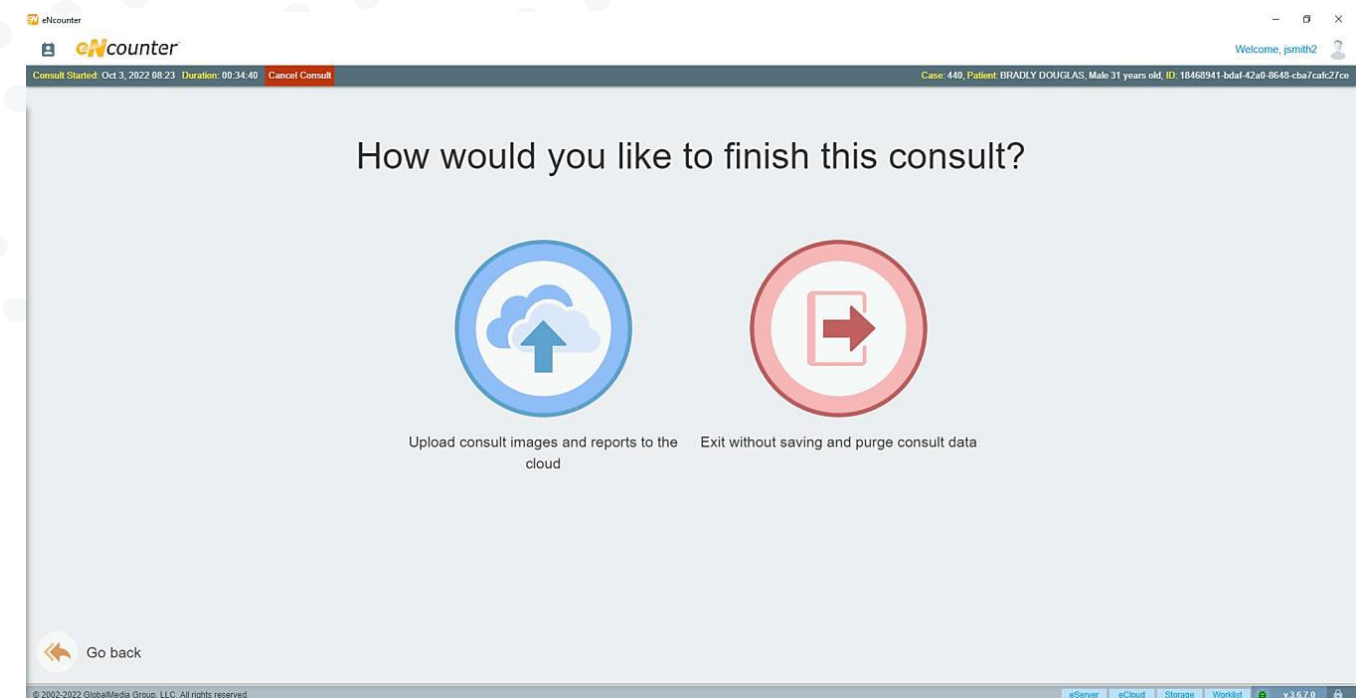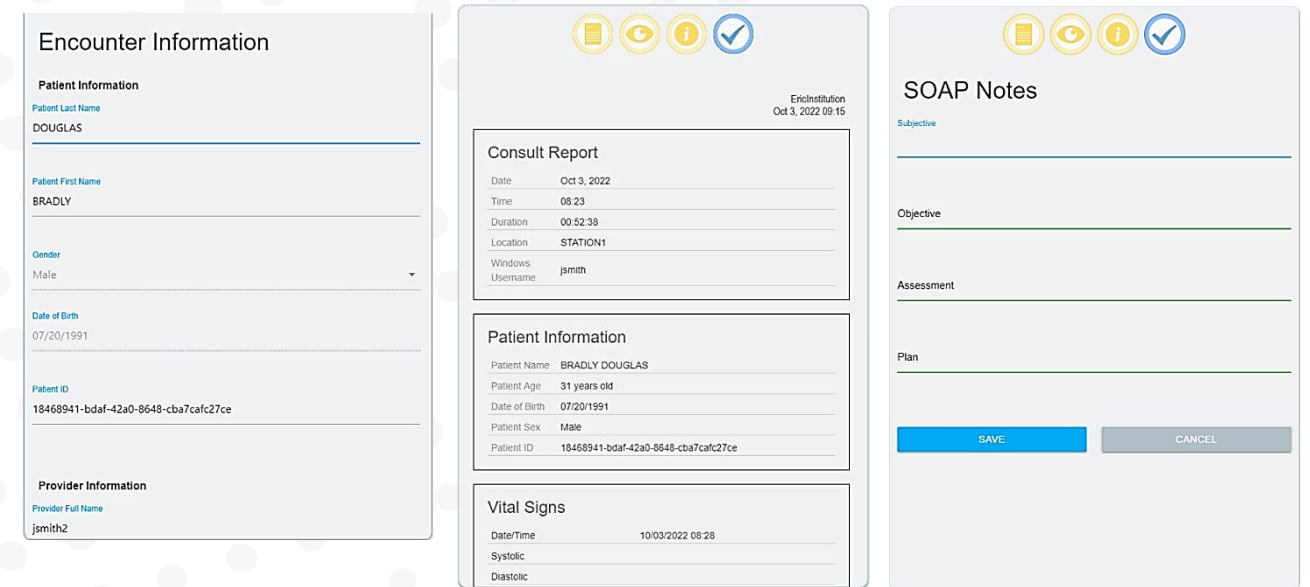
Integrated Medical Devices

Note: For more information regarding integrated devices, please visit www.globalmed.com.

- **TotalExam® 3 (Otoscope, Variable Polarizing Derm Hood, Autofocus Head)**

- **ClearSteth®**

- **TotalVitals® (Vital Signs)**

- **TotalECG® (Electrocardiogram)**

- **Welch Allyn Diagnostic Cardiology Suite (Spirometry)**

- **SimpliVue (Ultrasound)**

Device Panel Icons

The following tables indicate the functions of each icon that appears on the consult screen. *Device Panel icons, located on the left side of the screen*:

Icon	Function
	3rd party cameras (non-GlobalMed). This is only displayed if plugged into workstation.
	Launch Stethoscope module. Only enabled if licensed.
	Launch ECG module. Only enabled if licensed.
	Launch Spirometry module. Only enabled if licensed.
	Launch Ultrasound module. Only enabled if licensed.
	Launch Audiology module. Only enabled if licensed.
	Access Vital Signs Panel. Only enabled if licensed.
	Otoscope camera. Only displayed if plugged into workstation.
	TotalExam® 2 HD camera. Only displayed if plugged into workstation.
	TotalExam® 3 camera. Only displayed if plugged into workstation.
	Expand and Collapse Device Panel

Icon	Function
	3rd pa Takes a snapshot of the image displayed in the viewing pane, including any annotations and measurements. If a snapshot is displayed, clicking this icon again will create a new snapshot in the evidence tray with any newly added annotations and measurements. rty cameras (non-GlobalMed). This is only displayed if plugged into workstation.
	Video Format Fill: Adjusts the view of the camera stream by toggling between full-screen and a consolidated view.
	Annotation: Draws a circle/ellipse on the displayed image or video.
	Annotation: Draws a square/rectangle on the displayed image or video.
	Annotation: Draws a free-form line on the displayed image or video.
	Annotation: Draws a single-capped arrow on the displayed image or video.
	Annotation: Allows user to add text on the displayed image or video.
	Measurement selection.
	Measurement: Draws a double-capped arrow showing current calibrated measurement.
	Measurement: Draws a capped line showing current calibrated measurement.
	Measurement: Draws a capped gap showing current calibrated measurement.
	Measurement Calibration selection.
	Calibration: Adds new calibration.
	Calibration: Displays current list of saved calibrations (can save 10 max), including the current default.
	Erases all annotations added. If viewing a snapshot, it will only erase the last annotation added to the snapshot. Clicking the icon again will continue to erase the annotations on the snapshot in reverse order.
	Erases all annotations added. If viewing a snapshot, it will only erase annotations newly added to the snapshot.

TotalExam® 3

TotalExam® 3 Button Functionality

The TotalExam® 3 combines excellent HD image quality, intuitive design and versatility to take your telemedicine imagery needs to a new level of high definition imagery. The TotalExam 3 has interchangeable attachments including autofocus and otoscope heads, dermatology attachments and accessories.


No.	Feature	Description
1	Locked/Unlocked	Indicator that represents the locked and unlocked position the ring the secures the camera head.
2	WB (White Balance)	After the desired light intensity is selected, hold the camera 2 inches away from the provided white balance sticker and press the WB button. Note: this process will need to be repeated if the light intensity changes.
3	LED	Adjusts the light intensity by toggling through 4 different intensities: Dim, Medium, Bright, Max.
4	FF (Freeze Frame)	Press and release the FF button to pause the live camera stream and capture a freeze frame image, press the button to resume the live camera stream.

Inner Ear Audiology
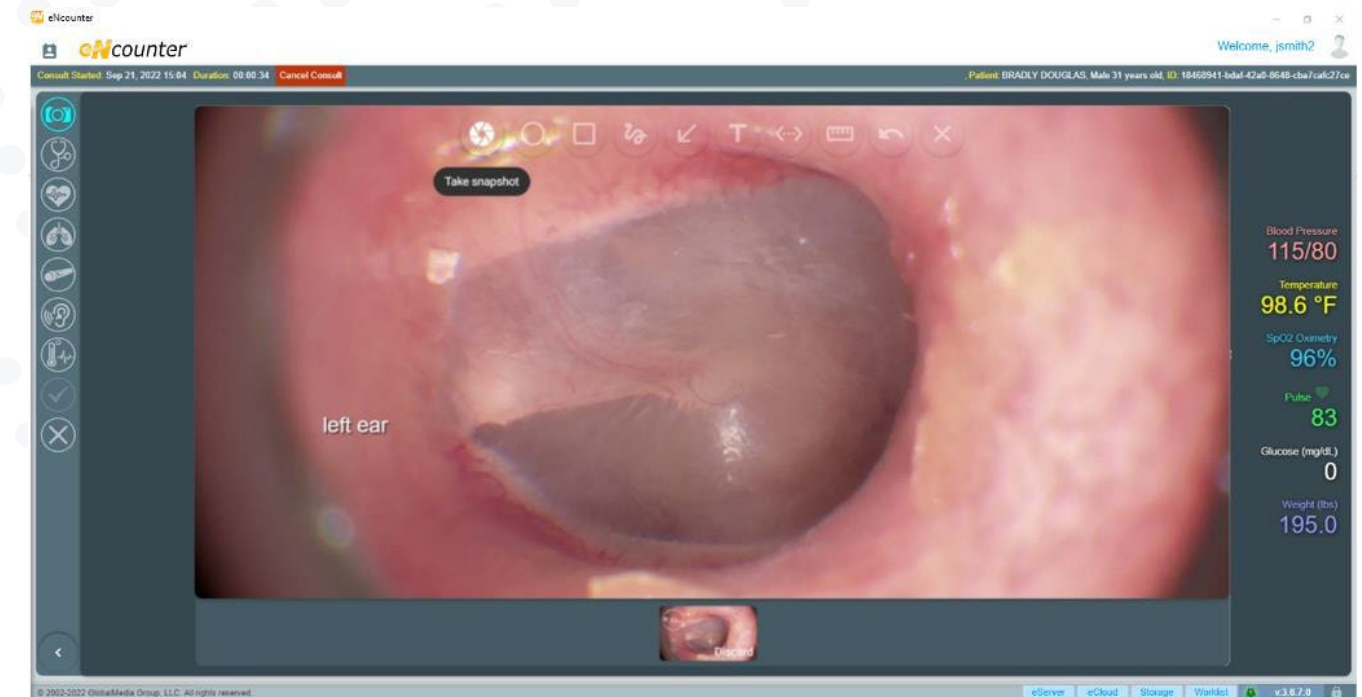
Configuring TotalExam 3 for Inner Ear Images

The Otoscope head must be used to capture inner ear images. If the Otoscope Head is not attached to the TotalExam 3 camera, follow the steps below to attach it.

a. If applicable, remove the current that is attached to the camera by twisting the ring on the camera head from the locked to the unlocked position.

b. Insert two alignment pins on the Otoscope Head into the holes in the camera wand.

c. Secure the head to the wand by twisting the ring on the camera head from the unlocked to the locked position.
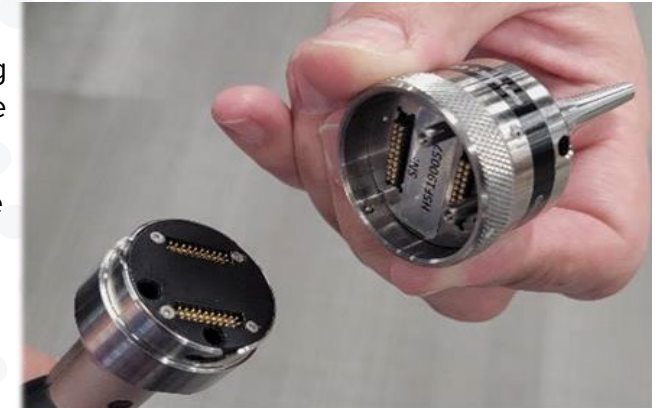
Configuring TotalExam 3 for Inner Ear Images

Insert the otoscope in the patient's ear and press the FF button to freeze/resume the live camera stream, then select the Take Snapshot icon to capture an image. The captured image, along with any annotations that were added, will appear in the Evidence Tray at the bottom of the Consult Screen.

Outer Ear Audiology

Configuring TotalExam 3 for Outer Ear Images

1. The Auto Focus head must be used to capture inner ear images. If the Otoscope Head is not attached to the TotalExam 3 camera, follow the steps below to attach it.

2. If applicable, remove the current that is attached to the camera by twisting the ring on the camera head from the locked to the unlocked position.

3. Insert two alignment pins on the Auto Focus head into the holes in the camera wand.

4. Secure the head to the wand by twisting the ring on the camera head from the from the unlocked to the locked position.

5. Connect the accessory attachment to the neck of the TotalExam 3 camera wand. Make sure that the camera buttons are facing upwards.

6. Insert the elongated measurement tool into the accessory attachment.

Elongated Measurement

Accessory Attachment
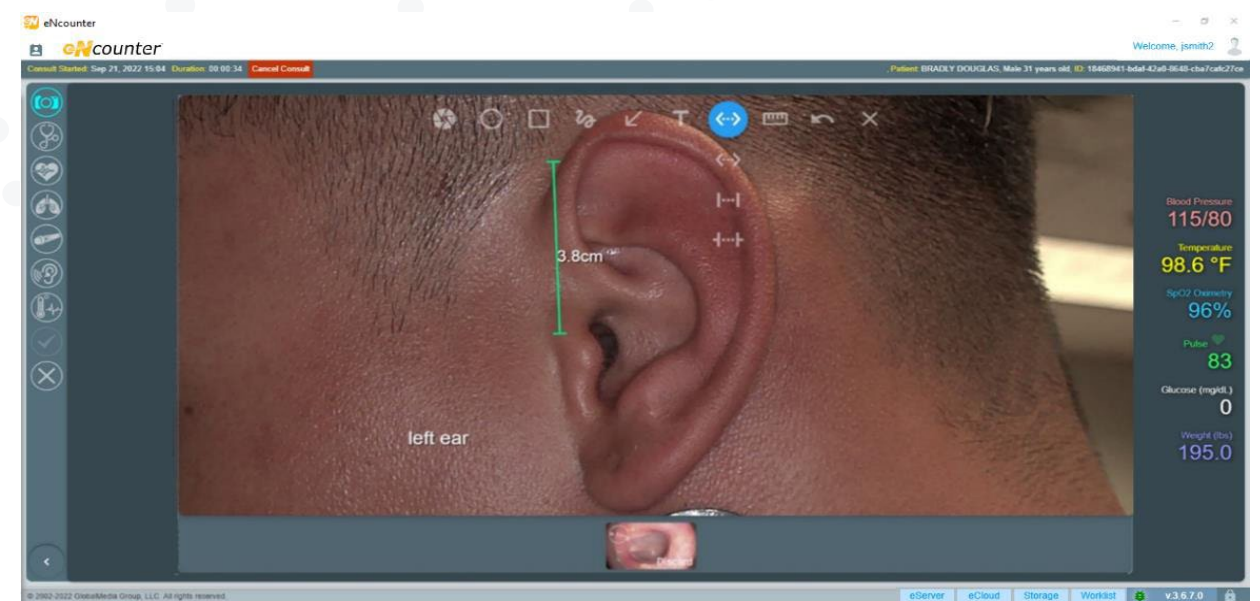
Outer Ear Audiology

Capturing Outer Ear Images using TotalExam 3

1. Rest the elongated measurement tool on the neck directly beneath the patient's ear.

2. With the buttons positioned upwards, press the FF button to freeze/resume the live camera stream.
   Note: Placement of the elongated measurement tool beneath the patient's ear must be consistent when gathering images. This ensures accurate and precise measurements.
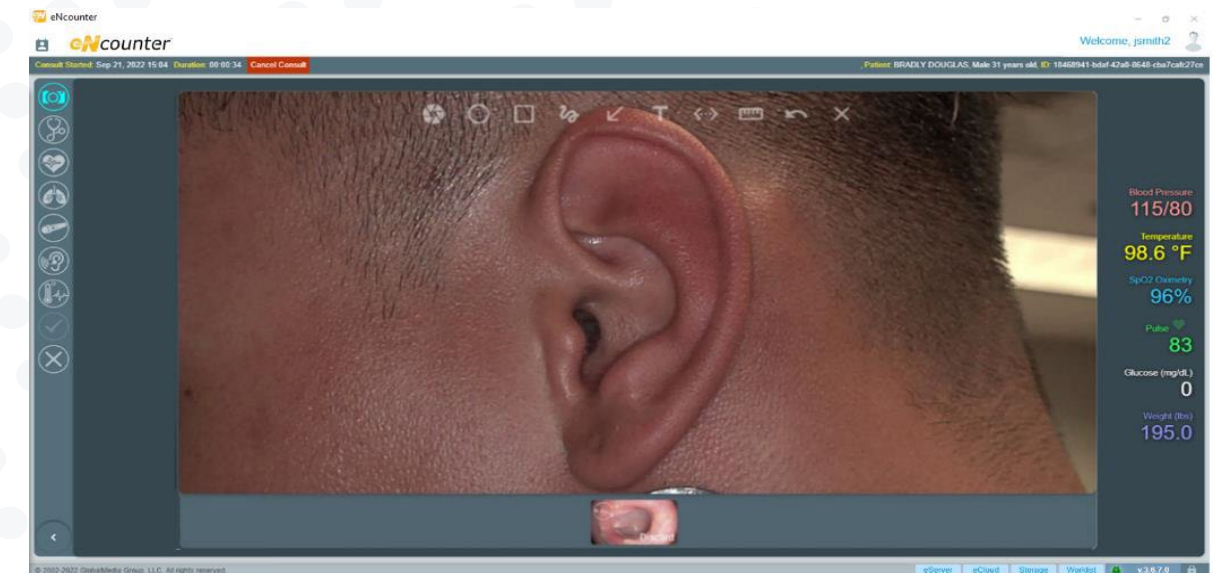

3. Once the image is captured, **select the Measurement icon**, and select the desired style of measurement.

4. **Click and drag the cursor** to make the desired measurements.

Outer Ear Audiology

Capturing Outer Ear Images using TotalExam 3

5. **Select Take Snapshot to capture an image**. The captured image, along with any annotations that were added, will appear in the Evidence Tray at the bottom of the Consult Screen.
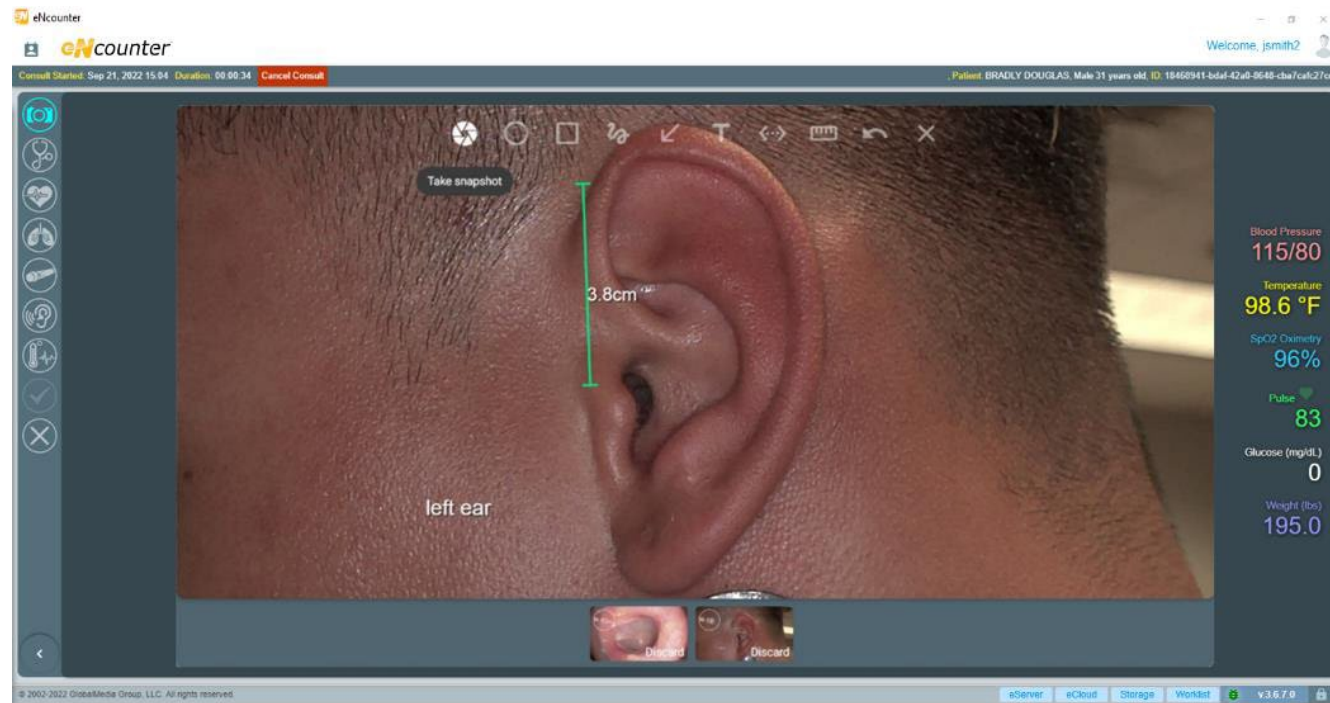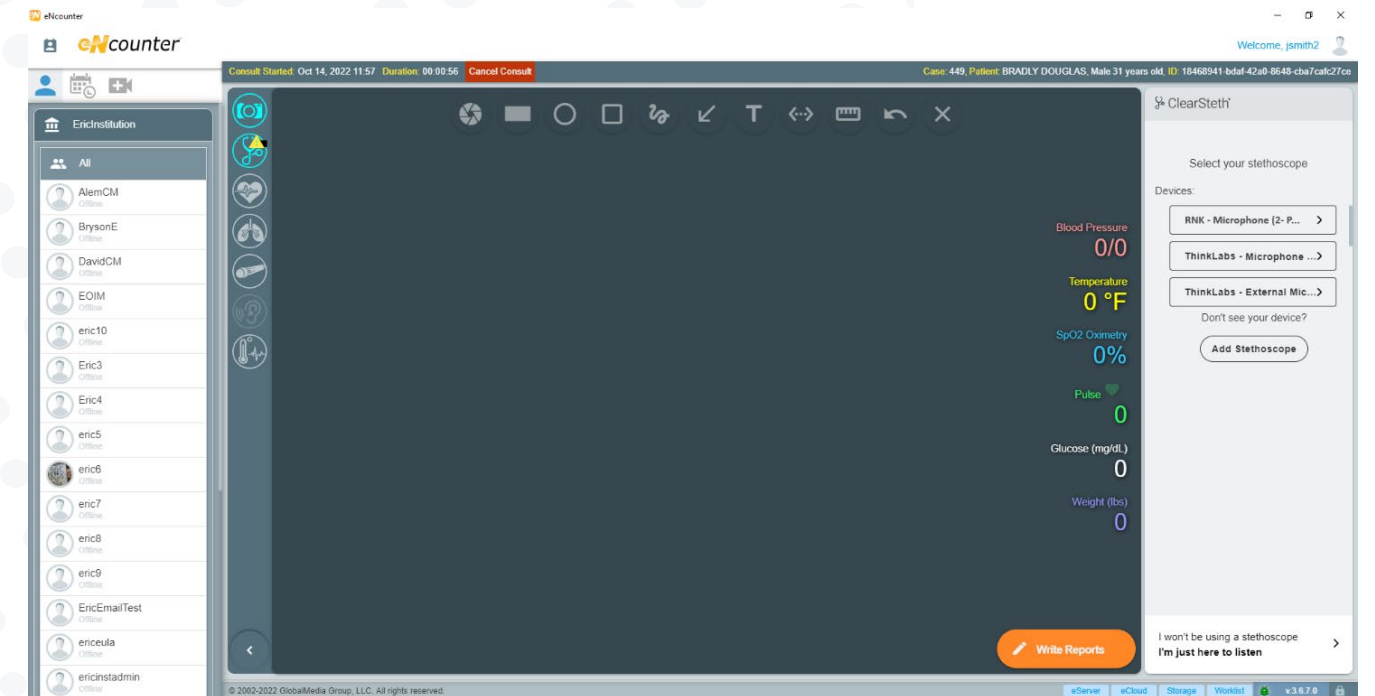

ClearSteth (Stethoscope)

ClearSteth is GlobalMed's digital auscultation software and has been integrated to work natively with eNcounter® to transmit stethoscope audio to an end user as well as listen to incoming stethoscope audio.

change title.

1. **Click the stethoscope icon on the eNcounter**® device panel to display the conferencing and ClearSteth panels.

2. If a stethoscope device is not configured, the user will be prompted to configure a stethoscope **by selecting a detected device under the Devices section** or to configure a listening device by selecting the option that reads "I won't be using a stethoscope I'm just here to listen".
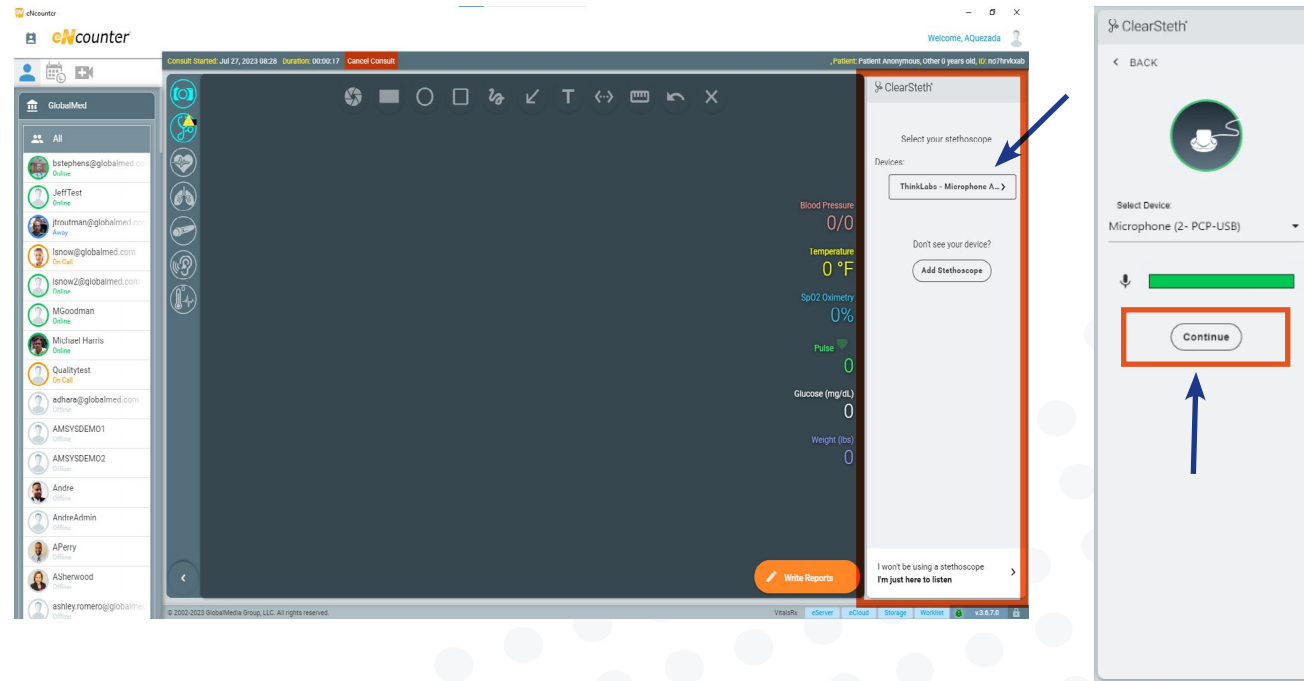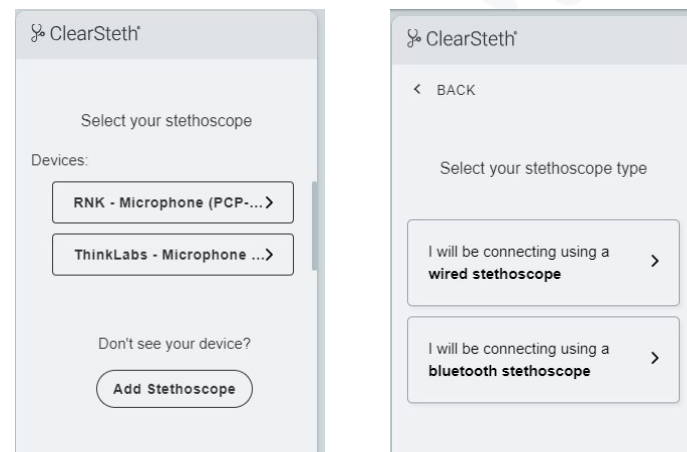
ClearSteth (Stethoscope)

Configuring Wired Stethoscope (RNK)

From the **initial configuration screen**, **select the applicable wired stethoscope** from the list of detected devices under the Devices section.

After selecting a detected stethoscope device, an audio verification prompt will be displayed. After verifying the stethoscope is transmitting audio, **click Continue**.

If the desired stethoscope was not detected initially or if a new stethoscope device needs to be added, click the Add Stethoscope button, and select the wired stethoscope option.
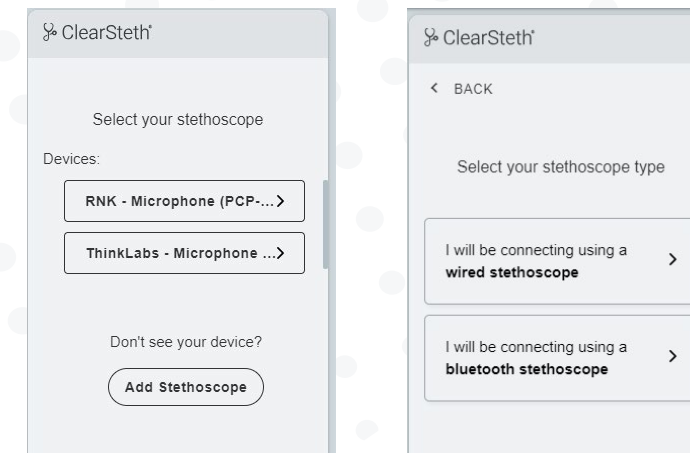

ClearSteth (Stethoscope)
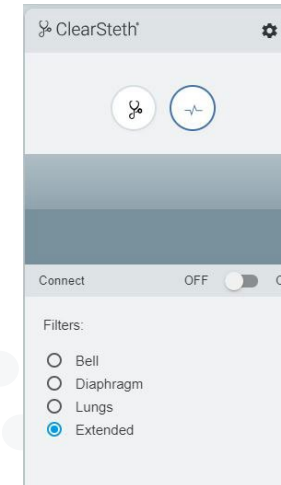
After a stethoscope has been configured use the Stethoscope Settings Icon to modify or add a stethoscope configuration.
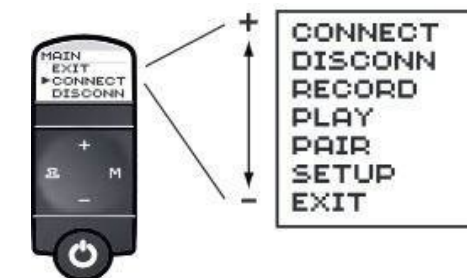
Configuring a Bluetooth Stethoscope (Littman)

From the initial configuration screen, select the Add Stethoscope button and then select the bluetooth stethoscope option.

After selecting the bluetooth stethoscope type the user will be prompted to set the Littman stethoscope into pair mode. Select Next after the stethoscope is in pair mode.
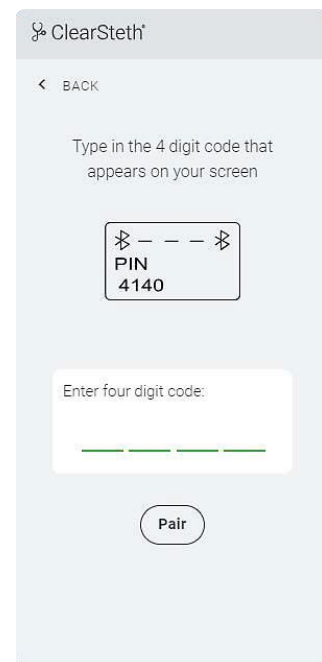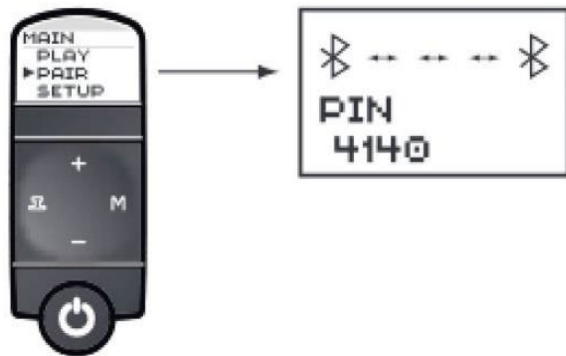
a. To set the Littman stethoscope into pair mode press the 'M' button the stethoscope's directional pad to enter the main menu.

ClearSteth (Stethoscope)

Configuring a Bluetooth Stethoscope (Littman)

Scroll down and select, **'Pair'** by pressing the **'M'** button. Once the device is in **'Pair'** mode, a four-digit code will be displayed.

Enter the four-digit code provided on the stethoscope pair screen and select **'Pair'**.

Occasionally the pairing may be lost, and a connection cannot be made. To resolve this issue, utilize the following steps:

• Open the Windows Bluetooth Devices menu located in the system tray.

• Find the entry for the Littmann stethoscope, click the entry, and select Remove Device.

• Utilize the previous steps to pair the stethoscope again.
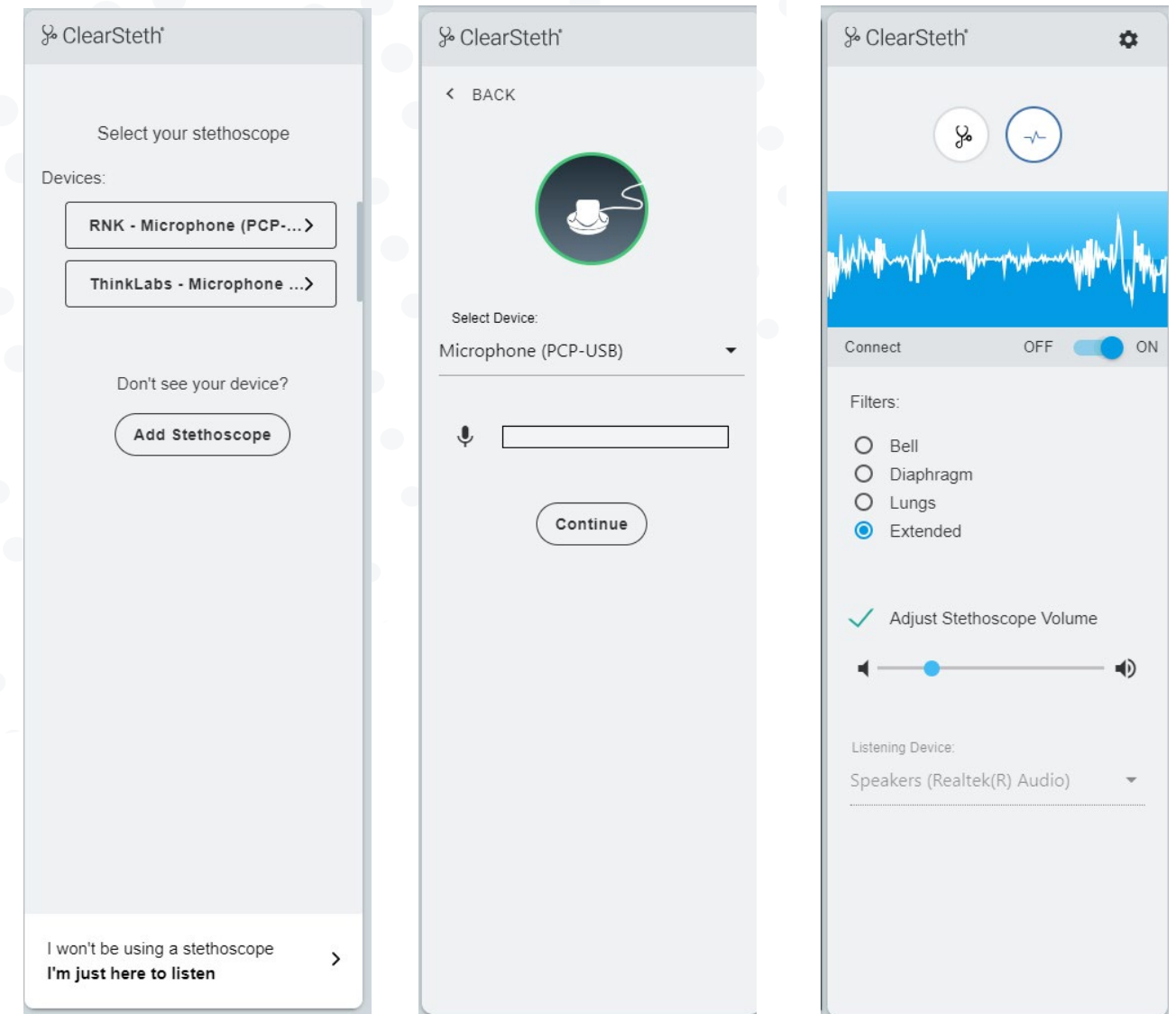
ClearSteth (Stethoscope)

Configuring ClearSteth for Listening to Incoming Stethoscope Audio

From the initial configuration screen, select the prompt at the bottom that reads "I won't be using a stethoscope I'm just here to listen".

Select the applicable audio device under the 'Listening Device' section.

The 'Test' button is available to verify the listening device is receiving audio. Click 'Continue' to proceed

If the initial configuration screen is no longer available there is also a 'Listening Device' section at the bottom of the Clearsteth home screen.

ClearSteth (Stethoscope)

Connecting with End Users

1. To initiate a meeting, **select the applicable user from the contacts tab** on the conferencing panel to view the user's contact options.

2. Depending on the end users supported communication configuration, **click the video or audio-only conference call icon** to connect with the end user.

3. Once connected, the end user's conferencing window will appear.

4. To begin sharing stethoscope sounds, **switch the 'Connect' toggle to ON**. An audio waveform will be displayed when the stethoscope is active.
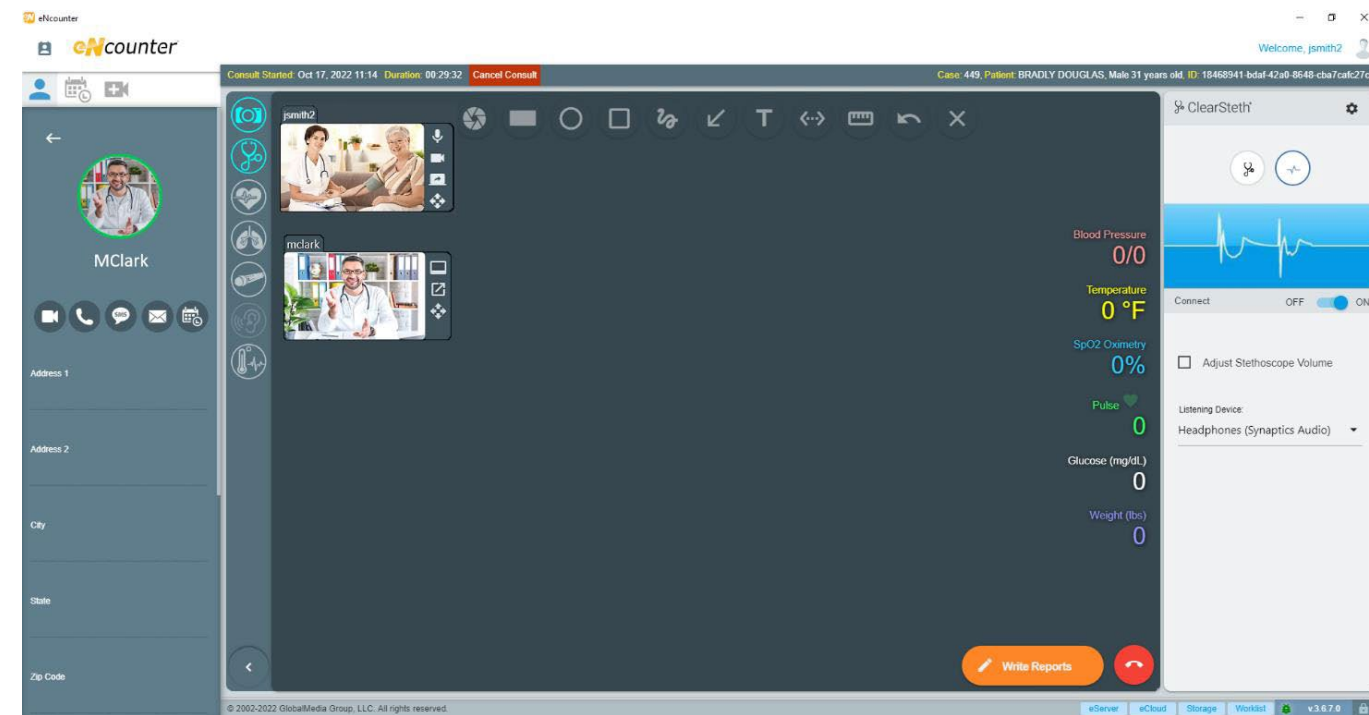
If the desired stethoscope was not detected initially or if a new stethoscope device needs to be added, **click the Add Stethoscope button**, and **select the wired stethoscope option**.

5. To discontinue the transmission of stethoscope audio, switch the 'Connect' toggle to OFF.

6. To end the conference call, click the red phone icon.

ClearSteth (Stethoscope)

Using Stethoscope Filters

Clearsteth offers various audio filters that isolate specific audio frequency ranges to allow users to better hear the organs systems of interest.

Clinical evidence indicates that heart sounds begin below the **audible threshold of 20 Hz** and **do not exceed 1000Hz** - with most being heard between the **20-500Hz range**. High frequency heart sounds, such as murmurs of aortic insufficiency and mistrial insufficiency, are better heard with the use of a diaphragm that filters out the low frequency components of other heart sounds. Lung sounds are classified into the following groups: **Low (under 100 Hz)**, **middle (200-600Hz)**, and **high frequency (600-1200Hz)**. These categories capture the majority of clinically relevant respiratory sounds (crackles, wheezes, rubs, etc), even the **highest pitched wheezes rarely exceed 2000 Hz**.

RNK Stethoscope Filters - users on the receiving end of an RNK stethoscope call will be presented with 4 options for filtering the stethoscope audio.

- User can access these filters below the Connect toggle switch.
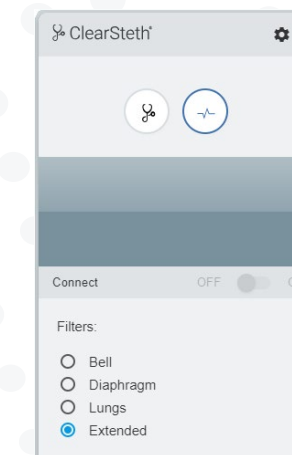
Filter	Frequency Range (Hz)	Description
Bell	20-350	Recommended for low frequency sounds, including heart sounds.
Diaphragm	20-1000	Recommended for low to moderate frequency sounds.
Extended	20-2000	Recommended for higher frequency breathing sounds, including wheezes and coughs.
Lungs	250-2000	Removes all filtering, allowing the user to hear the full spectrum of sound captured by the stethoscope.

ClearSteth (Stethoscope)

Littman Stethoscope Filters - users on the receiving end of a Littman stethoscope call will be presented with 3 options for filtering the stethoscope audio.

| Filter	Frequency Range (Hz)	Description
Bell	20-200	Recommended for low frequency sounds, including heart sounds.
Diaphragm	100-500	Recommended for low to moderate frequency sounds.
Extended	50-500	Recommended for higher frequency breathing sounds, including wheezes and coughs.

To select a filter, press the filter button located on the device's directional pad.

Filter Button

TotalVitals (Vital Signs)

Configuring TotalVitals:

1. Each TotalVitals device will only support one of two connection options, **Bluetooth or USB**. Ensure the applicable connection type based on your device is selected in the device settings. TotalVitals devices that support Bluetooth connection type will display the flashing Bluetooth indicator. I**f the indicator is not displayed, then the device connection type is USB.**

2. **Press and hold the power button** located on the right side of the device to power it on.

3. When utilizing the USB connection option, **connect the device to the workstation via the USB cable**.

4. When utilizing the Bluetooth connection option, **pair the device with the Windows operating system by selecting** **"PC_300SNT"** from the available Bluetooth devices.

5. With the device powered on, initiate a consult in eNcounter®, then **click the TotalVitals connectivity indicator** that appears in the footer to begin connecting the device to eNcounter®. The bluetooth connectivity icon will flash intermittently until the device is connected to eNcounter®, after the device is connected the icon stops flashing.
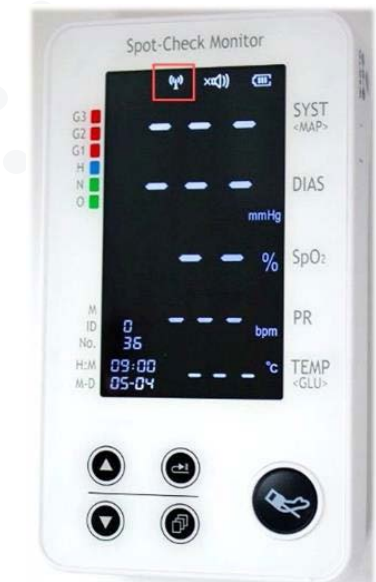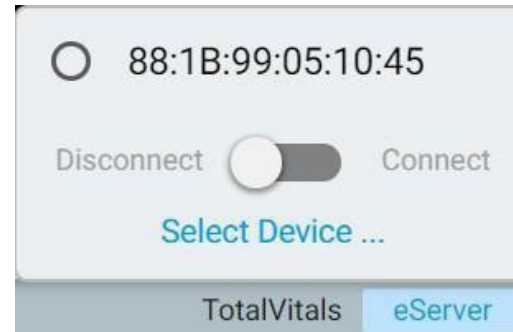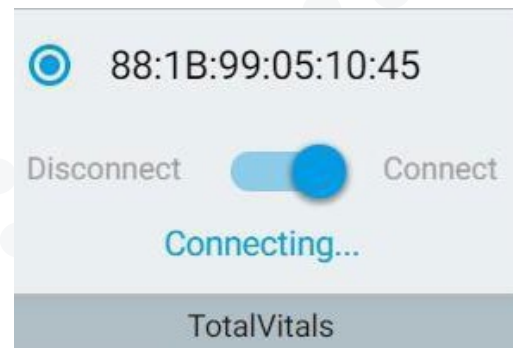
TotalVitals (Vital Signs)

6. A prompt will appear indicating that eNcounter® is Discovering the Bluetooth signal.


7. The Select Device prompt indicates the device has been found. **Select the MAC address associated with your device,** then click the toggle switch to connect with the device.

8. The prompt will then indicate that the device is Connecting to eNcounter®

9. After the connection process is completed successfully the prompt will change to indicate that the device is Connected.
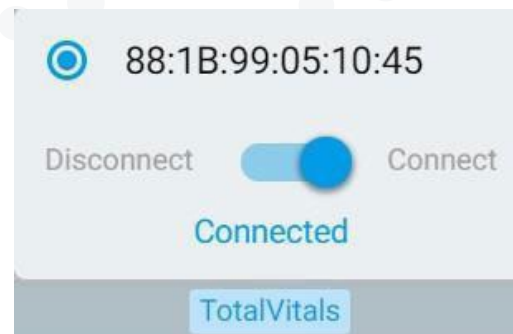
TotalVitals (Vital Signs)

Blood Pressure:

1. To take a blood pressure reading, connect the cuff tube to the **"NIBP" port**.

2. **Press and release the blood pressure button** to begin the measurement. The eNcounter® Vitals Overlay will reflect any vitals data measured by the device.

Pulse Rate:

1. To take a patient's pulse, connect the oximeter probe to the **"SpO2" port** and insert the patient's finger into the clip of the probe. The measurement will begin automatically.

Note: **TotalVitals continuously reads the patient's pulse. If the oximeter is removed from the patient's finger, the readings reset to 0.**

TotalVitals (Vital Signs)

Temperature:

1. To take a patient's temperature, **connect the probe to the "Temp" port**

2. **Remove the tip cover**, insert the tip into the ear canal, and press the scan button on the top side of the probe to begin reading. The eNcounter® vitals fields reflect any vitals data registered on the device.


TotalECG (Electrocardiogram):

1. Ensure TotalECG is selected in the device settings.

2. Ensure the TotalECG device has **two AA batteries** and the Bluetooth dongle is attached to the workstation via USB.

3. Attach the leads to the patient as necessary.

4. Power on the **TotalECG by pressing any button**.

5. **Click the down arrow** to highlight Start Transmitting, **then click the select button**.

6. Verify the device is transmitting before launching the ECG module **(it should read "Searching for Host" on the screen)**. Then click the ECG icon on the consult screen in eNcounter® to launch the ECG module.

7. **Click confirm** on the prompt to proceed.

8. Once TotalECG is located, the device information will populate the screen.

9. **Click the Connect button**. Once paired, the software streams live ECG data.
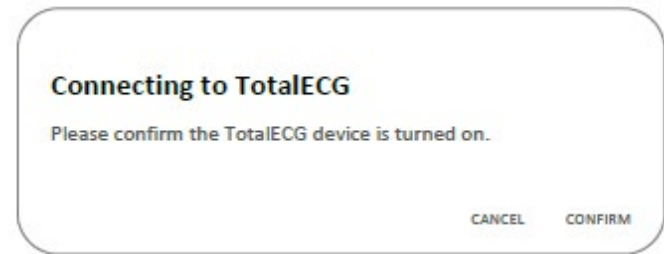
**Note: Device pairing with software may take a few moments.**
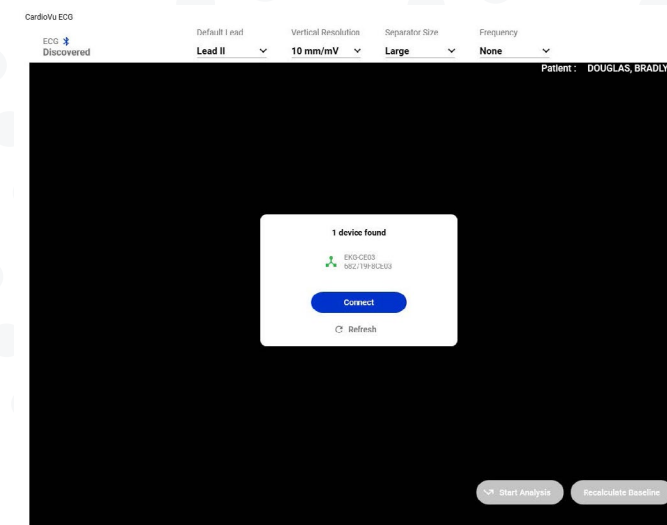
10. The Recalculate Baseline function can be used to reset the baseline from which the QRS complex is measured.

11. **Click Start Analysis** to capture a ten-second reading of ECG data and generate a report.

TotalVitals (Vital Signs)

12. The Start Analysis window allows users to record patient information related to applicable medications and observed clinical classifications

13. After the relevant patient information has been recorded, **select Start Analysis to proceed**.
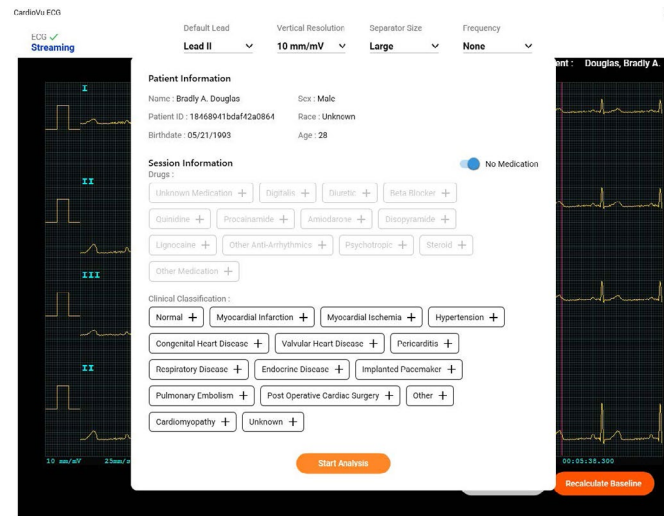
14. If the report is successfully exported to eNcounter®, a confirmation message will appear.

The lead recording for **BRADLY A. DOUGLAS** is complete. Report has been exported to eNcounter.

Finish

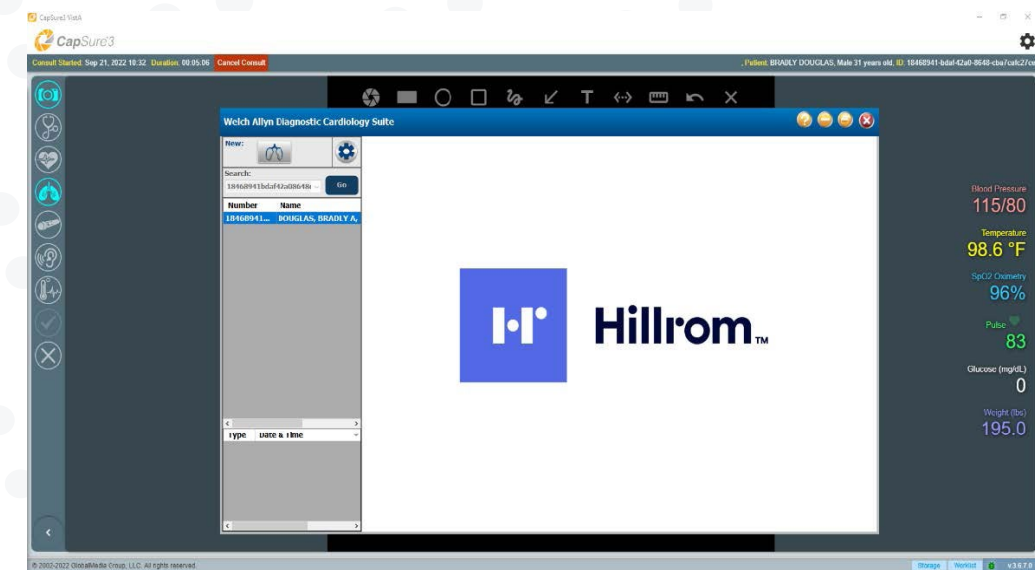15. Once exported, the report will appear in the Evidence Tray for inclusion in the Consult Report.

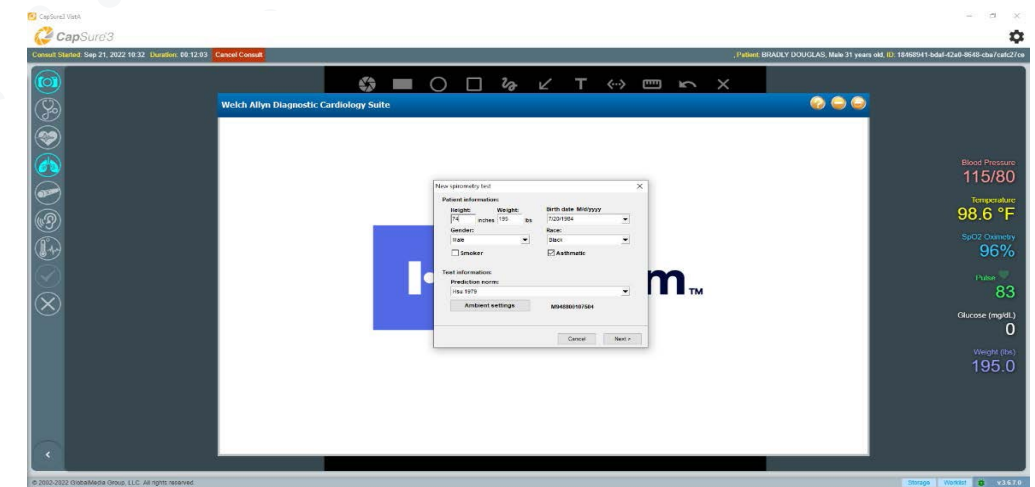# Welch Allyn Diagnostic Cardiology Suite (Spirometry)

1. **Insert the spirometer cable** into a USB port.

2. **Click the Spirometry icon** in ENcounter® to run the spirometry software.
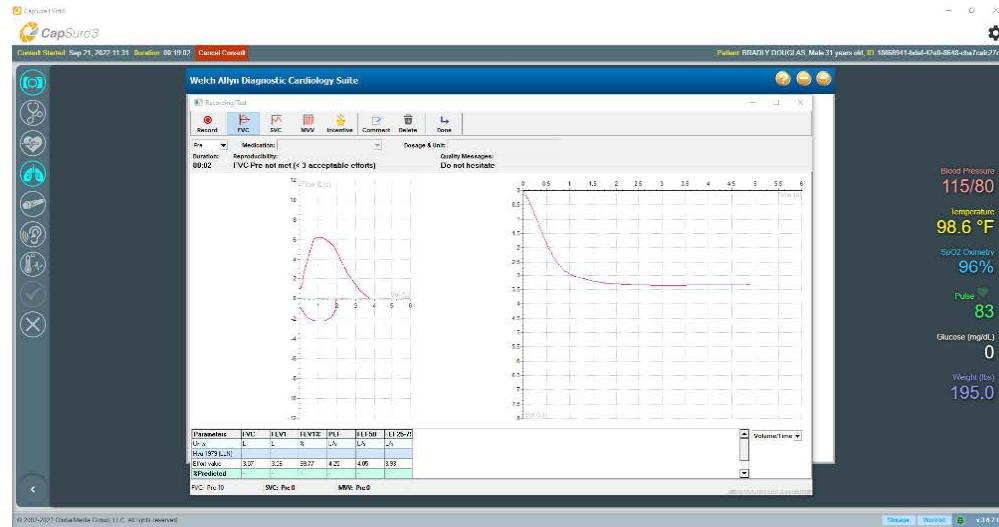

3. **Select the Spirometry icon** at the top of the window that appears and enter the required patient information.
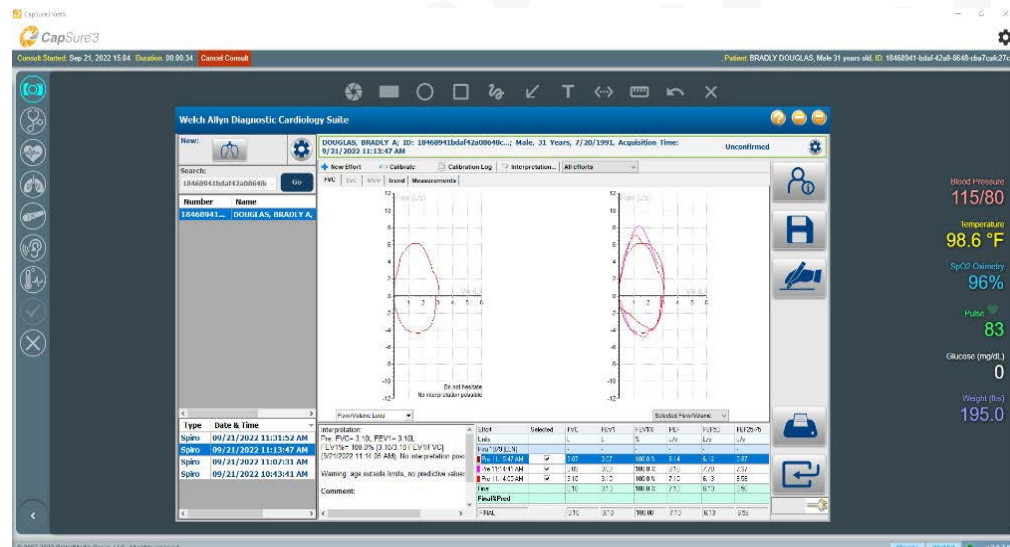
Welch Allyn Diagnostic Cardiology Suite (Spirometry)

4. **Click Record** and instruct the patient to inhale deeply and exhale as hard as possible.

5. After three satisfactory efforts, **click Done**. Then **click the Save icon** to export the report to ENcounter®.


Welch Allyn Diagnostic Cardiology Suite (Spirometry)

6. Once complete, the spirometric data automatically uploads to the Consult Report and can be viewed as a thumbnail in the evidence tray.
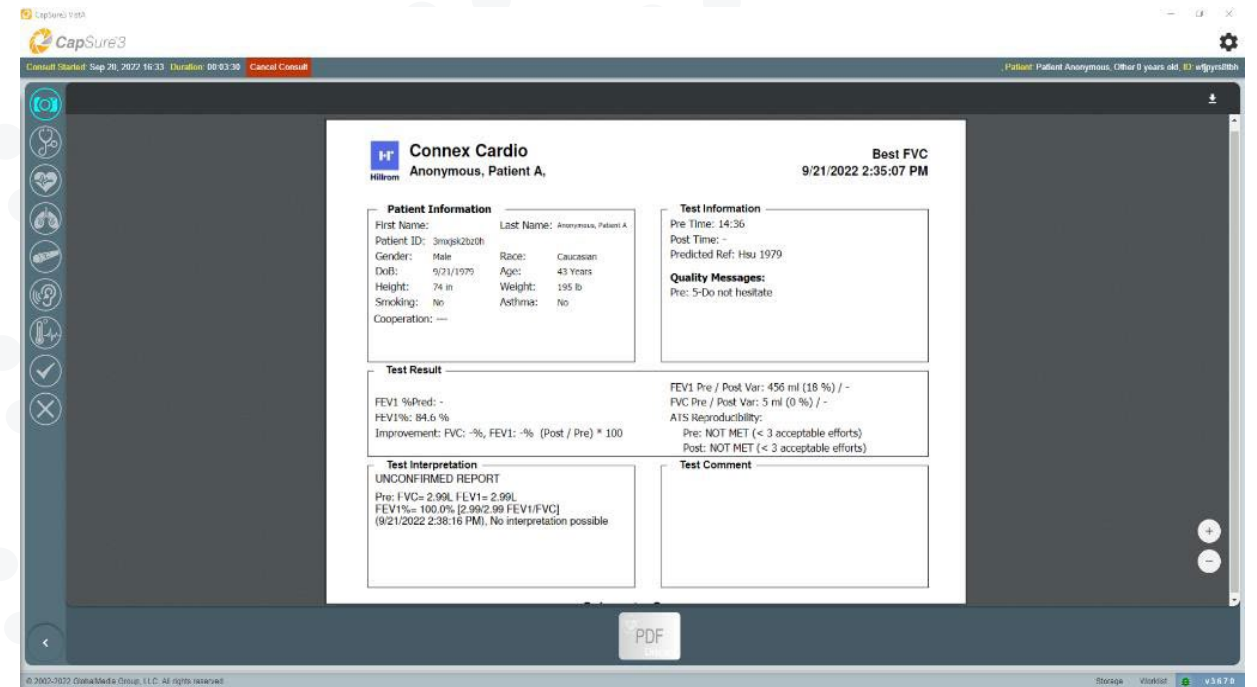
SimpliVue (Ultrasound)

1. **Ensure Simplivue is selected** in the device settings.

2. **Insert the ClearProbe cable** into a USB port.

3. **Select the Ultrasound Icon** on the Device Panel in eNcounter® to launch the ultrasound software.

4. **Apply the ultrasound gel to the probe and press the button on the probe** or click Scan to begin an ultrasound reading.
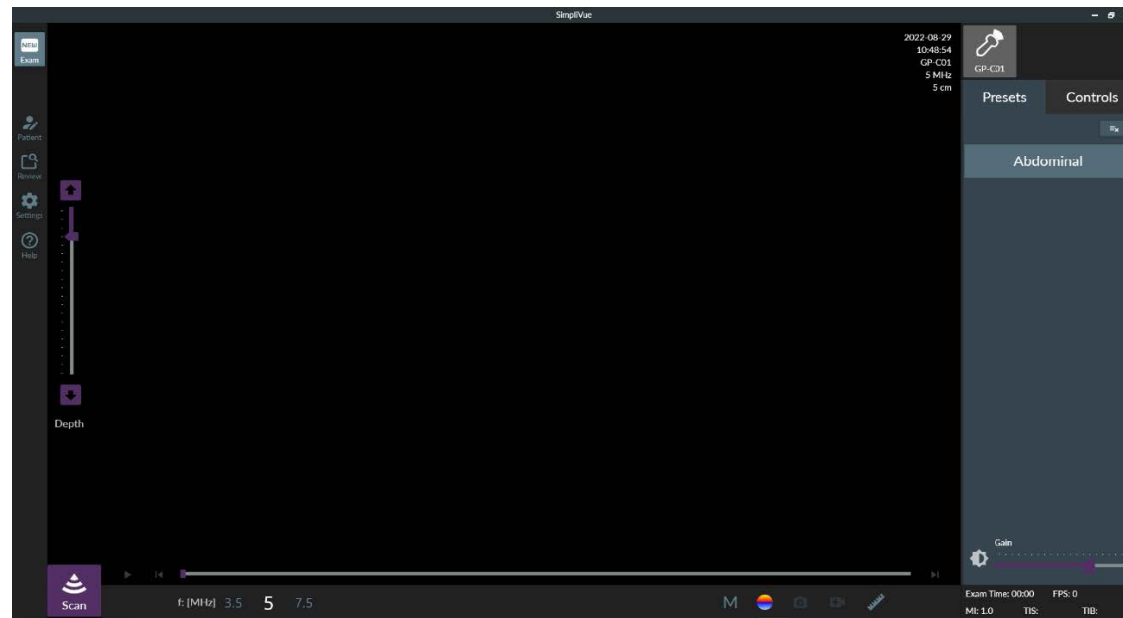
5. **Click the button on the probe** or click Freeze to capture a still frame image.

SimpliVue (Ultrasound)

6. The following image and corresponding table indicate the function of each feature that is available on the Simplivue ultrasound screen.
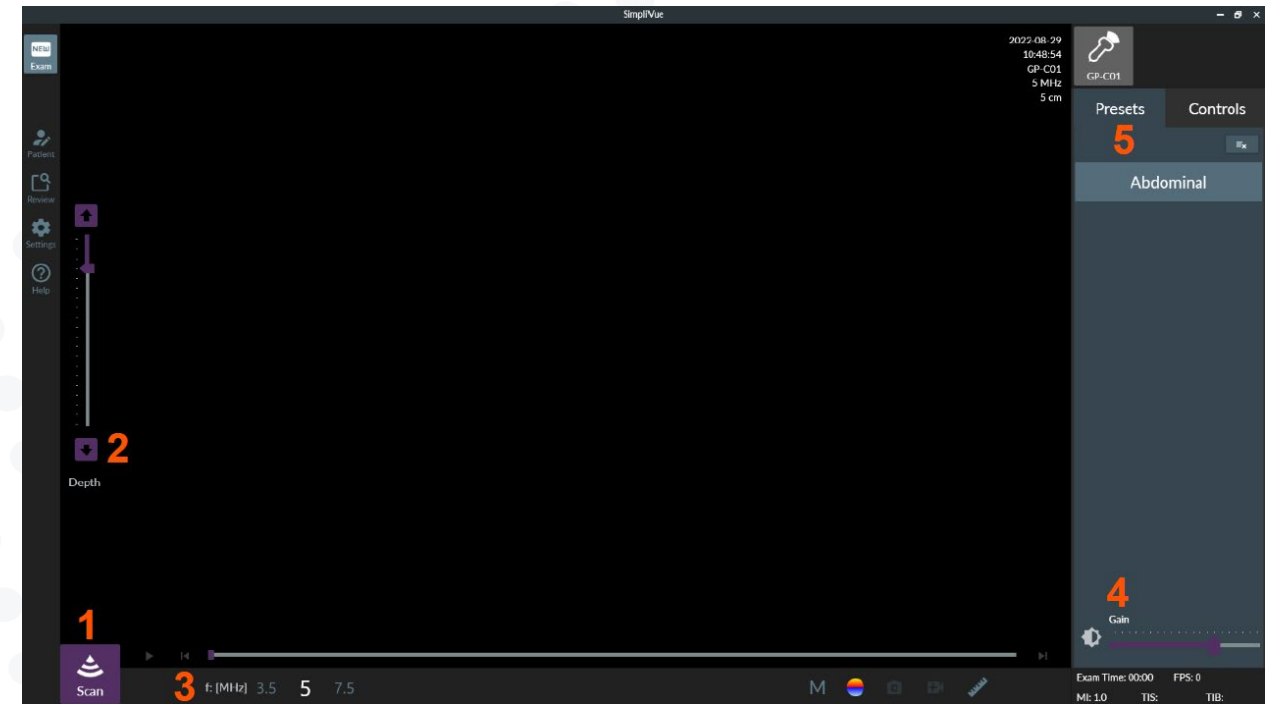

Table 6 Simplivue Icons/Features

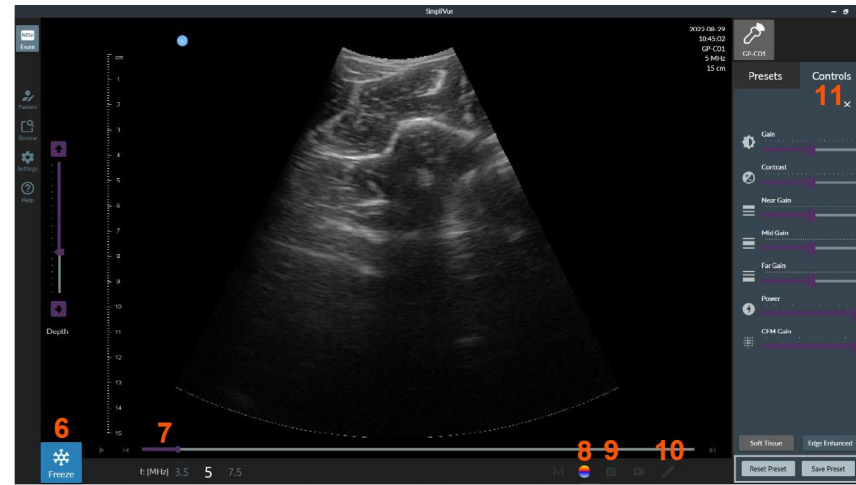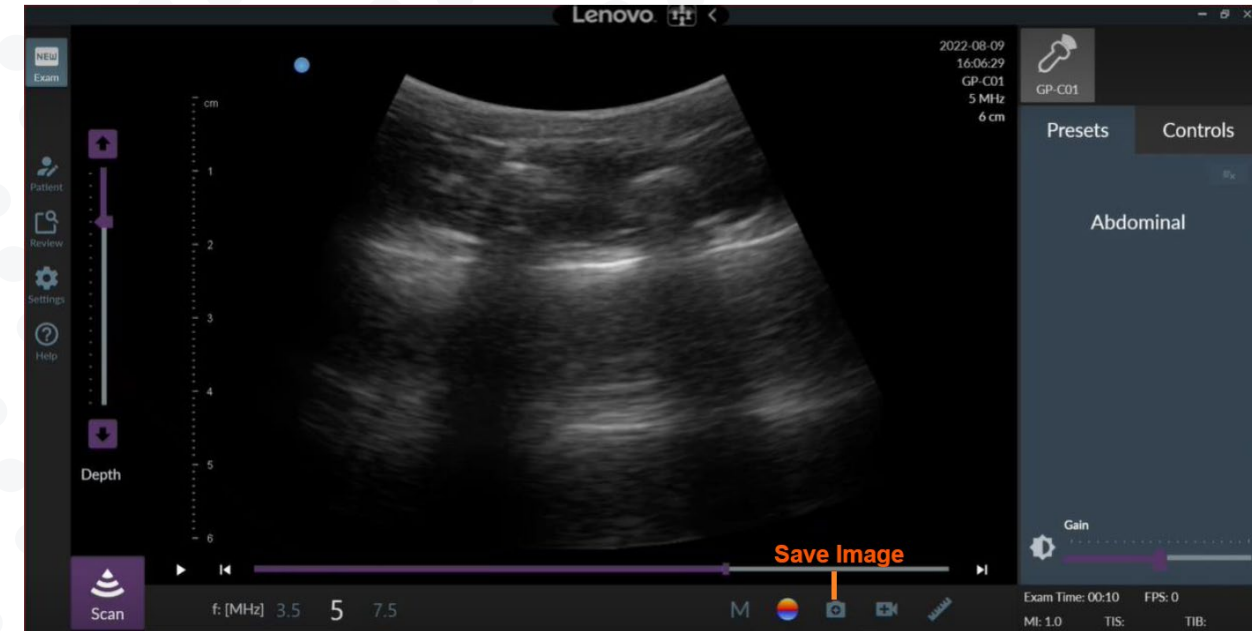| NO.	Feature	Description
1	Scan	Initiates the ultrasound
2	Depth	Adjusts the image depth
3	Frequency	Allows users to adjust the probe operating frequency.
4	Gain	Adjusts the brightness of the image displayed.
5	Preset Panel	Allows users to select from the list of display setting presets that were previously saved on the Controls Panel.

SimpliVue (Ultrasound)

Table 6 Simplivue Icons/Features

NO.	Feature	Description
6	Freeze	• To capture a still frame of the ultrasound image, utilize the Freeze Button in the lower left corner of the software interface or press the button on the side of the ultrasound device.
7	Playback Functions	• Allows users to examine ultrasound recording. The user can Play/Pause recording as well as use the playback bar to pinpoint a specific part of the recording.
8	CFM (Color Flow Mapping)	• Allows users to view a multi-colored map depicting the directionality of fluid/blood flow.
9	Save Image	• Saves the still frame with any added annotations and exports it to the evidence tray in eNcounter®.
10	Annotations	• Access a toolbar that allows users to select from multiple tools for annotating the ultrasound images. • **Note: Pressing the Freeze Button or Image capture button on the ultrasound device will erase any annotations that were made and will capture a new freeze frame image. To save a freeze frame image with the annotations, the user must select the Save Image icon. Then enter a name for the image, and click save.**
11	Controls Panel	• Allows users to adjust different aspects of how the ultrasound image is displayed. • Allows users to save/name a custom preset of display settings.

SimpliVue (Ultrasound)

7. To save and export a still frame image of the ultrasound that includes annotations, the user must **select the Save Image icon**.

8. **Enter a name for the image and click save**.

9. The saved images are displayed in the Evidence Tray of the Consult Screen and can be viewed in the Consult Report.

Learning & Development