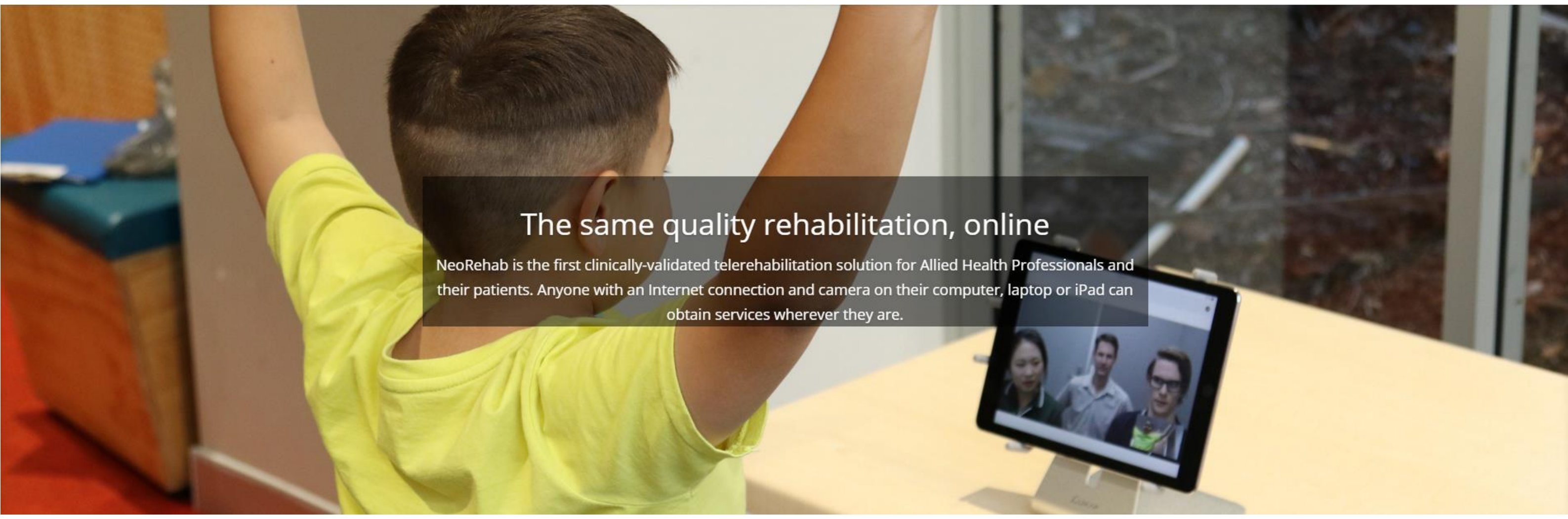
eHAB®

User Guide



Contents

1. About

Healthcare systems in most developed countries such as Australia, Canada and the USA are coming under increasing pressure in delivering health services due to a shortage of health professionals and increased age and life expectancy.

These factors are driving the cost of service delivery. As an example, Allied Health professionals from home health agencies in the United States travel around 330 million miles per year to conduct almost 30 million visits to 400,000 clients. These client visits cost the US healthcare system $4.4 billion dollars in 2008 and are projected to cost $8.3 billion by 2018. In Canada, the Ontario Telemedicine Network (a single provider) provides telemedicine services to over 200,000 clients per year saving some 208 million kilometres ($44m) in client travel per year.

Telehealth is seen as a key element in containing the cost of healthcare and redistributing the workload to ensure equitable access to high quality health services.

The NeoRehab eHAB® System is the only clinically validated telehealth system that enables Physiotherapists, Speech Pathologists, Occupational Therapists, Audiologists and other rehabilitation and medical professionals to consult with clients remotely in their own homes, or in remote community facilities. In doing so, the eHAB® system can facilitate increased community access, reduce costs and improve the efficiency of home healthcare.

NeoRehab supplies health care providers with eHAB® software as service (website) as well as provides product support and training. eHAB® is a tailored software solution that addresses the breadth of Allied Health applications and provides specialised measurement software systems that enable objective measurement of movement and speech.

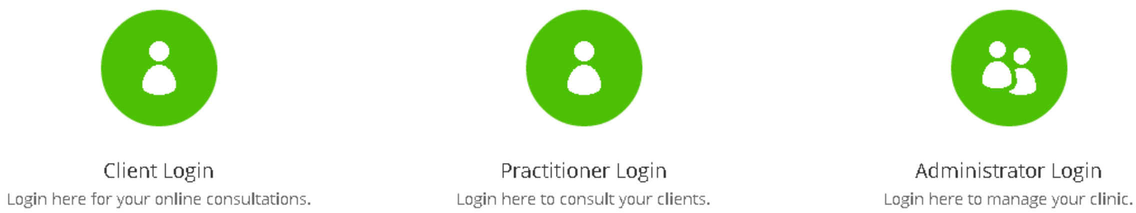
2. System Overview

Thank you for purchasing eHAB®, the best way to stay in touch with clients at a distance. eHAB® is on online application that enables you to conduct a videoconference with up to six remote clients at a time. eHAB® can be accessed via a web browser (Google Chrome) by the provider or via either a web browser (Google Chrome) or an iPad app at the client end of the consultation.

There are three type of users of the eHAB® system

Healthcare Providers	Healthcare providers are responsible for maintaining an eHAB® subscription and for creating accounts for individual practitioners.
Practitioners	Practitioners conduct online consultations with clients and have the ability to add and remove clients from the system
Clients	Clients access the system either via a web browser or an iPad. Consultations are initiated by the practitioner.

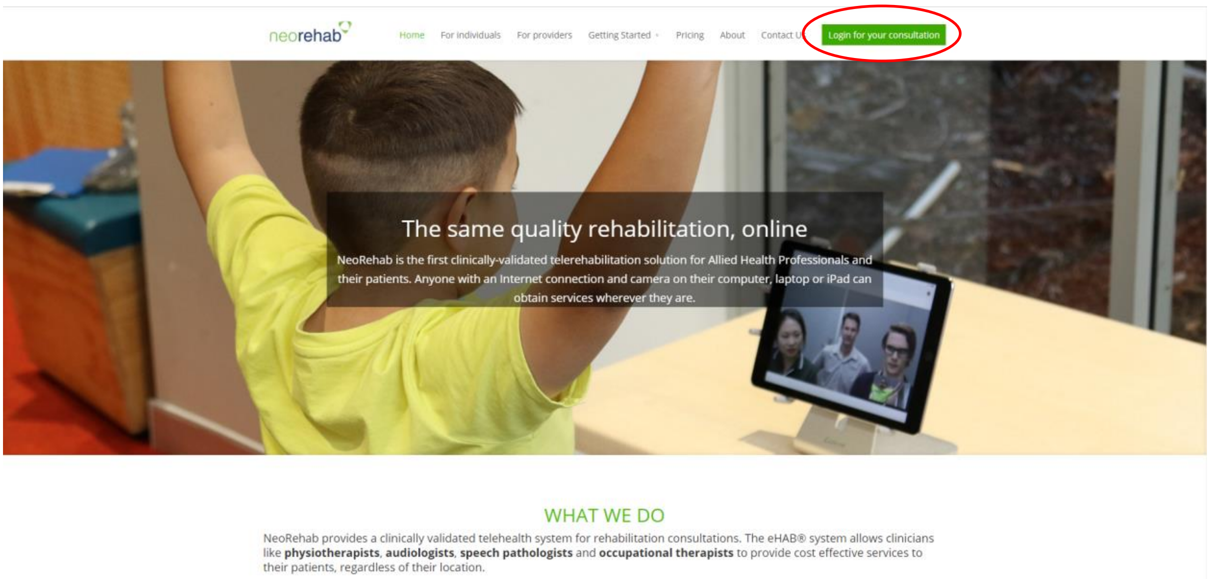
The following documentation will provide an overview of the use of the system from the perspective of each user type.

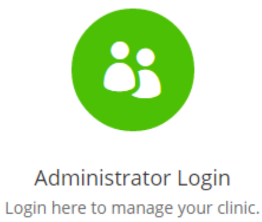


3. Healthcare Providers

Healthcare providers access the eHAB® system through the NeoRehab website: www.NeoRehab.com

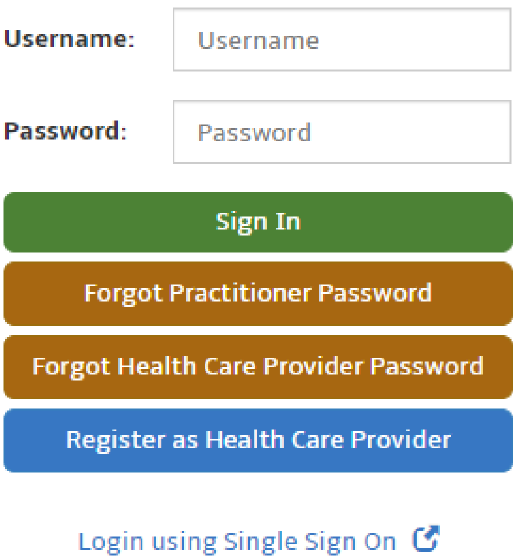
Click on the “Login for your consultation” link in the top right corner of the screen.





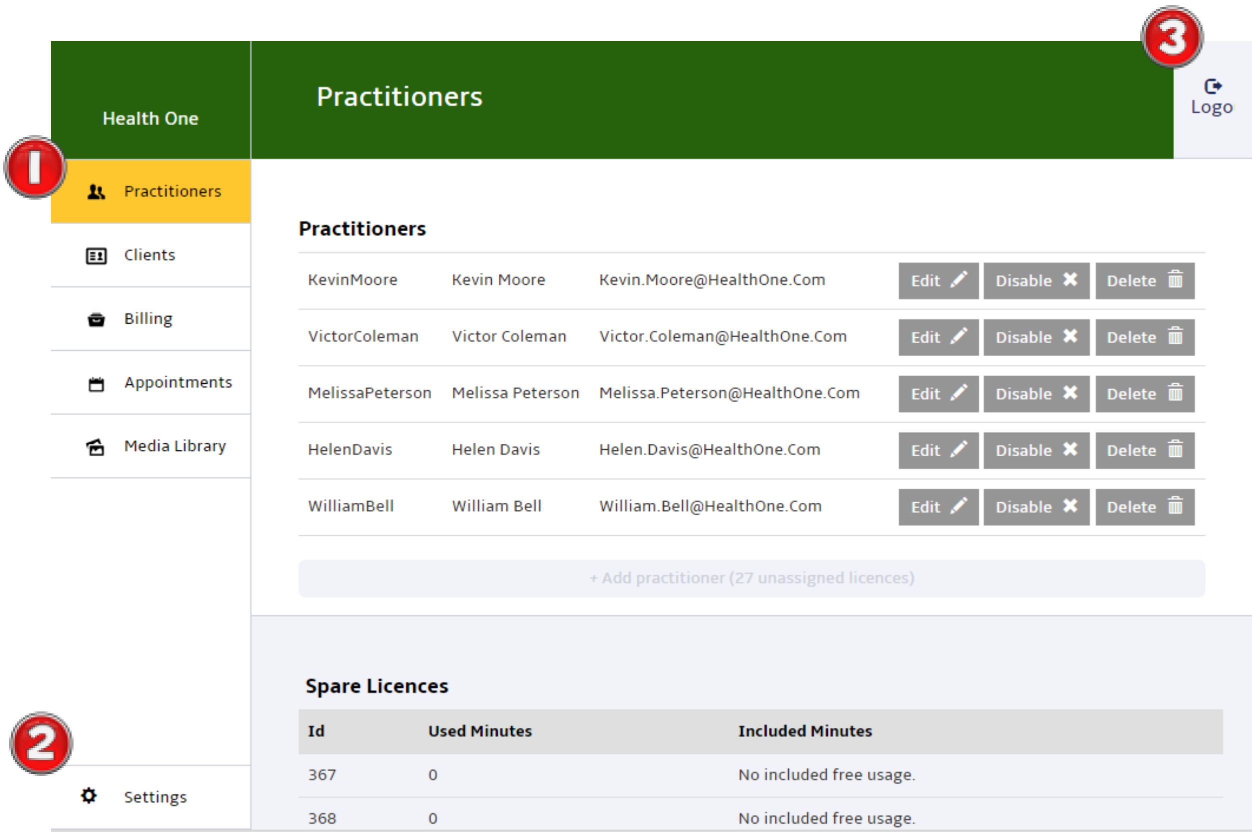
When you sign up for a NeoRehab account, you will receive a username and password. Select “Administrator Login” from the available options and enter the supplied username and password to get started

If your organisation has entered into an agreement with NeoRehab you can use your organisations username and password to log into the system by selecting “Login using Single Sign On”



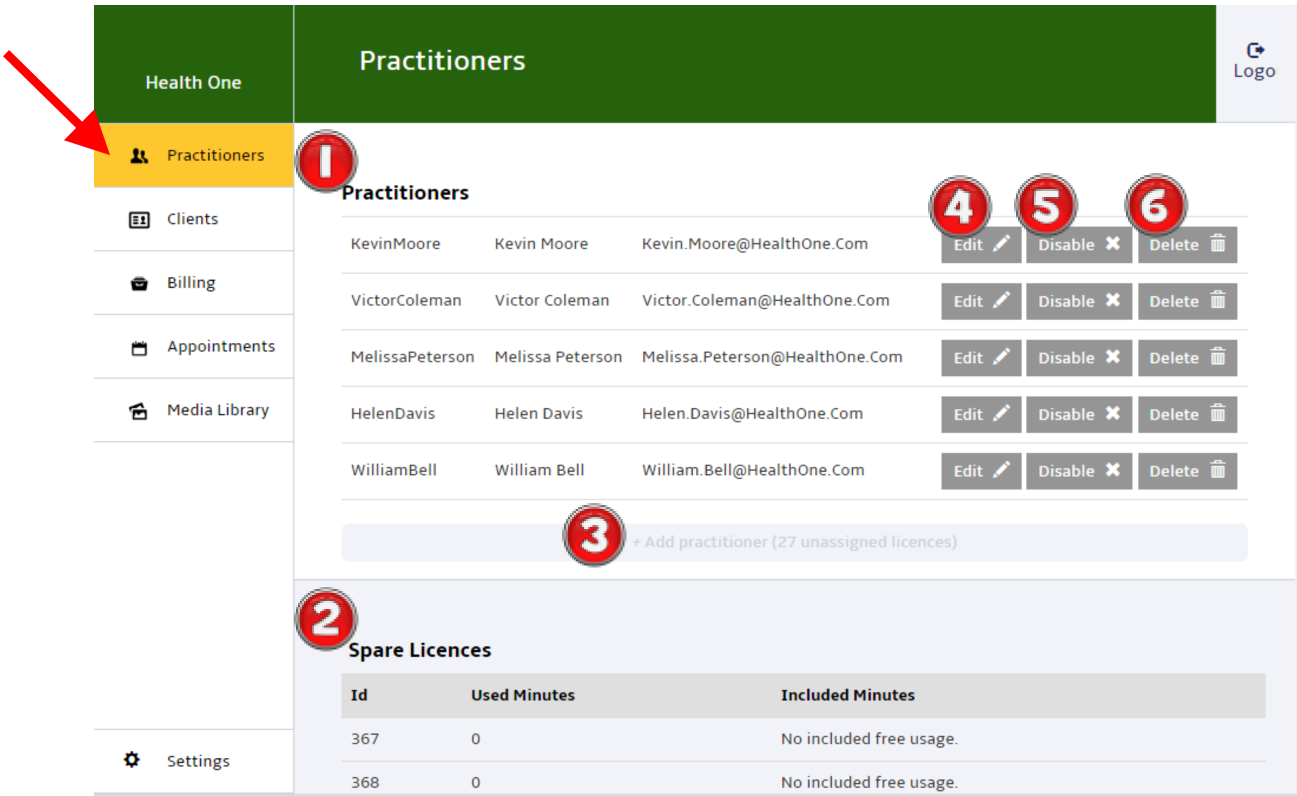
3.1 Dashboard

Once you have logged in you will be redirected to the dashboard page. This page consists of a menu tab down the left hand side of the screen to provide access to various pages within the provider site ①, a Settings button which enables you to configure the eHAB® system for your organisation ② and a logout button to exit the system③. By default, the "Practitioners" page will be displayed at login.



3.2 Managing Practitioner Accounts

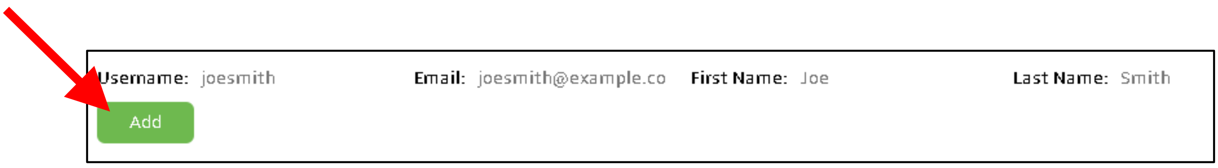
Selecting the "Practitioners" menu item (arrow) on the left hand side of the screen with open the "Practitioners" page. A list of practitioners who currently have user accounts in the system will be listed at the top of the page ①. Practitioner licenses for which you have paid, but have not yet used will be listed at the bottom of the page ②.



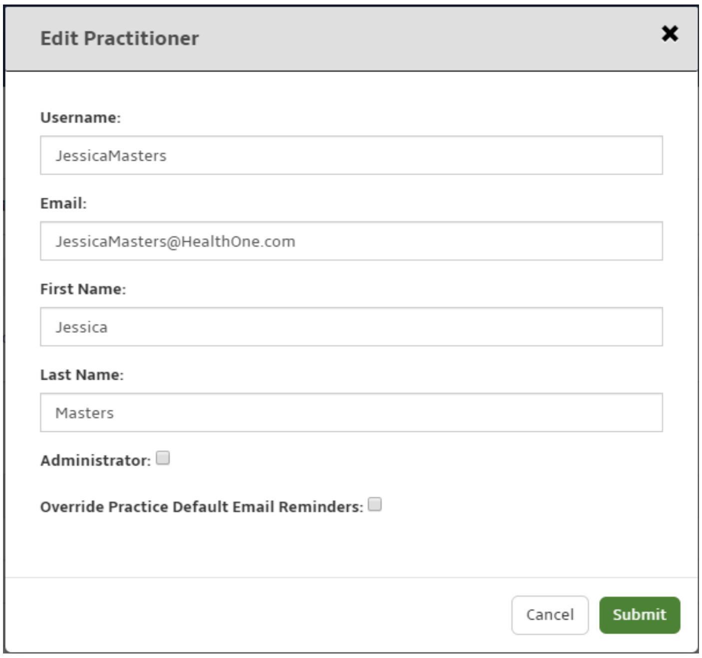
3.2.1 Add a Practitioner Account

To add a new practitioner account, you first must have a spare license available in the "Spare Licenses" section of the page ②. To add an account, click on the "Add Practitioner" button ③.

On the subsequent screen enter a username, email address and name and click on the "Add button (arrow).



3.2.2 Edit a Practitioners details



To edit an existing practitioner, click on the corresponding “Edit” button ④. On the following page you will be able to edit practitioner details such as the practitioner’s username, email address and name.

NOTE: As the username is used to log into the system, changing this field will require the practitioner to change the details they use to log into the system.

If you are an Administrator, you will have the option of giving the user Administrator access by checking the “Administrator” box. You can also opt to allow the user to override the default email reminder schedule and specify their own by checking the “Override Practice Default Email Reminders” box.

3.2.3 Disable or Enable a Practitioner Account

To disable a practitioner account, click on the corresponding “Disable” button ⑤. Disabling a practitioner has no effect in the current subscription period, but will prevent the practitioner from being automatically licenced in the next period. If you want to reduce your licence count for the next period (or for resuming a subscription), disabling practitioners will allow this to occur. When the disable button is clicked, a warning will be provided to ensure you intend to perform this action.

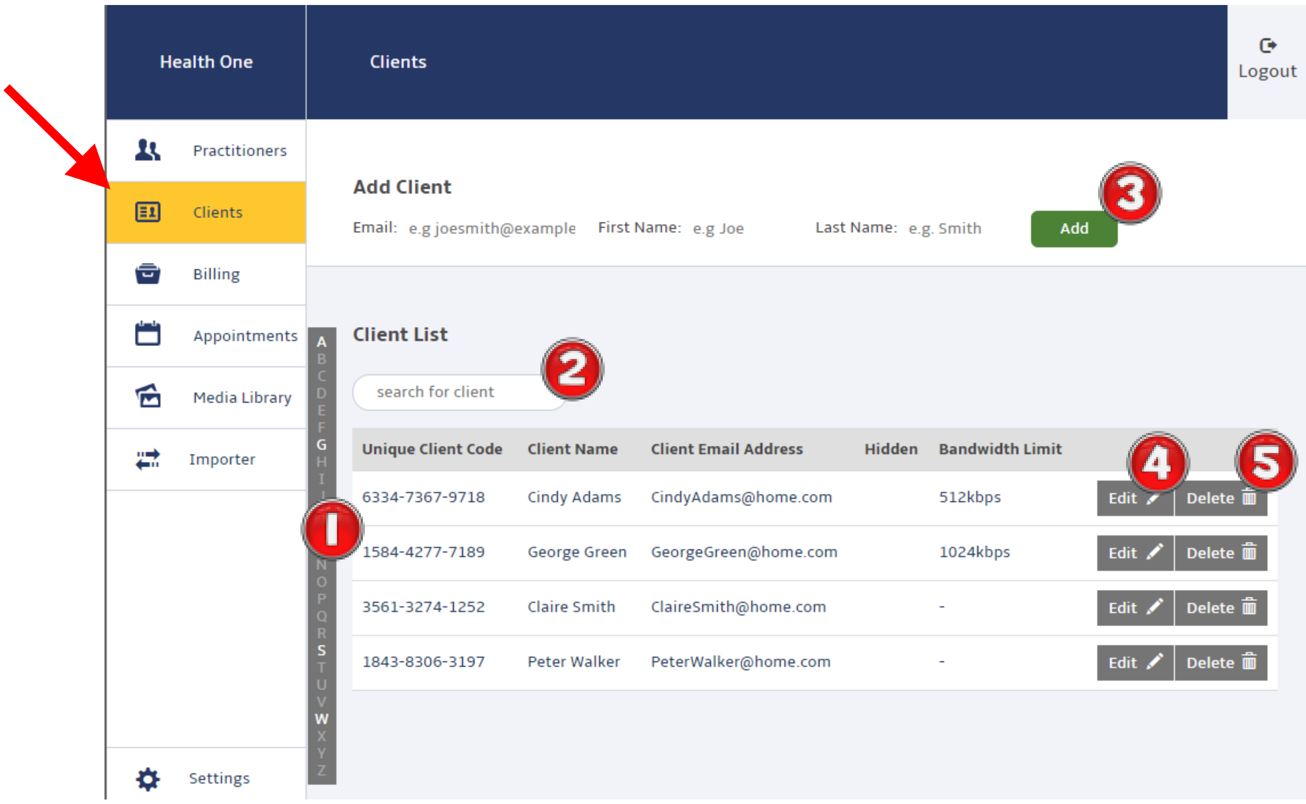
If you wish to re-enable an account that has previously been disabled, click on the corresponding “Enable” button for the practitioner. Enabling a practitioner has no effect on the current billing period. Enabled practitioners will be automatically licenced in your next subscription period

3.2.4 Delete a Practitioner Account

To delete a practitioner account, click on the corresponding “Delete” button ⑥. When the delete button is clicked, a warning will be provided to ensure you intend to perform this action.

3.3 Managing Clients

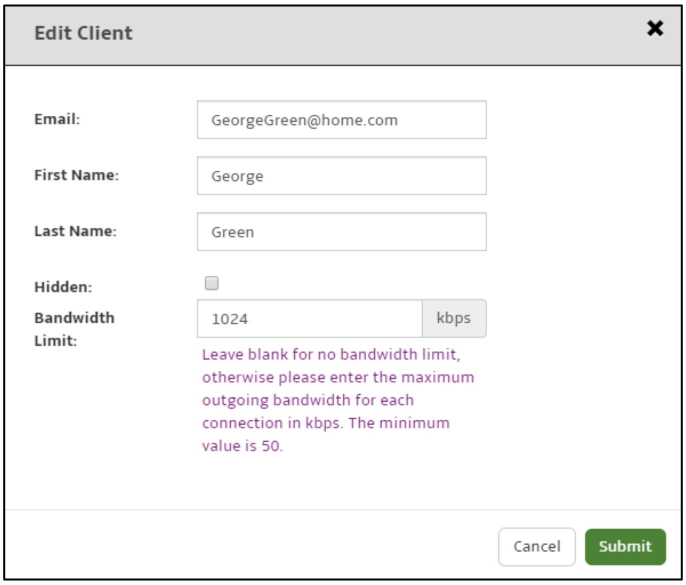
Selecting the “Clients” menu item (arrow) on the left hand side of the screen with open the “Clients” page. A list of clients who are currently registered in the eHAB® system for your organisation will be listed on this page ①. To search in the current list of clients, begin typing the client’s name in the search box ② and the list will be filtered.



3.3.1 Add a Client

To add a client to the eHAB® system, type the client details including an email address, a first name and a last name at the top of the page and click on the “Add” button ③. The Client will be sent an email which contains a unique access code and information on how to access the eHAB® system from either a computer or tablet device through a browser, or from the app store if they have an iPad.

3.3.2 Edit a Client



To edit a client who has already been added to the eHAB® system, click on the corresponding “Edit” button 4. On the subsequent screen, edit the client details such as their email address or name and click on the “Submit” button. If the checkbox labelled “Hidden” is ticked, the client will not be displayed to practitioners.

A bandwidth (connection speed) limit can be specified for each client. This will limit the speed of the connection used for the videocall. This is useful if the client has a poor internet connection or if you need to minimise the amount of data (and cost) associated with the videocall. The lower the number the poorer the picture quality will be. Numbers between 50 and 3000 are reasonable to specify here.

3.3.3 Delete a Client

To delete a client from the eHAB® system, click on the corresponding “Delete” button 5. When the delete button is clicked, a warning will be provided to ensure you intend to perform this action.

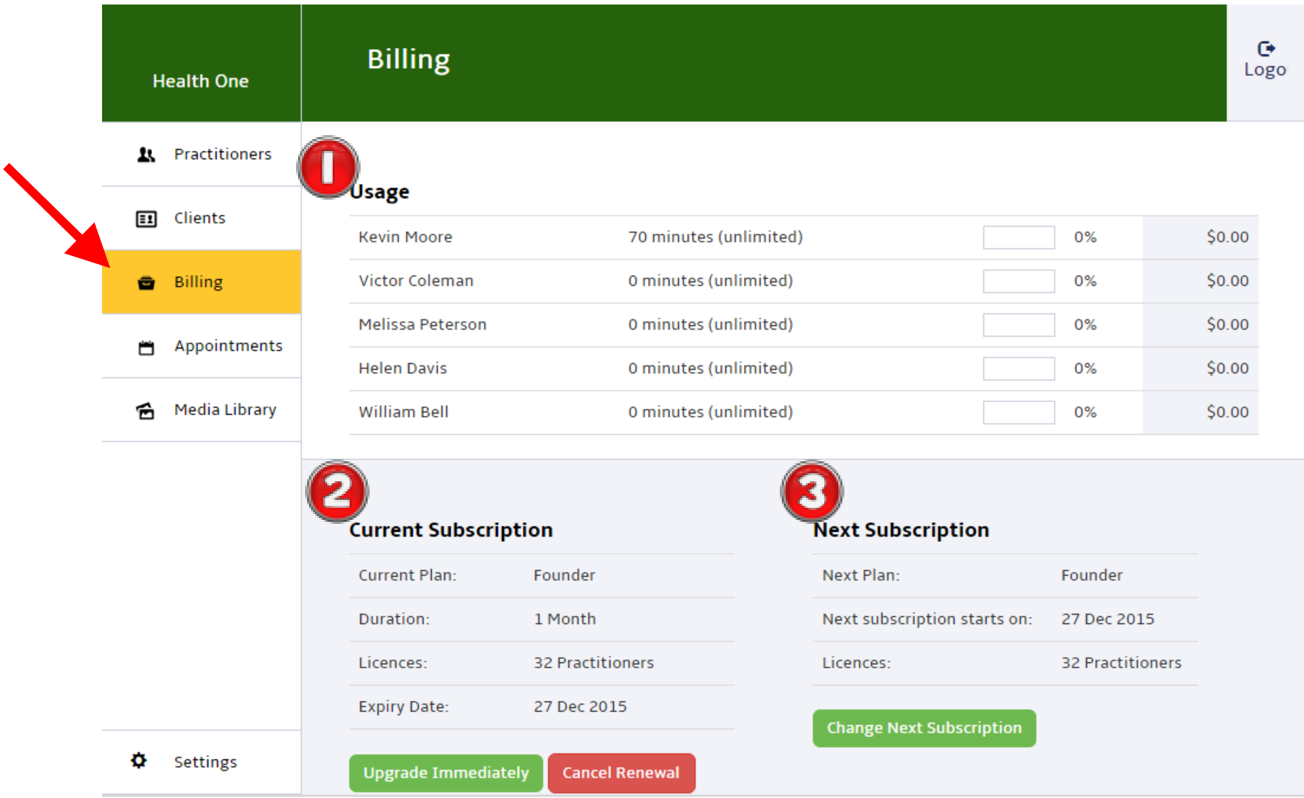
Note: If a client has been entered into the system and has received at least one eHAB® consultation, it is recommended that the client account is “Hidden” (See section 3.3.2) rather than deleted. This enables their account to be reactivated in the future.

3.4 Billing

Selecting the “Billing” menu item (arrow) on the left hand side of the screen with open the “Billing” page. The system usage for each of the registered practitioners will be listed at the top of the page 1. Information includes the amount of conferencing time used for the month, the percentage of their allocated time used for the month and any over usage fees.

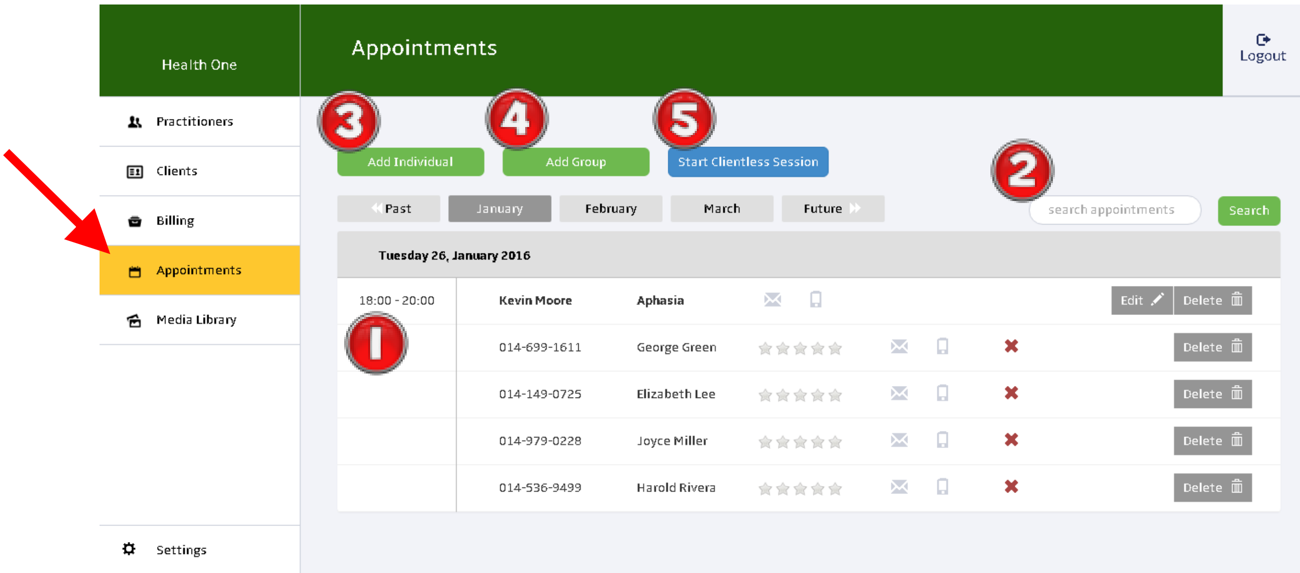
The current subscription (which is the subscription for the current month), is displayed at the bottom left of the page 2 and includes details of the current plan. The duration of the plan, the number of practitioner licenses included within the plan and the expiry date of the current plan. To upgrade the current plan part way through the month, click on the “Upgrade Immediately” button where you will be directed to select a new plan which will be applied for the month. To cancel the automatic renewal of your subscription at the expiry date, click on the “Cancel Renewal” button.

The subscription which will be applied at the end of the current subscription period is displayed in the bottom right of the screen ③. This includes details about the plan that will be applied, the date that the subscription will be applied and the number of licenses that will be applied. To change the details of the subscription that will be applied at the end of the current period, click on the “Change Next Subscription” button.

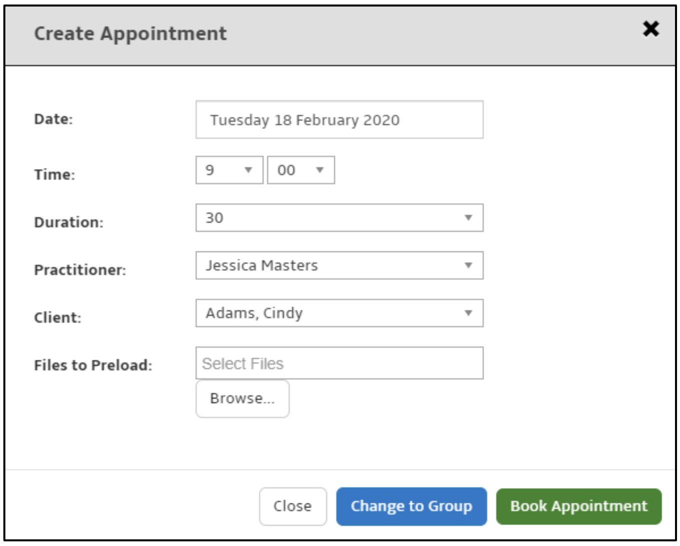


3.5 Appointments

Selecting the “Appointments” menu item (arrow) on the left hand side of the screen with open the “Appointments” page. The current appointments in the system are displayed according to month, day and time in the body of this form ①. To search for a specific appointment, type into the “Search Appointments” field and click on the “search” button.



3.5.1 Add Individual Appointments



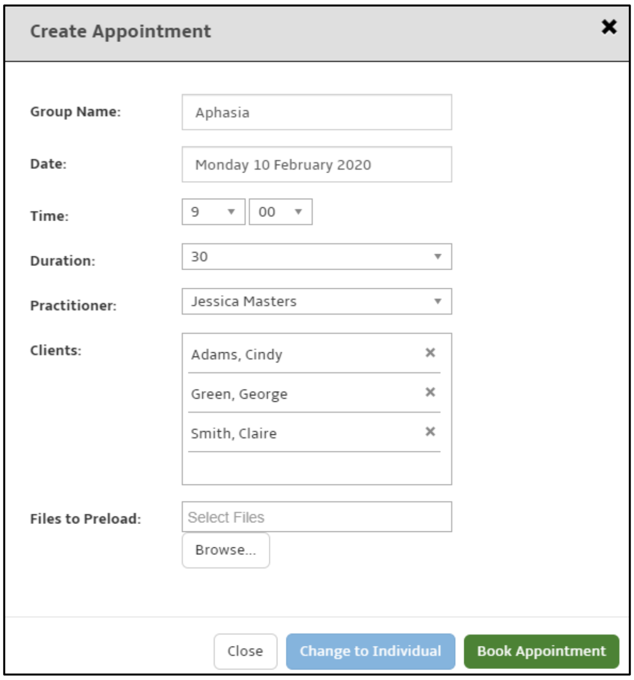
To add an appointment for an individual client (one-on-one session) click on the “Add Individual” button 3.

On the subsequent page, select a date, time and duration for the appointment. Also select the practitioner who will deliver the session and the client from the drop down lists.

If you have specific media files that you know you will use during the system, you can have these files pre-loaded to the client before the session begins. This will increase the responsiveness of the system during the call. To pre-load files click on the “Browse” button and add any files from the Media Store.

Once the appointment details have been entered, click on the “Book Appointment” button at the bottom of the window.

3.5.2 Add Group Appointment



To add an appointment for a group session (up to 6 clients) click on the "Add Group" button 4.

On the subsequent page, type a name for the group session and select a date, time and duration for the appointment. Also select the practitioner who will deliver the session and the client in the clients box to add multiple clients to the group.

If you have specific media files that you know you will use during the system, you can have these files pre-loaded to the client before the session begins. This will increase the responsiveness of the system during the call. To pre-load files click on the "Browse" button and add any files from the Media Store.

Once the appointment details have been entered, click on the "Book Appointment" button at the bottom of the window.

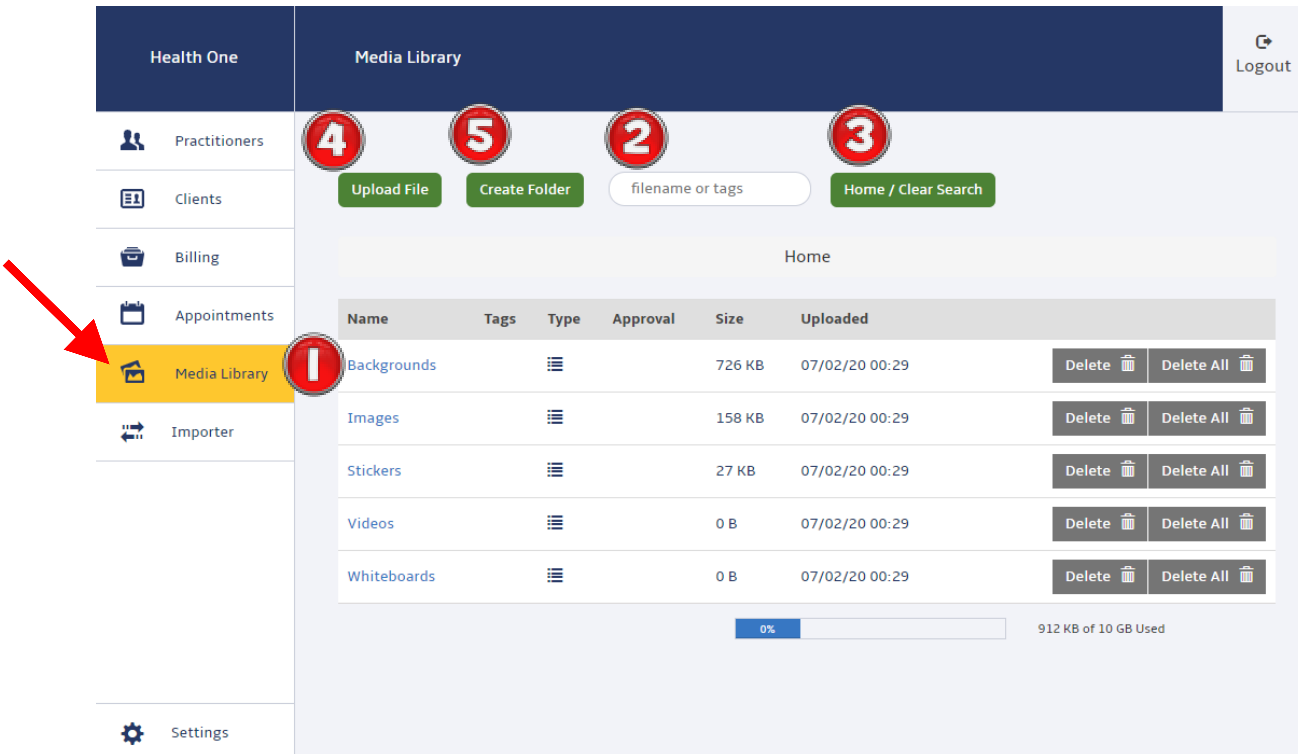
3.5.3 Clientless Session

Clientless sessions are used to access the measurement functions within eHAB, without having to perform an active videoconference with a client. Further details on using the measurement tools are available in section 4.18 Measurement Tools).

3.6 Media Library

The media library is a cloud based media store which allows you to upload your own media for use during clinical consultations. These media files can include images, video or audio clips which can be used as stimulus materials or educational materials during consultations. By uploading the media to the media library, it will enable you to access this content during any consultation, irrespective of which computer you are using at the time.

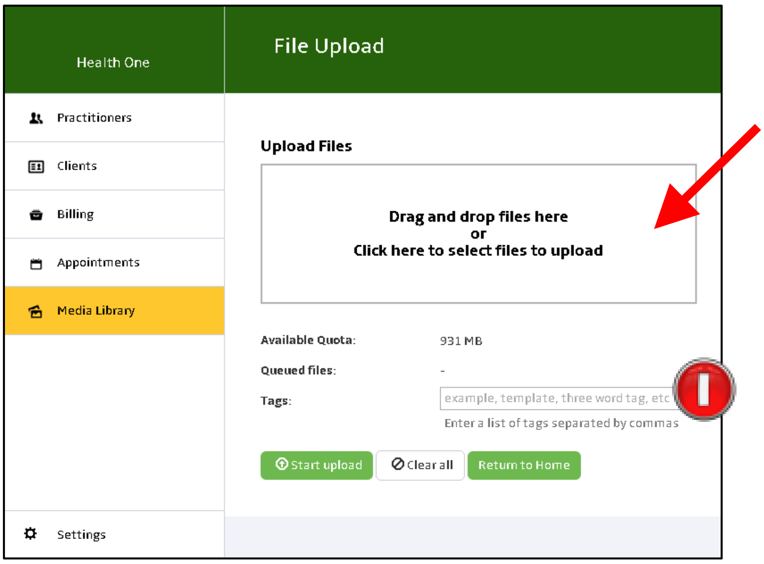
Selecting the "Media Library" menu item (arrow) on the left hand side of the screen with open the "Media Library" page. The media which has already been uploaded into the eHAB® system for your organisation will be displayed in the body of the page ①. To search for media in the system, type in the "Filename or tags" area ②. Your search can be cancelled by clicking on the "Home / Clear Search" button ③.



3.6.1 Upload Media

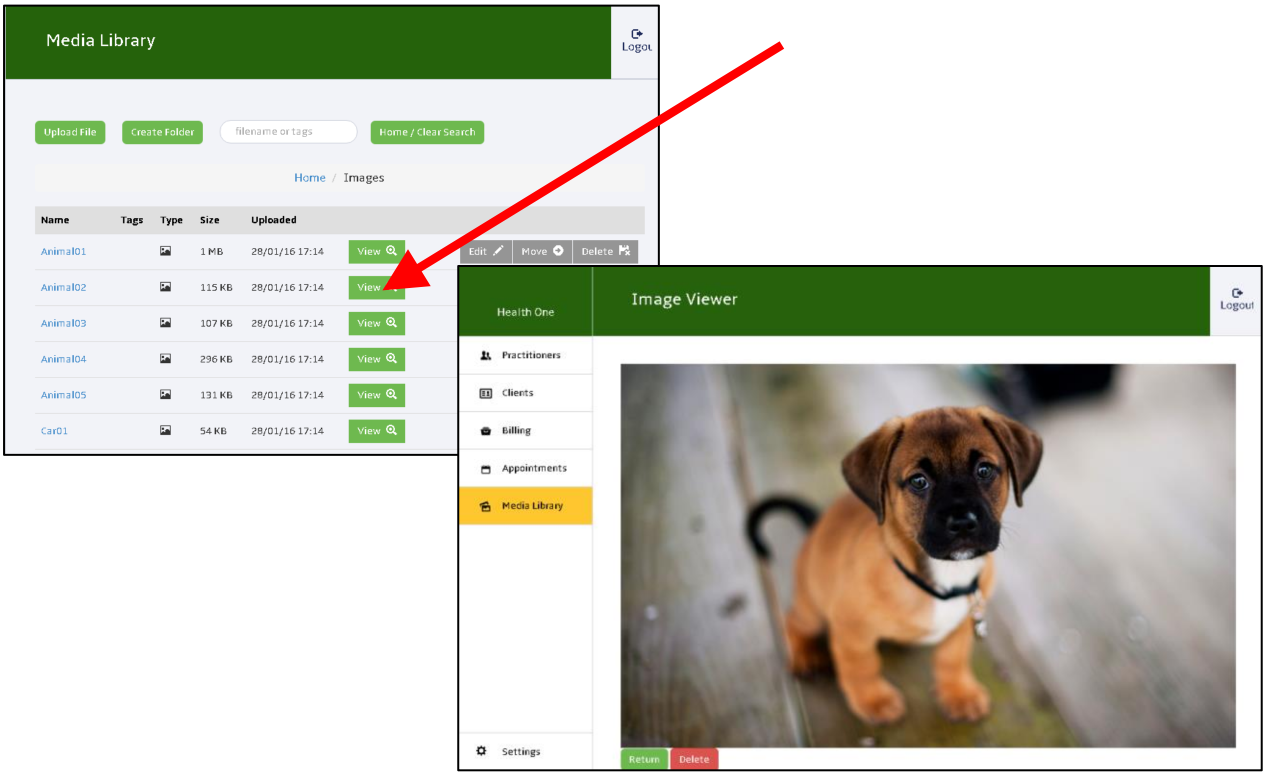
To upload a media file to the Media Library, first create a folder for these files by clicking on the 'Create Folder' button ⑤ and specify a folder name. You can navigate to the folder that you have created by clicking on the folder in the main body of the page ①. Once you are in the desired folder, click on the "Upload File" button at the top of the page ④.

To upload a file, drag and drop the file into the area at the top of the page (arrow) or click into this area to open your file explorer to select a file to upload. To add a tag to the file to facilitate the identification of this file at a later date, type a tag into the tags field ①. Repeat this process to add additional files to the media store. Once all files have been selected, click on the "Start Upload" button at the bottom of the form.

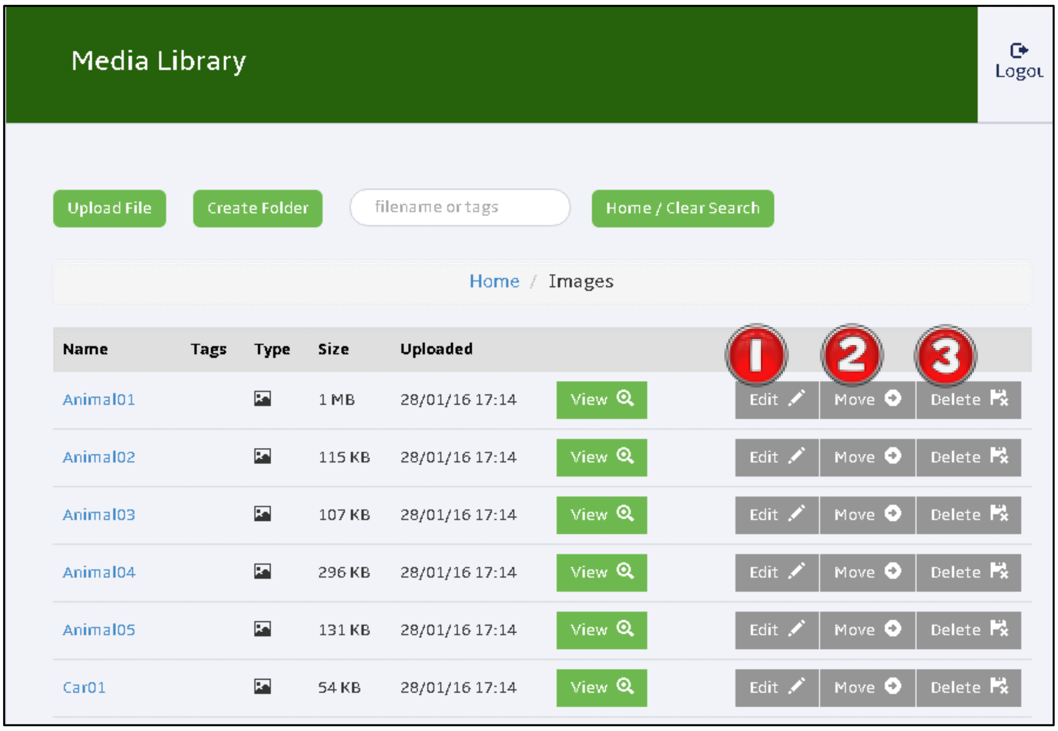


3.6.2 Review Media

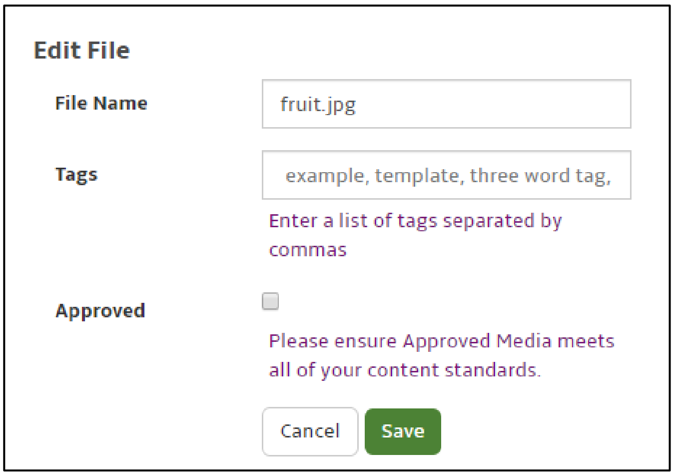
To view media that you have previously loaded into the eHAB® system, click on the corresponding "View" button in the media library window.



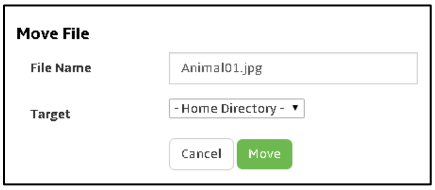
3.6.3 Edit, Move, Delete or Approve Media



To edit the file name or the tags of a media file click on the "Edit" button of the corresponding image ①. On the subsequent form, edit the filename field or the tags field and then select "Save".



If you are an Administrator, you will have the option to "Approve" the Media Library Content. This will flag to practitioners that the material conforms to all of your organisations content standards.



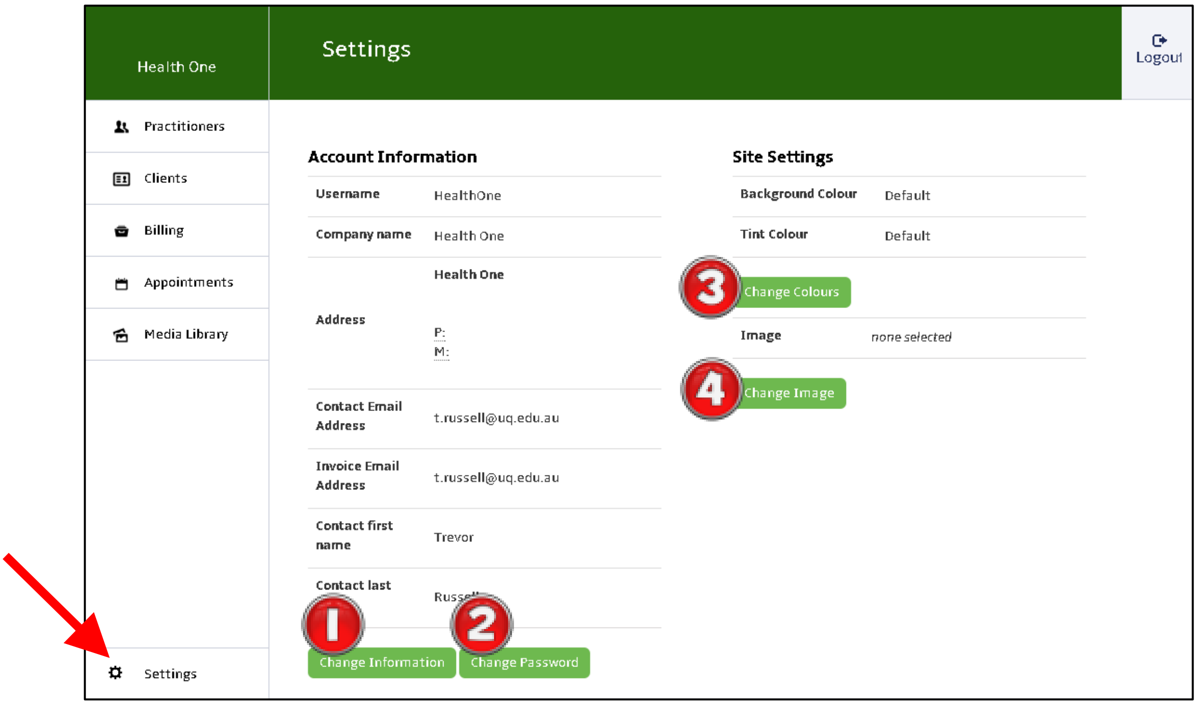
Files may be moved between folders in the eHAB® system by selecting the "Move" button of the corresponding file ②. Select the new location for the file using the drop down box labelled "Target" and click the "Move" button.

Delete unwanted files by clicking on the "Delete" button of the corresponding file ③.

3.7 Settings

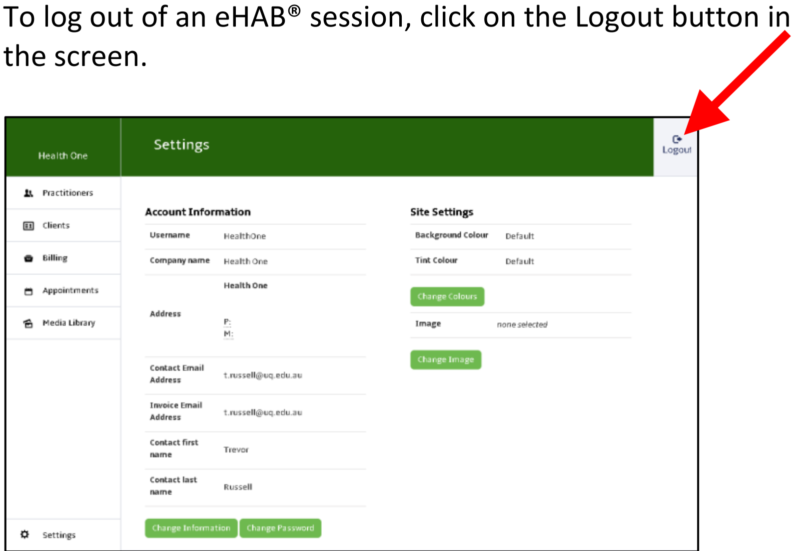
Selecting the “Settings” menu item (arrow) on the left hand side of the screen will open the “Settings” page. The account information including the username, company name and address and the user details can be edited by clicking on the “Change Information” button ①. The password of the healthcare provider account can be changed by clicking on the “Change Password” button ②.

The colours of the website and the image (or logo) or the site can be customised by clicking on the “Change Colours” ③ or “Change Image” ④ buttons on the right of the screen. The image must be presented as a 278 pixel by 278 pixel image file or smaller to be rendered on the screen.



3.8 Logging out

To log out of an eHAB® session, click on the Logout button in the top right hand corner of the screen.

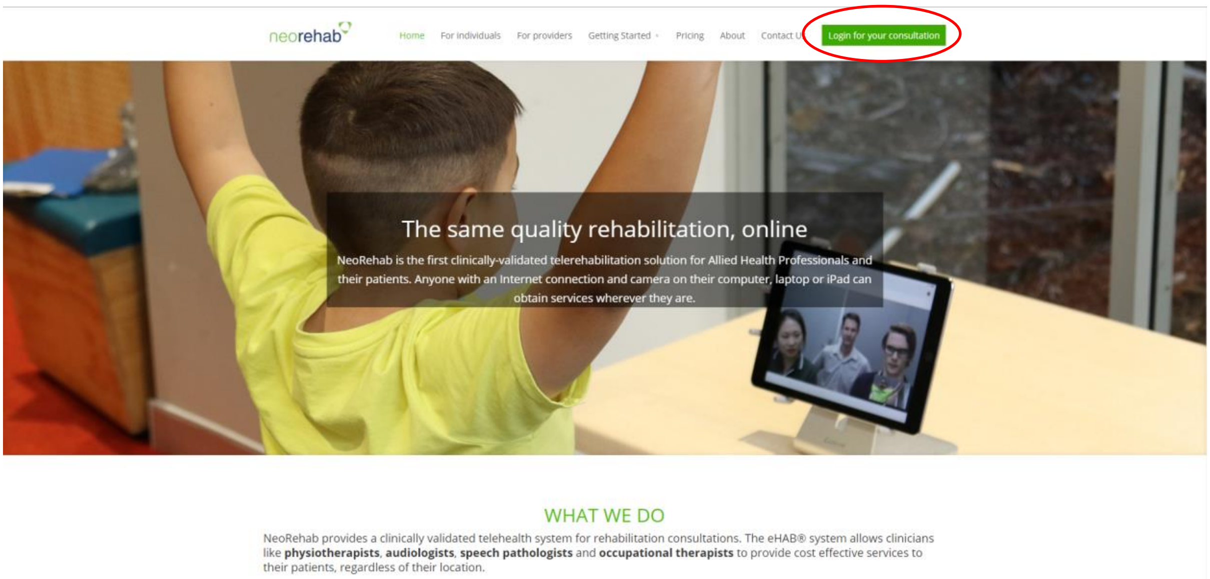


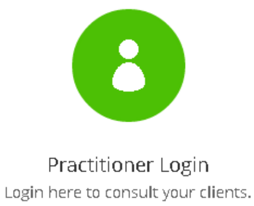
4. Practitioners

Practitioners access the eHAB® system through the NeoRehab website: www.NeoRehab.com

NOTE: Due to the real-time video component of the eHAB® system, practitioners MUST use the Google Chrome, Firefox or Safari browsers.

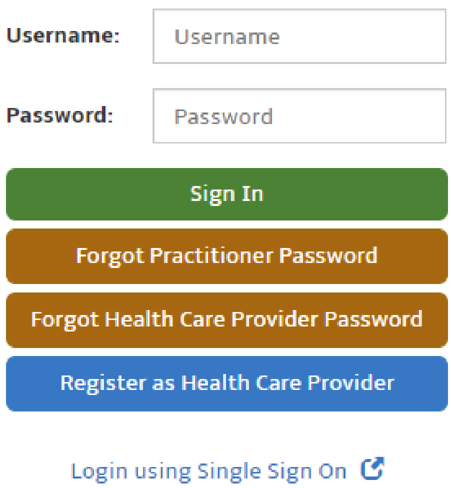
Click on the “Login for your consultation” link in the top right corner of the screen.





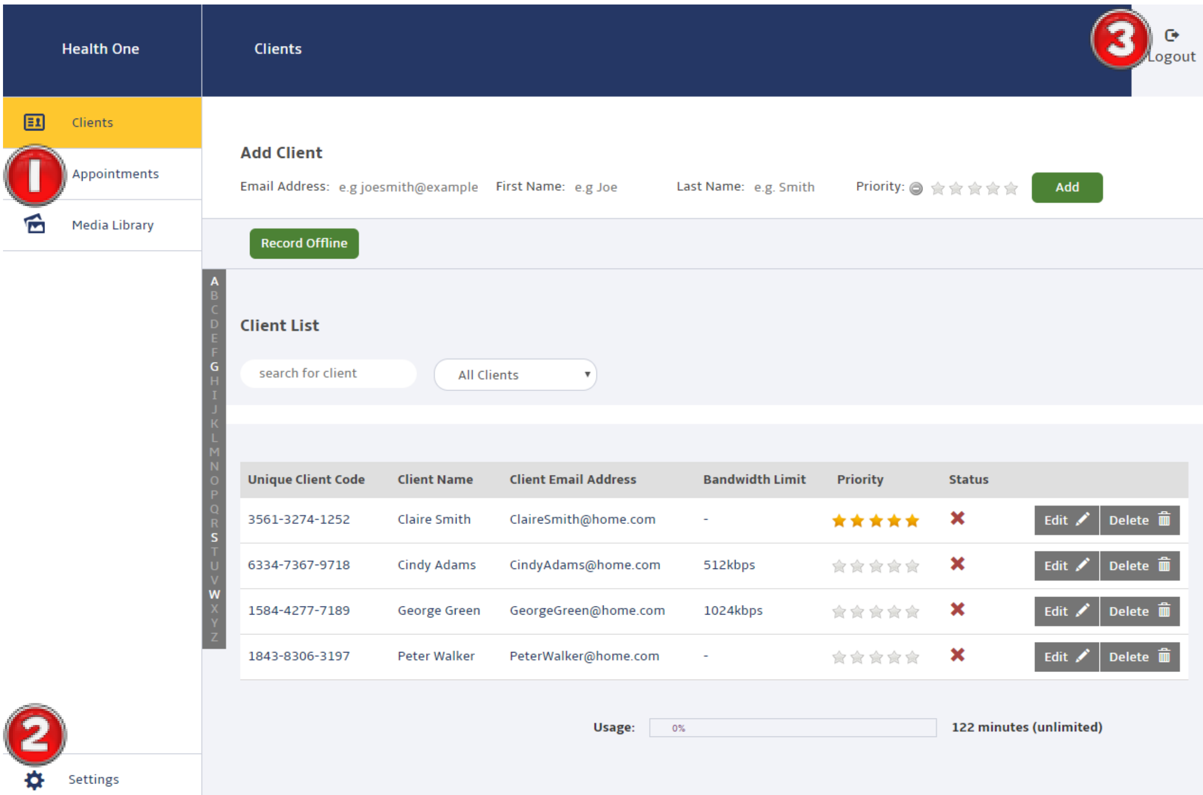
When you sign up for a NeoRehab account, you will receive a username and password. Select “Practitioner Login” from the available options and enter the supplied username and password to get started.

If your organisation has entered into an agreement with NeoRehab you can use your organisations username and password to log into the system by selecting “Login using Single Sign On”



4.1 Dashboard

Once you have logged in you will be redirected to the dashboard page. This page consists of a menu tab down the left hand side of the screen to provide access to various pages within the provider site 1, a ‘Settings’ button which enables you to configure the eHAB® system for your organisation 2 and a logout button to exit the system 3. By default, the ‘Clients’ page will be displayed at login.



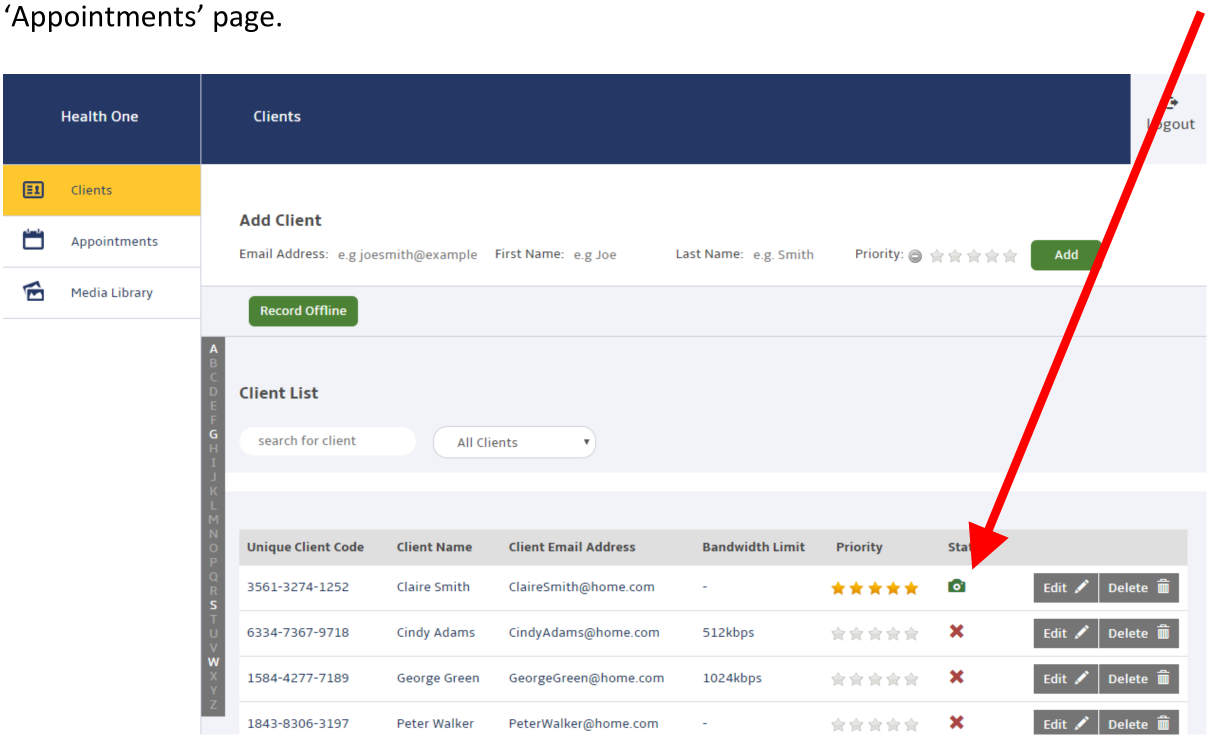
4.2 Clients, Appointments and Media Library

The management of clients, appointments and the media library is the same as that described in the Healthcare Providers section of this manual. Please see the relevant components of Section 3 of this guide for further information on these functions.

4.3 Placing a Call

4.3.1 Place a call to an Individual

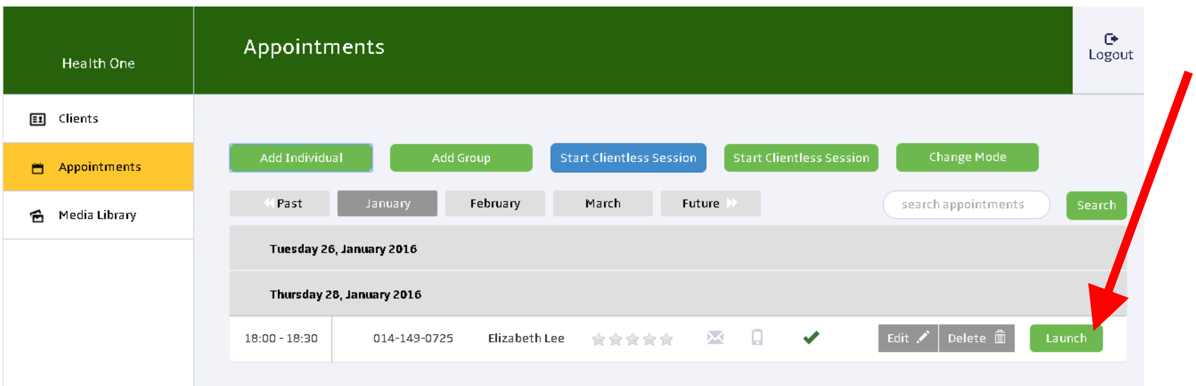
A call can be placed to an individual either from the 'Clients' page or from the 'Appointments' page.



On the 'Clients' page, ad hoc calls can be placed to an individual user, where an appointment has not been previously organised. The status column (arrow) on this page indicates users that are currently logged in and available for a call (camera symbol) or those who are currently offline and are therefore unavailable for a call (cross)

To place a call to a client who is currently logged in and available for a call, click on the green camera symbol to launch the call.

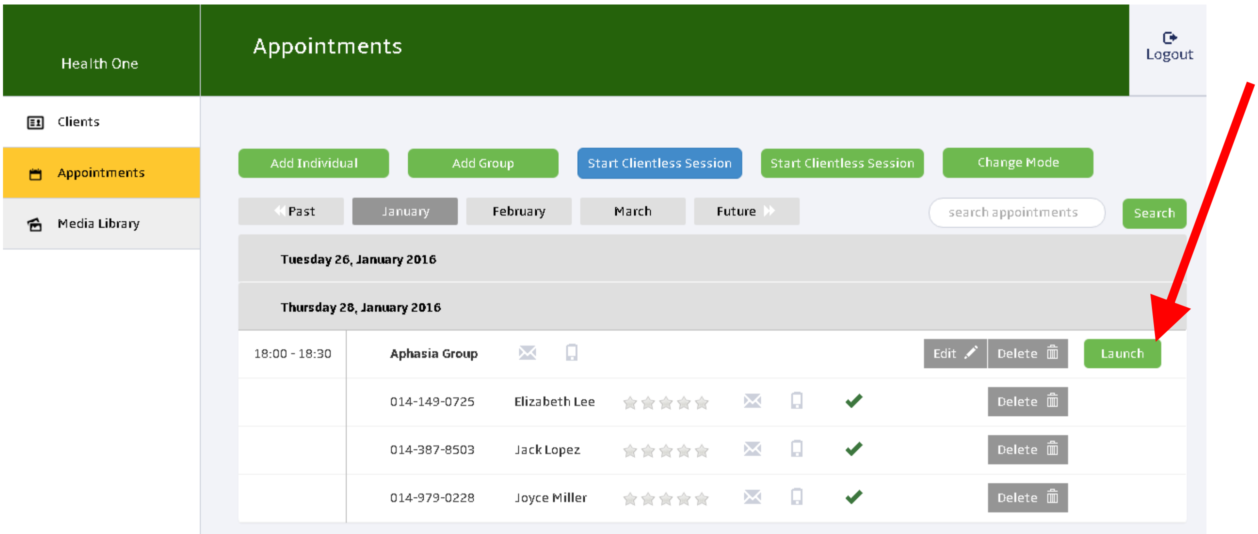
To launch an individual call from the "Appointments" page, click on the "Launch" button adjacent to the desired appointment (arrow). If an appointment has been booked with a client, this is the preferred method to connect a call.



4.3.1 Place a call to a Group

Group calls can only be launched from the "Appointments" page. On the "Appointment" page navigate to the desired appointment. The availability status of each attendee is indicated in the in the body of the appointment, however the group session can be launched regardless of the participant's status, i.e. the group session can be launched even if all members are not yet available for the call.

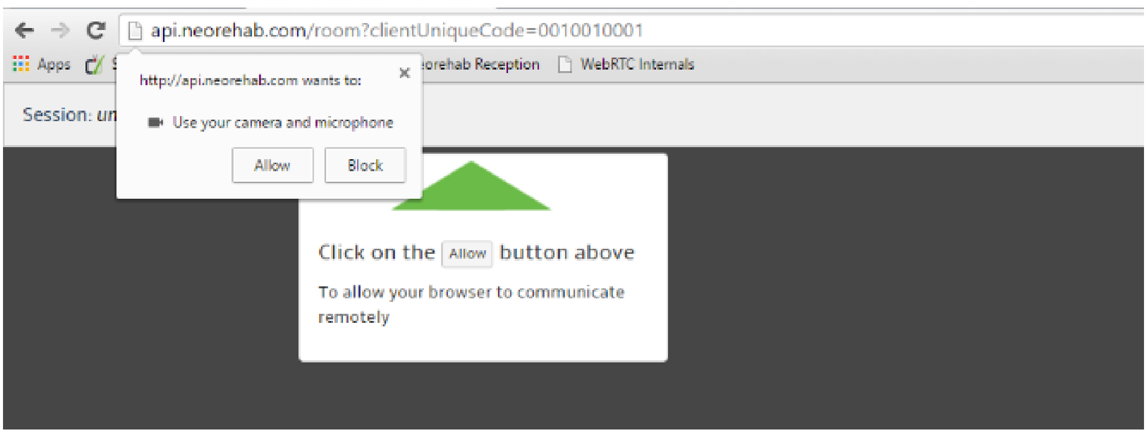
Launch the call by clicking on the 'Launch' button (arrow) associated with the appointment.



4.4 Placing a Call for the First Time

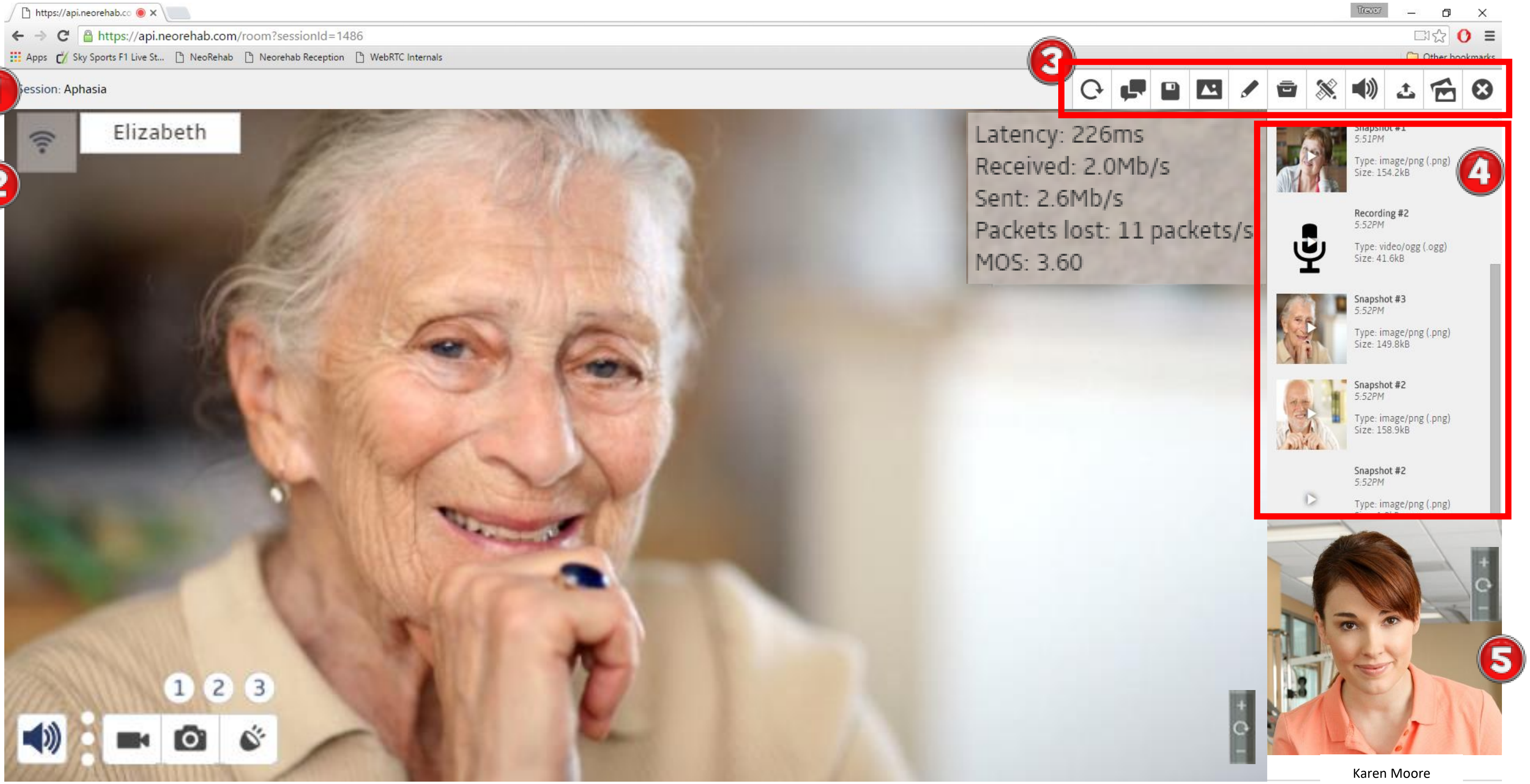
When a call is placed, the clinician will be redirected to the conference window.

NOTE: The first time a call is placed on a computer, the clinician will be required to give permission for the web browser to access the camera and microphone on the system. When this is required, a notification will be displayed on the screen and a dialogue box will request access to both the camera and microphone. Click on the 'Allow' button on this notification.



4.5 The Videoconference Window

The videoconference window consists of the following components: The session name ①, a videoconference window for the client ②, the Conference Function menu ③, the Session Files window ④ and the local video window ⑤.



4.5.1 The Session Name

The session name corresponds to the name given to the group at the time of creation of the appointment. For individual or ad hoc calls, a random number is generated at the start of a call to identify the session.

4.5.2 The Client Window

A videoconference window is displayed for each client in the videoconference. This window includes the videoconference image, a controls panel and an information panel which presents information related to the link with the individual client.

The client broadcast button ① is a control which toggles if the client is visible to other users in a group videoconference. See the section on Group Calls for more information on this function. The client's given name is displayed in the top left corner of the screen ②.

The Client Toolbox menu is displayed in the bottom left hand corner of the window ③. From left to right, this menu provides the clinician with functions to mute the microphone of the client, perform high quality (remote end) recordings of the client (4.7 Capture a Video Recording), perform lower quality (local end) recordings of the client (4.7 Capture a Video Recording), obtain still images of the client (4.9 Capture an Image), perform high quality (remote end) and lower quality (local end) audio recordings of the client (4.11 Capture an Audio Recording) and change the camera which is active on the clients device (4.13 Change the Active Camera). More information on these individual functions in the relevant section of this manual.

The Client Network Status Window is positioned in the top right hand corner of the Client Videoconferencing Window 4. This window provides information on the status of the network connection between the clinician and the client.

Latency: The latency of the connection is the delay between when the information is sent by one end of the conference and when it is received at the other end of the conference. A higher latency (greater than 500 milliseconds) can make communication with the client difficult.

Received/Sent: These numbers refer to the speed (or bandwidth) of the connection between the clinician and the client. The higher this number, the more information that is transmitted between parties and therefore the higher the quality of the video and audio on the conference. Typically, speeds of over 120 kb/s are required for a successful conference.

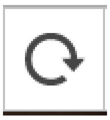
Packet Loss: The number of network packets that are lost over the Internet during transmission directly effects the quality of the conference. The higher the packet loss of the connection, the worse the videoconference experience will be.

MOS: The MOS is an abbreviation for the 'Mean Opinion Score' which is a score out of 5 related to the overall quality of the videoconference connection. Typically, a MOS score of greater than 3 is desired for a successful videoconference experience.

A zoom control in the bottom right corner of the screen 5 allows the therapist to zoom in and out of the live videocall image. Clicking and dragging on the main widow gives the ability to pan the live videocall image.

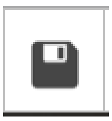
4.5.3 Conference Function Menu

The conference Function Menu provides the clinician with a number of features and functions which can be used during a videoconference.



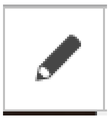
The Conference Reload button is used to refresh the connection with all clients in the call in the event that the connection is inadvertently disconnected. If any client is disconnected unexpectedly during a call, press this button to re-establish the connection with all clients.

The chat button can be used to open a chat window to all clients. Text that is typed into the chat window will appear to all clients in a conference. See 4.15 Text Chat for more details.



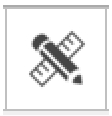
The save button can be used to save all of the media (Images, Video, Audio) collected during a videoconference. See 4.21 Save Files for more details.

This button provides access to the media which has been uploaded to the online Media Library as described in section 3.6. More details on the use of this function is provided in section 4.16 The Media Library.



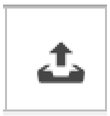
This button displays the white board screen where text and drawing can be displayed to clients. More information on this function is provided in section 4.17 The White Board.

This button will display a list of files which are part of the current session which can be sent and displayed on the client's end of the call. More information on this function is provided in section 4.20 Send Local Files During a Videoconference



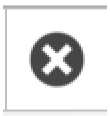
Measurements are an important part of the eHAB® system. Clicking on this button will show a list of measurement tools which can be used to perform measurements on the live videoconference window or on captured media during the session. More information on this function is provided in section 4.18 Measurement Tools

This button will mute / unmute the microphone on the clinician's end of the videoconference.



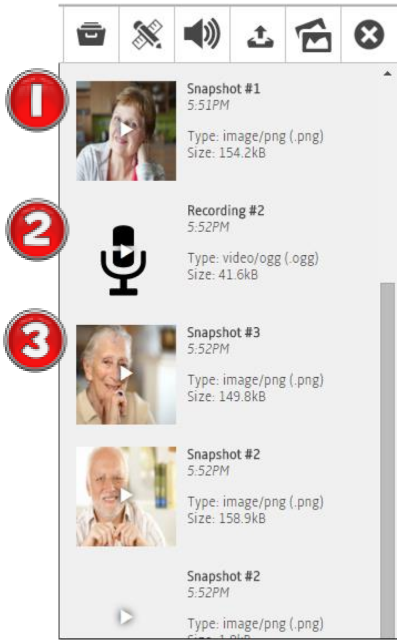
This button can be used to add files from your local computer into the session. Once files have been added to the session you can perform measurements on them or share them with clients in the conference. More information on this function is provided in section 4.19 Load a file into the Session.

This button can be used to load in a previously saved session on your computer. Loading in a session will display all of the media files associated with the previous session into the Session Files window. More information on this function is provided in section 4.23 Load Files from a Previous Session.



This button will terminate the current call.

4.5.4 Session Files Window



The Session Files window displays all of the media that is collected during your videoconference session. It will display captured images ①, audio ② and videos ③ along with any local content that you load into the session. To view these files simply click on them and the relevant player will be loaded to display the content. The playback of these files will only be visible to the practitioner.

4.5.5 Local Video Window

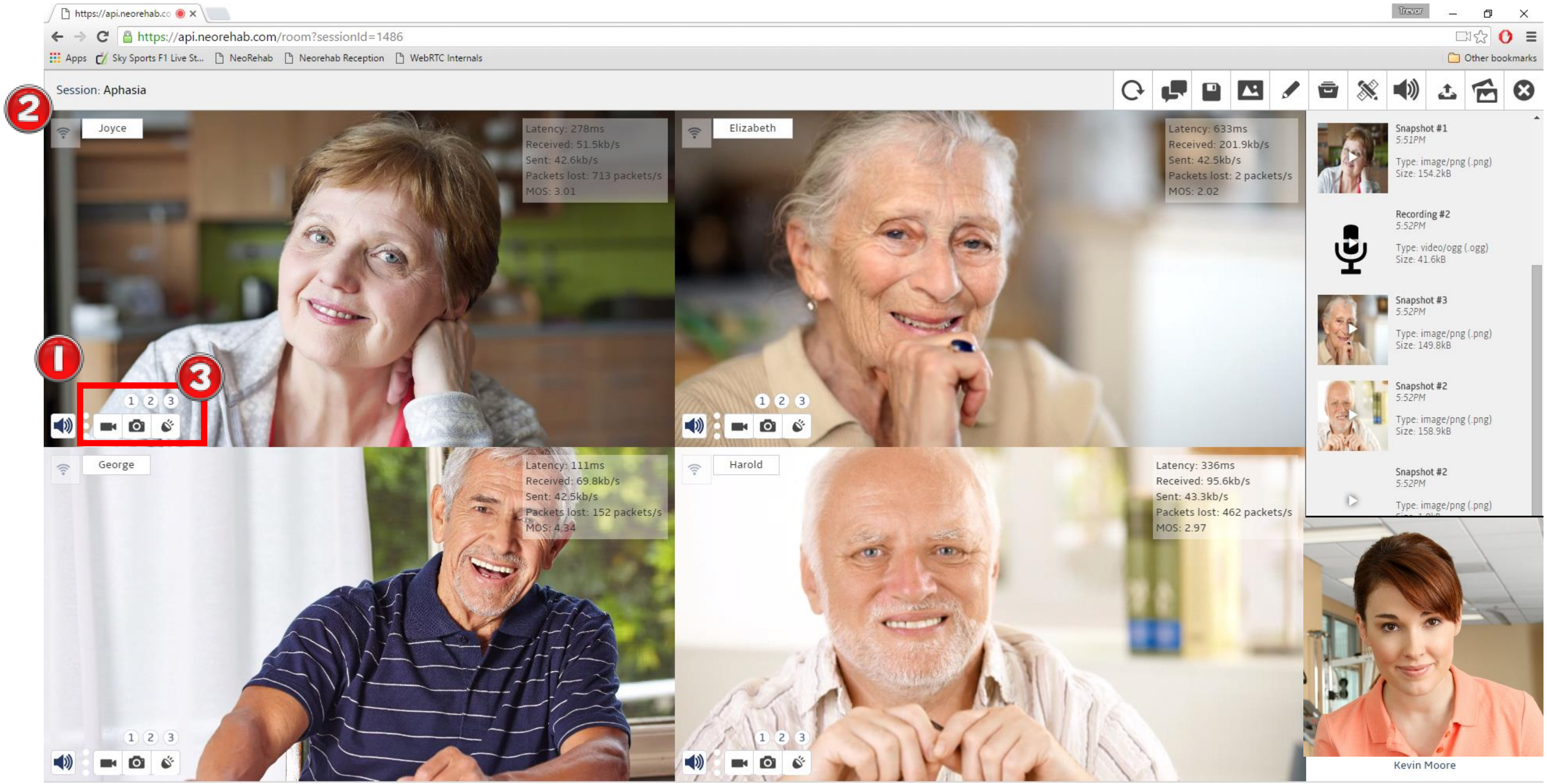
The local video window displays a live video image of the practitioner. This image reflects what is displayed at the client end of the videoconference and can be used to ensure the client has a clear view during the conference. Zoom controls in the top right corner of the window gives the ability to zoom the camera in and out and clicking and dragging the image of the practitioner can be used to pan to image.

Karen Moore

4.6 Group Calls

To place a group call, follow the procedure outlined in 4.3.1 Place a call to a Group. The group call window is similar to the videoconference window for an individual, with a few small differences as outlined below.

In a group call, a videoconference window is presented for each client in the call. Of note is that each window has a Client Toolbox Window ① to enable access to these function for each client independently. For example, a videorecording, an image or an audio recording can be produced for any individual at any time during a call using these functions. Relevant to a group call, are the video broadcast buttons ② and the breakout room buttons ③. These functions are described below.

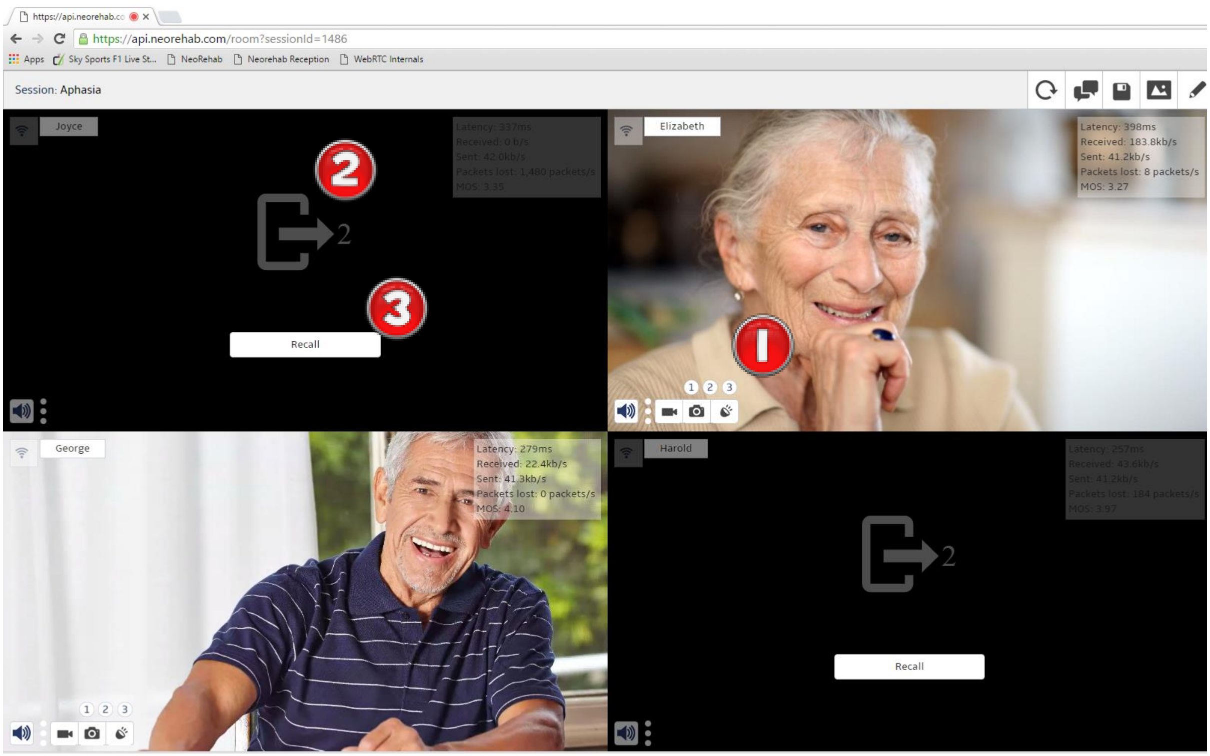


4.6.1 Video Broadcast Button

The video broadcast button is used to select if this client is visible to the other clients that are participating in the group videoconference call. If the video broadcast button is enabled, ALL participants in the videoconference will be able to see this client. If the video broadcast button is disabled, only the practitioner will be able to view the client. This functionality enables the practitioner to decide which clients are visible to other clients in the videoconference. By default, all video broadcast buttons are disabled, so that clients are only able to see the practitioner unless a video broadcast button is enabled.

4.6.2 Breakout Room Buttons

The eHAB® system has three breakout rooms that can be used during group calls. Breakout rooms are separate virtual rooms that clients can be sent to during a group call. While in a breakout room, clients will only be able to interact with other clients in the same breakout room. To place a client in a breakout room, simply click on the desired room number within the client's toolbox ①. When in a breakout room, the client will no longer be visible in the main videoconference, and their video will be replaced with an icon which represents which breakout room they are in ②. In the example below, Joyce and Harold are in breakout room 2. To return the client to the main videoconference, simple click on the 'Recall' button ③ and the client will exit the breakout room and will be visible again in the main videoconference.



4.7 Capture a Video Recording

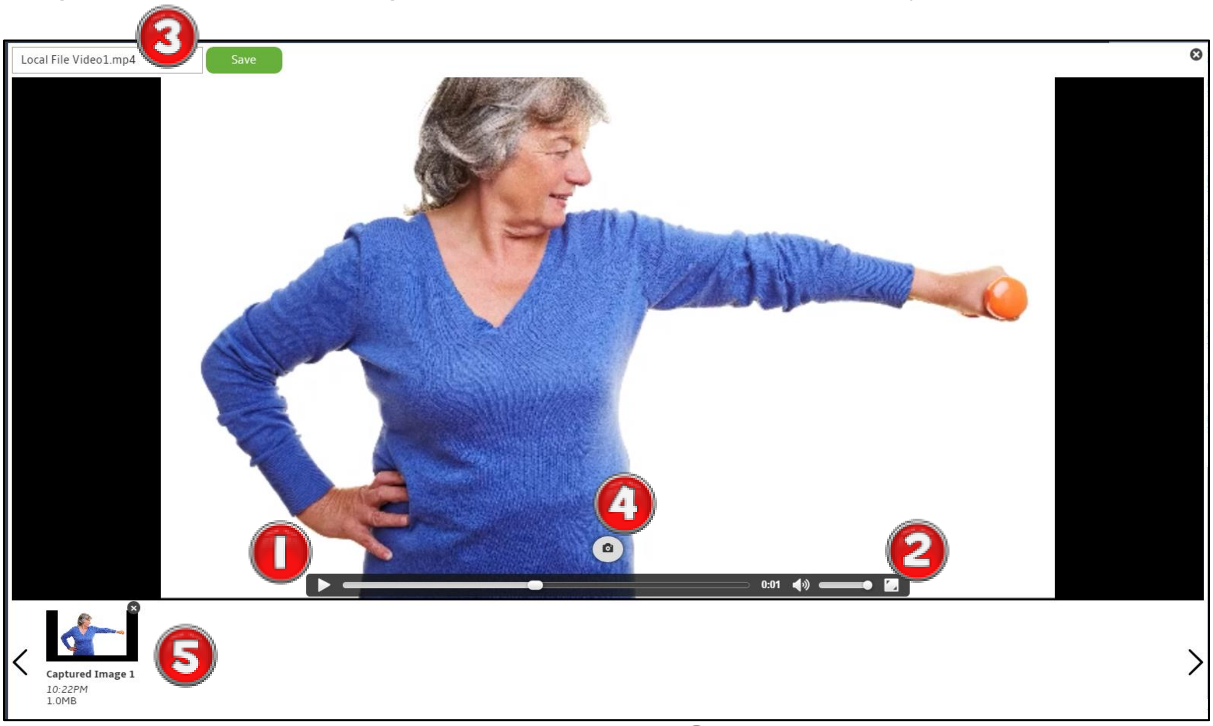
eHAB® uses a 'Beyond Bandwidth' recording system to capture high quality media from the videoconference session ①. When activated, this feature captures video content **on the client's** end of the consultation, packages the file up and sends it back to the practitioner.

This feature produces a videorecording of known quality regardless of the quality of the network connection between the two end points of the conference. To capture a video of the client, first roll out the Client Toolbox Menu by clicking on the option menu in the bottom left corner of the screen ①. To begin the videorecording, click on the image of the video camera in the roll out menu ②. When the recording is underway, the icon will change to a red 'Stop' button. Click on this button to end the videorecording. Note: The videorecording is performed at the client's end of the consultation and then sent to the practitioner. When using an iPad at the client end, the videorecording is encoded as the recording happens and the file transfer will begin immediately after the videorecording is stopped. If using a browser at the client's end of the consultation, encoding happens once the recording is finished. This means there will be a delay between ending the recording and when the file transfer begins. The videorecording will appear in the Session Files window (See 4.5).

eHAB® also has the ability to record video of the client at the local (practitioners) end of the consultation. This recording of the video is taken *after* it has been transmitted over the internet so the quality of this recording will not be as high as the 'Beyond Bandwidth' recording function. Use this function if you wish to record a prolonged amount of video of the client.

4.8 Playing a Captured Video

Videorecordings captured during a call will appear in the Session Files window. To play the video simply click on it and the video playback window will appear. Please note, video playback occurs only at the practitioner's end of the consultation when using this playback method. To play the video, click on the 'Play' item on the video menu ①. You can seek to any point in the video by clicking on the video timeline scrubber and dragging it to the left or right. The controls to the right of the video menu can be used to adjust the volume of



playback or to enter into full screen playback mode ②. The name of the video file can be modified by editing the textbox in the top left hand corner of the screen and then clicking on the 'Save' button③. To extract a still image from the video, click on the camera icon just above the video timeline scrubber ④. Images that you have extracted from the video will appear in the thumbnail viewer at the bottom of the window ⑤.

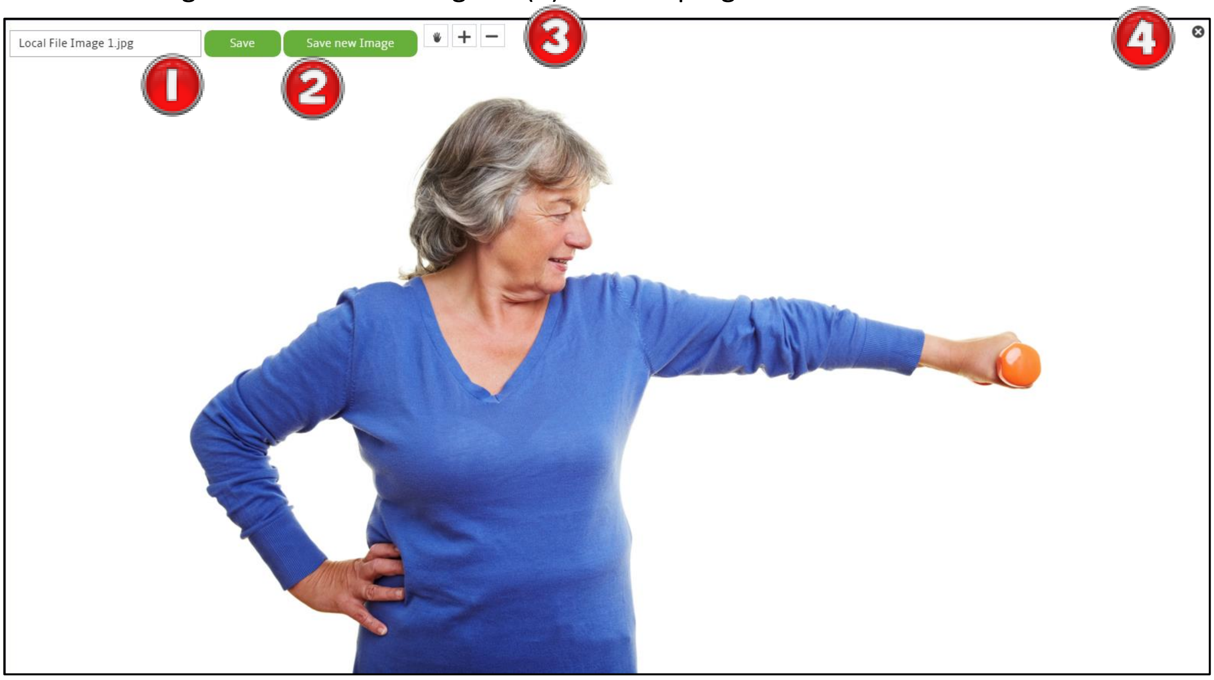
4.9 Capture an Image

eHAB® uses a 'Beyond Bandwidth' recording system to capture high quality media from the videoconference session. When activated, this feature captures video content **on the client's** end of the consultation, packages the file up and sends it back to the practitioner. This feature produces an image of known quality regardless of the quality of the network connection between the two end points of the conference. To capture an image of the

client, first roll out the Client Toolbox Menu by clicking on the option menu in the bottom left corner of the screen ①. To capture an image, click on the image of the camera in the roll out menu ②. The image will appear in the Session Files window (See 4.5)

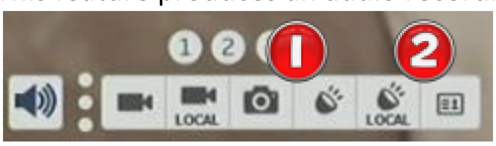
4.10 Viewing a Captured Image

Images captured during a call will appear in the Session Files window. To view the image simply click on it and the image viewer window will appear. Please note, the image is only viewable at the practitioner's end of the consultation when using this playback method. The name of the image can be modified by editing the textbox in the top left hand corner of the screen and then clicking on the 'Save' button ①. To save a new copy of the image click on the 'Save New Image' button ②. This function will save the image, **and any other markings such as measurements that have been performed over the top of the image**. This is an important feature for capturing how a measurement was performed.
The 'Hand' tool can be used to move the position of the image in the image viewer window and the zoom in (+) and out (-) control can be used to zoom in and out of the image ③. Close the image view window using the (X) in the top right corner.



4.11 Capture an Audio Recording

eHAB® uses a 'Beyond Bandwidth' recording system to capture high quality media from the videoconference session. When activated, this feature captures audio content **on the client's** end of the consultation, packages the file up and sends it back to the practitioner. This feature produces an audio recording of known quality regardless of the quality of the network connection between the two end points of the conference. To capture an audio sample of the client, first roll out the Client Toolbox Menu by clicking on the option menu in the bottom left corner of the screen. To begin the recording, click on the image of the speaker in the roll out menu ①. When the recording is underway, the icon will change to a red 'Stop' button. Click on this button to end the audio recording. The audio file will appear in the Session Files window (See 4.5)



eHAB® also has the ability to record audio of the client at the local (practitioners) end of the consultation ②. This recording of the audio is taken *after* it has been transmitted over the internet so the quality of this recording will not be as high as the 'Beyond Bandwidth' recording function. Use this function if you wish to record a prolonged amount of audio of the client.

4.12 Listening to a Captured Audio Clip

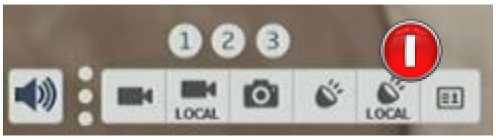
Audio captured during a call will appear in the Session Files window. To listen to the audio recording, simply click on it and the audio playback window will appear. Please note, the audio is only audible to the practitioner. The name of the audio clip can be modified by editing the textbox in the top left hand corner of the screen and then clicking on the 'Save' button ①. To play the audio sample, click on the 'Play' icon ②. You can seek to any point in the audio clip by clicking on the audio timeline scrubber and dragging it to the left or right ③. The adjust the volume of the audio use the slider control on the right hand side of the window ④.

4.13 Change the Active Camera

If the client is using an iPad, the active camera (front or rear facing) can be selected by the practitioner. To change the active camera, first roll out the Client Toolbox Menu by clicking

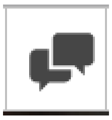
on the option menu in the bottom left corner of the screen ①. To change the active camera, click on the right most icon in the Client Toolbox Menu ②.

4.14 Launch a client screen share



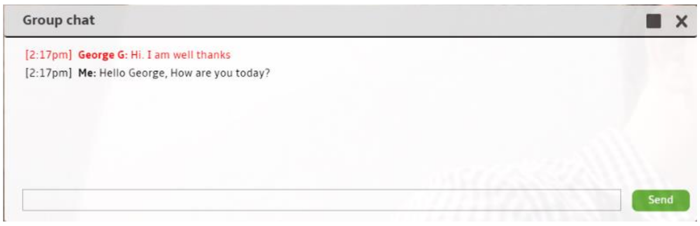
If the client is using a browser, the "Request screen share" button will appear. Clicking this button ① will send a message to the client asking them to share their screen. If the client accepts, you will be able to see their screen as they interact with this. This allows the practitioner to direct the client to use other apps and websites while being monitored by the practitioner. It is also useful for troubleshoot issues that arise during a session.

4.15 Text Chat

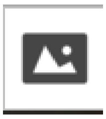


To send a written text message to a client click on the ‘Text Chat’ button in the Conference Function Menu.

This will open a window in which you can type text messages to your client. Messages will appear on the screen of ALL clients that are part of the videoconference session. The practitioner controls the showing / hiding of the text chat window on the client’s end point i.e. when the widow is visible on the practitioner end, it will show on the client’s end and vice versa. To send a message, simple type the message in the box at the bottom of the window and click the send button. To close the chat window, click on the (X) in the top right corner of the chat window.

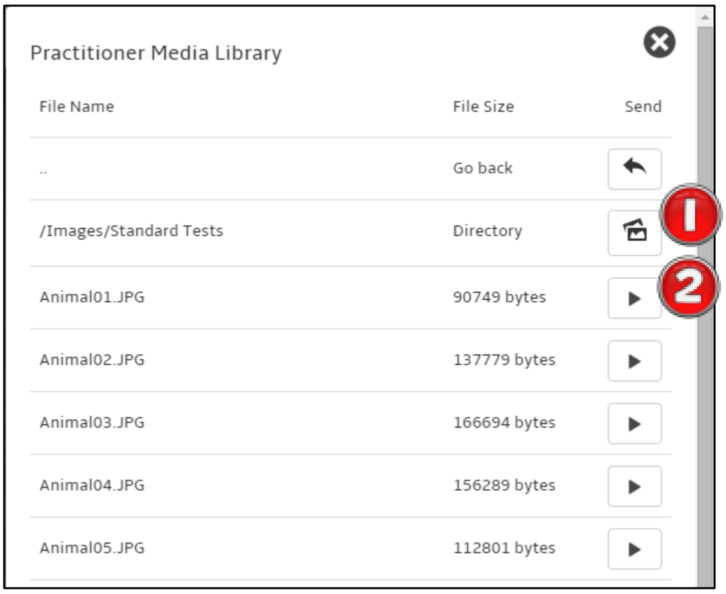


4.16 The Media Library

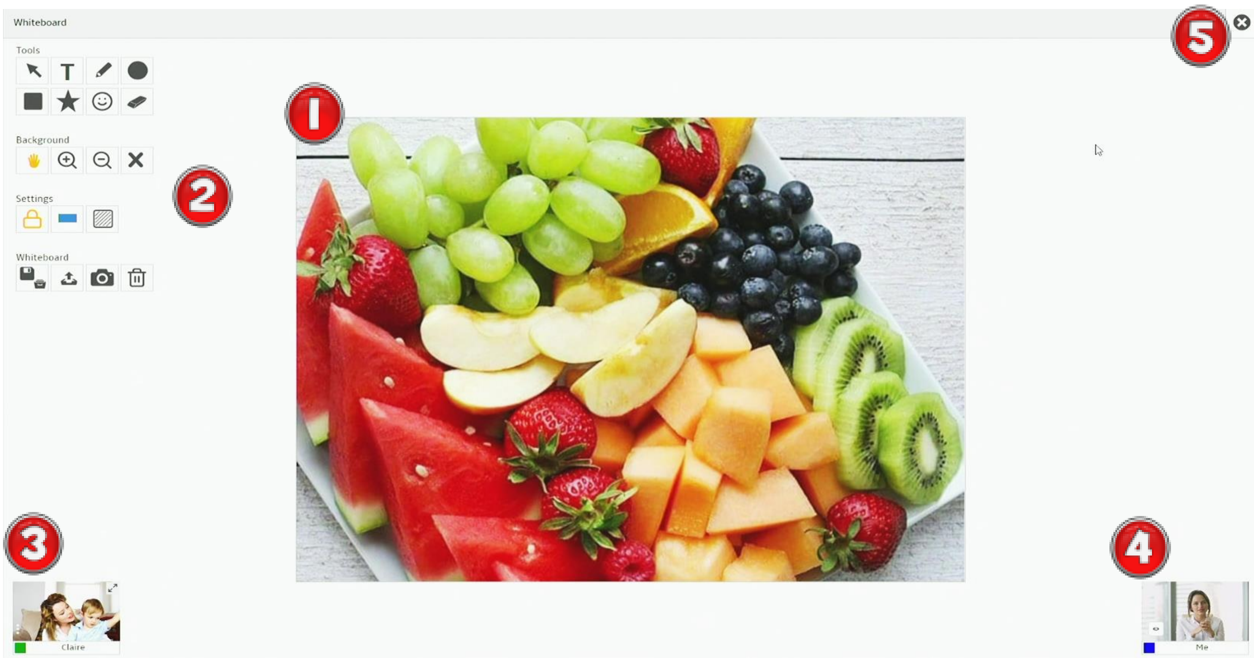


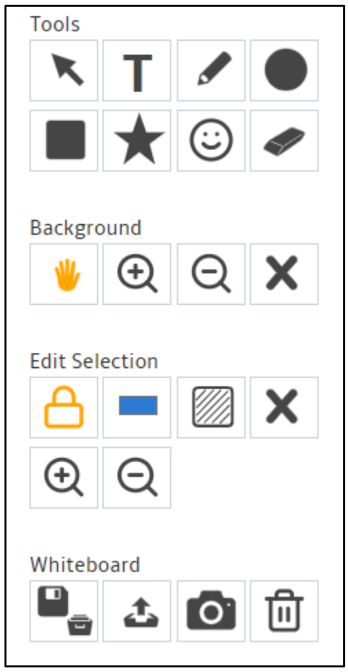
3.6 Media Library details the process for uploading files into the cloud based Media Library. To access these files and display them to your client during a videoconference, first click on the Media Library button in the Conference Function Menu.

The resulting window will provide a list of content that is available in the media library window. This list may contain both folders and files. Folders will be identified with an image icon and you may enter a folder by clicking on the icon 1. Files will have a ‘Play’ icon 2 and you can show this file to the client by clicking on the icon.



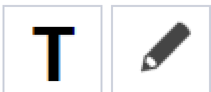
Once the file is selected, the White Board screen will appear on both ends of the consultation and the selected media will appear. This screen has 5 main elements including the displayed image ①, a toolbox ②, the remote client window ③, the local video window ④and a button to close the view ⑤.



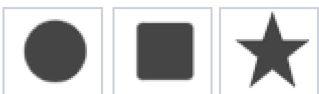


The toolbox on the White Board screen, provides the practitioner with a number of tools.

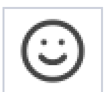
The 'Pointer' control enables the practitioner to select and move elements (images and stickers) around the screen.



The 'Text' and 'Pencil' buttons will allow the practitioner to write text or draw over the top of the image. These are then replicated on the client's end such that the client sees what the practitioner sees. These can be used as powerful education tools to draw attention to certain parts of the image during the consultation.



The shape icons allows the practitioner to draw various shapes over the top of the whiteboard image. These are synchronised onto the clients end such that the client sees what the practitioner sees.

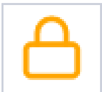


The 'Sticker' icon allows the practitioner to place stickers onto the whiteboard. Stickers will be place in a layer above the background image and can be moved by the practitioner and by the client to create interactive therapy opportunities.

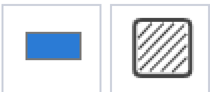
The ‘Eraser’ tool can be used to erase a single word or drawing. To delete a single item, first click on the erase tool and then hover the mouse over the item to delete. When the item is highlighted click the mouse a second time and the item will be deleted.

The tools labelled background can be used to manipulate the background image on the whiteboard. From left to right, the select tools allows the used to ‘grab’ and move the background image on the whiteboard; the zoom in and out buttons allow the user to increase or decrease the size of the background image and the ‘Remove Background’ button will delete the background image.

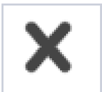
The controls in the ‘Edit Selection’ section can be used to manipulate **shapes** and **stickers** that have been placed on the whiteboard.



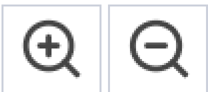
Select a shape or sticker on the whiteboard. If a closed lock symbol appears, this element is locked and cannot be moved by the client at the remote end of the consultation. If you wish the client to be able to move the element, click on the lock and an open lock symbol will appear. The client can now move this element



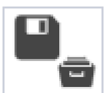
The colour and fill functions can be used to change the outline colour of a selected element on the whiteboard and if the element has a solid fill or not.



The delete button will delete the selected element from the whiteboard. First select the item to delete and then push this button.



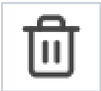
The ‘Zoom’ controls manipulate the size of the selected element displayed on both the practitioner and the client’s end of the videoconference. The + will zoom into the image while the – will zoom out.



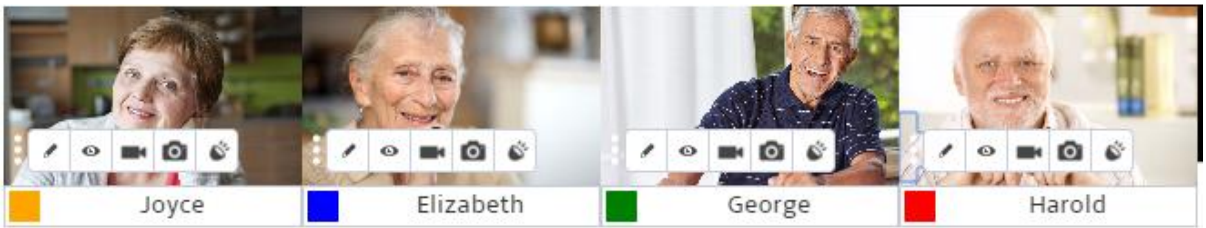
The section labelled ‘Whiteboard’ contains a number of functions for saving or deleting the whiteboard. The “Save Scene to Library” button will save the entire whiteboard (including background, drawing, stickers etc) to the Media Library. This whiteboard can then be recalled in future session by loading it from the Media Library. Use this to save an entire scene for future use.

The “Attach to Session” button will save this whiteboard to the current session. You can recall this whiteboard by clicking on the whiteboard icon which will appear in your Session Files window. If you save the files from your session (see Section 4.20) this whiteboard will also be saved.

The “Save Image” button will save an image of the whiteboard to your session. The image will appear in the Session Files section and will be saved alongside other files if you elect to save the session files (Section 4.20).

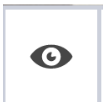


The button will clear the whiteboard, deleting all elements.



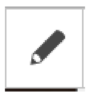
While on the White Board Screen, an icon of each participant in the conference will appear in the bottom left hand corner of the screen. Clicking on the three vertical dots within this image will open a context menu with a number of additional functions that can be controlled for each participant. The ‘videorecording’ (see 4.7 Capture a Video Recording), ‘image’ (see 4.9 Capture an Image) and ‘audio recording’ (see 4.11 Capture an Audio Recording) features have been described previously.

The ‘Pen Control’ button will toggle the ability for the client to draw over the White Board at their end of the consultation. If the ‘Pen Control’ is enabled, the client will see an image of a pen in the top left corner of their screen. Tapping (or clicking) on this pen will enable the pen and then they will be able to draw on the White Board. These drawings will be synchronised to ALL members of the videoconference.



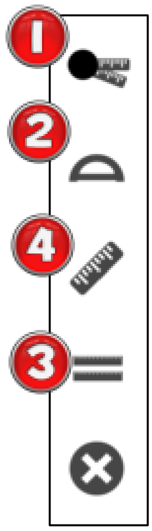
The ‘User Stream’ button will toggle the background of the White Board between the current content, and the client’s video stream. This function enables the client to see themselves in the background of the White Board and enables to clinician to draw or write over the client’s video for educational purposes. This icon is also available over the practitioner’s image on this screen (arrow). Clicking on this icon will display the practitioner in the background of the White Board.

4.17 The White Board



Access the White Board by clicking on the White Board button in the Conference Functions Menu. This will open a blank White Board with identical functionality as that described above in 4.16 The Media Library. Accessing the White Board this way is recommended when displaying text to the client as it is not possible to have a blank background when accessed through the Media Library function.

4.18 Measurement Tools



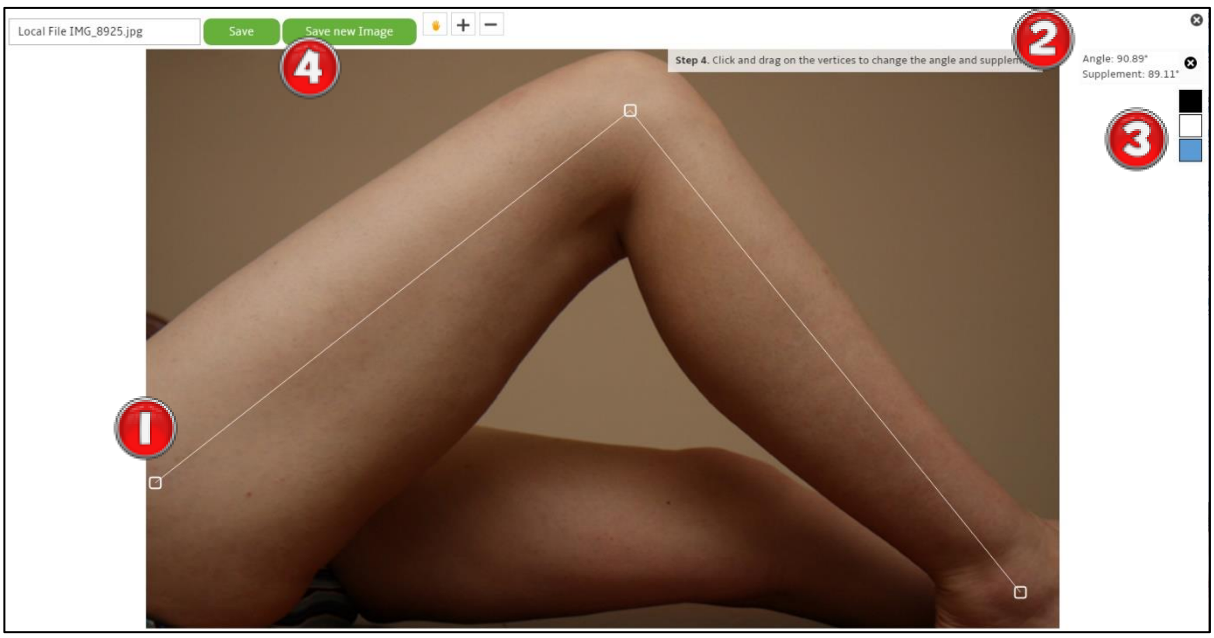
The eHAB® system has a number of tools to enable the practitioner to perform measurements on the live videoconference or on the video or image playback window. These tools include a simple goniometer tool ① (angles), a goniometer with a dynamic axis placement ② (angles), a goniometer based on the placement of vectors on the image ③ (angles) and a linear distance measurement tool ④ (distance in centimetres).

4.18.1 Selecting the Active Window

When any of the measurement tool are selected, first click in the window in which you wish to perform the measurement. As you move the mouse onto a window in which measurement can be made, the window will be shaded red. Click anywhere within a window to select it. Windows in which measurement can be performed include: the live videoconference window, the videorecording playback window and the image viewer.

4.18.2 Simple Goniometer tool

The simple goniometer tool requires the practitioner to indicate three landmarks on the selected window which correspond to the stationary arm, the axis of rotation and the movement arm of a standard goniometer respectively ①. The angle formed by these three points, and the supplement of the angle (180 degrees – angle) will be displayed in the top right hand corner of the screen ②. The colour of the measurement lines can be changed by selecting a colour from the options on the right hand side of the window ③. To cancel the measurement, click on the (X) in the top right corner above the colour selector. To save a copy of the image with the overlayed measurements, click on the 'Save New Image' button ④. A clinical decision will be required to record the appropriate angle for the measurement. You can reposition any of the measurement points by clicking on the point and dragging it to a new position.

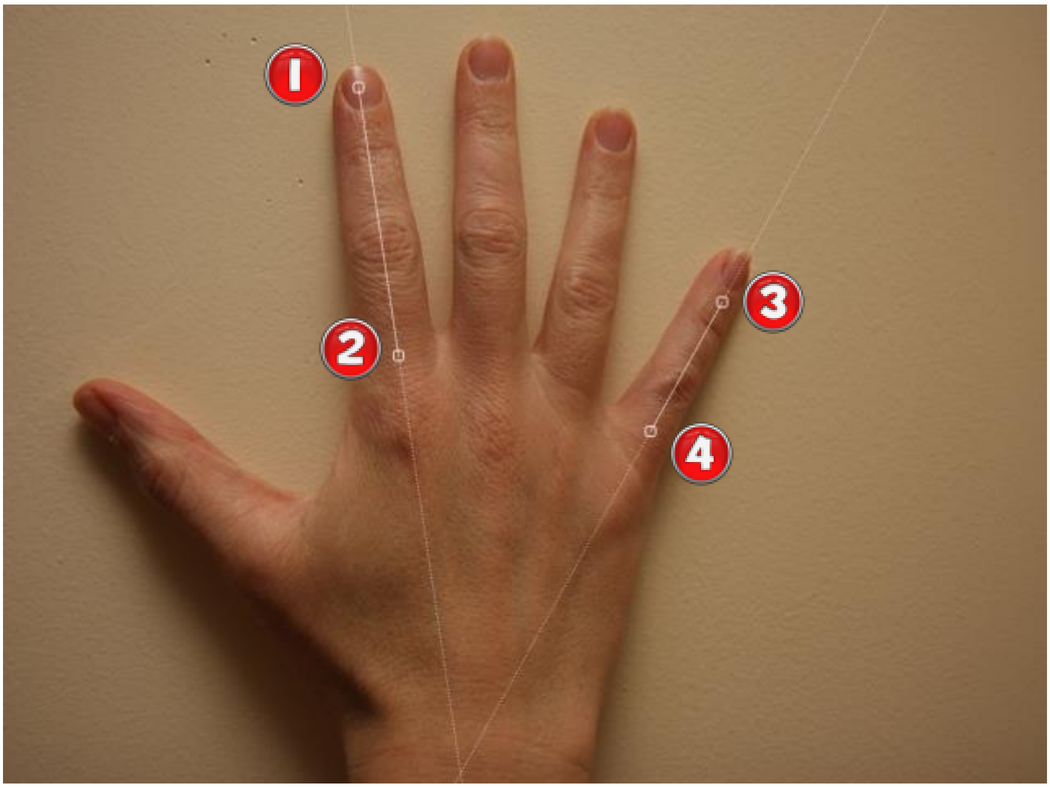


4.18.3 Goniometer with a Dynamic Axis

The goniometer with dynamic axis is conceptually identical to the simple goniometer tool with the exception that the landmarks are placed in the order of: stationary arm, movement arm and then axis of rotation. When placing the axis of rotation, lines are drawn from the stationary and movement points allowing visualisation of the both goniometer arms for accurate axis placement.

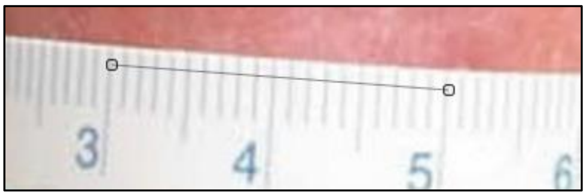
4.18.4 Vector Based Goniometer

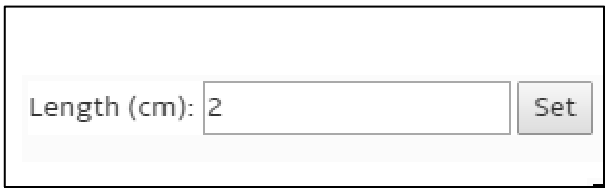
The vector based goniometer uses the alignment of vectors to the long axis of limbs rather than the identification of specific landmarks which may be more accurate when landmarks are difficult to visualise. It also has the advantage of not requiring the placement of an axis, which can be useful when the axis of rotation does not correspond to a specific landmark on the body. The Vector Based Goniometer also enables the practitioner to use stationary objects such as the plinth to align the tool to increase the accuracy of some measurements. The Vector Based Goniometer requires the placement of four points on the image corresponding to the start and end point of each vector. In the example below the first and second ①&② points define the vector related to the index finger. The third and fourth ③&④ points define the vector related to the little finger. The tool calculates the axis point for these two vectors and report the resulting intersecting angle.



4.18.5 Linear Distance Tool

The linear distance tool is designed to measure real scale linear distance on the live videoconference or on a captured videorecording or image. To perform a linear distance measurement, the image must first be calibrated. After selecting the tool, click on each end of a known object in the image. In the example here, a tape measure has been placed adjacent to the wound so that calibration can be performed. Here, a two centimetre interval on the tape measure has been defined by clicking on the 3cm 1 and the 5cm 2 mark in the image. The distance of 2 is then entered in the textbox at the top right of the screen 3.

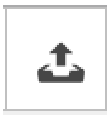




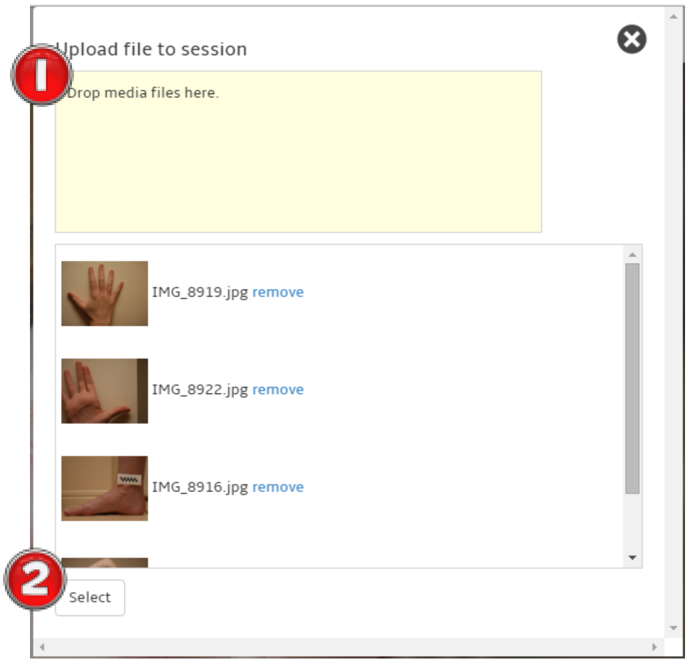
Once this step has been completed, the image is now calibrated and real scale measurements may be performed. To perform this measurement, simply click on the image in two locations and the distance between the two locations will be displayed.

For linear distance measurements to be accurate, the object of known size needs to be the same distance from the camera as the object on which the measurement is to be performed. For example, if a measurement is to be performed on the lower limb, the object such as a tape measure, ruler or calibration chart should be placed on the limb and not held in front or behind the limb.

4.19 Load a file into the Session

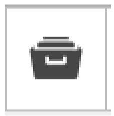


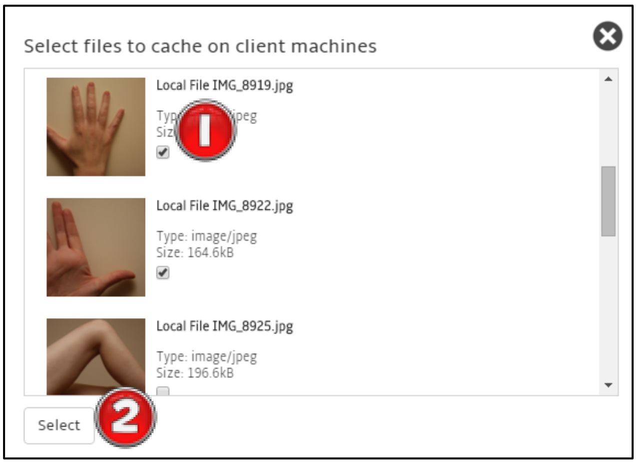
To load a file into the Session files window from your local computer, click on this icon in the Conference Function Window. In the window that appears, drag and drop images from your local files into the box at the top of the window. Once all of the desired media has been added click on the ‘Select’ button at the bottom of the window.

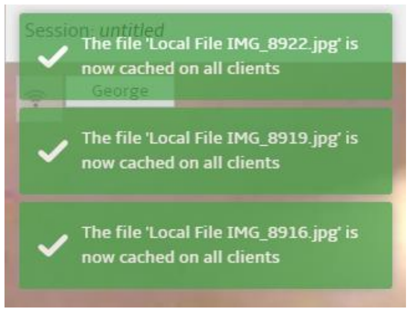


4.20 Send Local Files During a Videoconference

If you wish to send a file to a client during a videoconference and the file is not available in the media store, first follow the procedure described in section 4.19 Load a file into the Session to load the files into the current section. Next click on this icon in the Conference Function window. In the window that appears, check the checkbox next to the items that you wish to display to the client and click on the 'Select' button. When the files have been successfully received at the client's end of the videoconference, you will receive a notification like the following example in the top left hand corner of the screen.



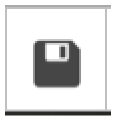




Once the files have been successfully received on the client's end of the videoconference, they will appear as files in the Media Library window. Follow the procedure described in section 4.16 The Media Library to select and display the media to the client.

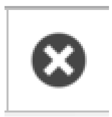
4.21 Save Files

Before the end of a session, all of the media generated during the videoconference can be saved. Click on the 'Save' icon in the Conference Function window and select a location to save the file in the save file dialogue box that appears. The file is a single ZIP archive containing all of the media generated during the session. These files can be loaded back into a session using the procedure described in 4.23 Load Files from a Previous Session. It is the responsibility of the practitioner to save these files as per their company policies.



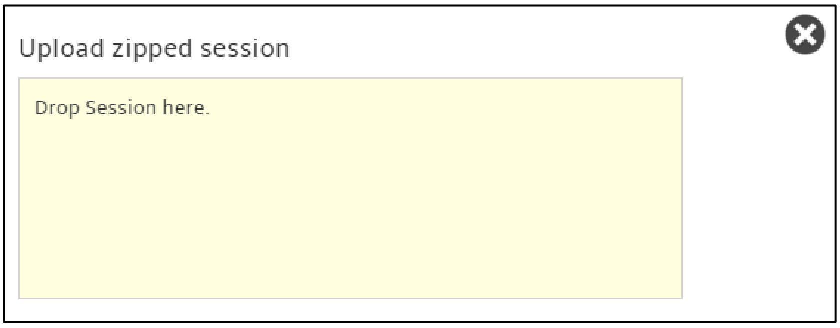
4.22 End a Call

To terminate a call, click on the large (X) icon in the top right hand corner of the screen. If the files from the current session have not yet been saved, the practitioner will be prompted to save the files before ending the call.



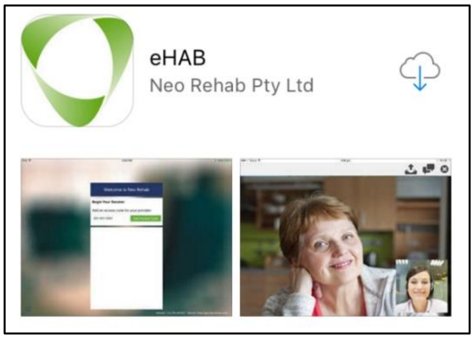
4.23 Load Files from a Previous Session

To load in the media from a previous session with a client, click on the following icon in the Conference Function window. In the window that appears, drag and drop an existing session ZIP file into the window. All of the media associated with the previous session will appear in the Session Files window.



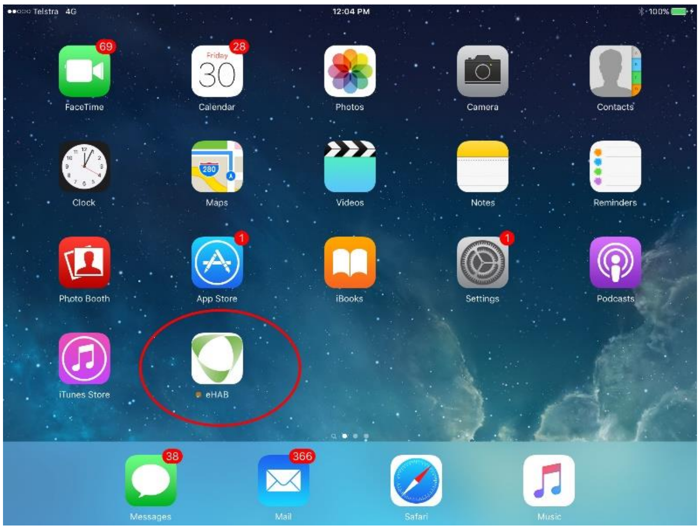
5. Clients

5.1 Downloading the Application for the iPad

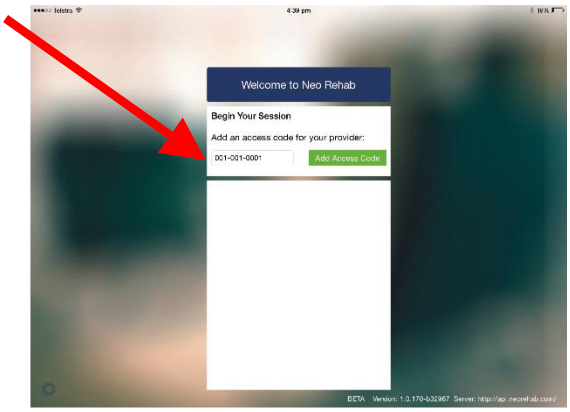


The eHAB® client application can be downloaded from the app store on the iPad. Open the app store and click on the search icon. Type eHAB® in the search field and click on the 'Get' or 'Download' icon which corresponds to the eHAB® app from Neo Rehab.

5.2 Launching the app on the iPAD



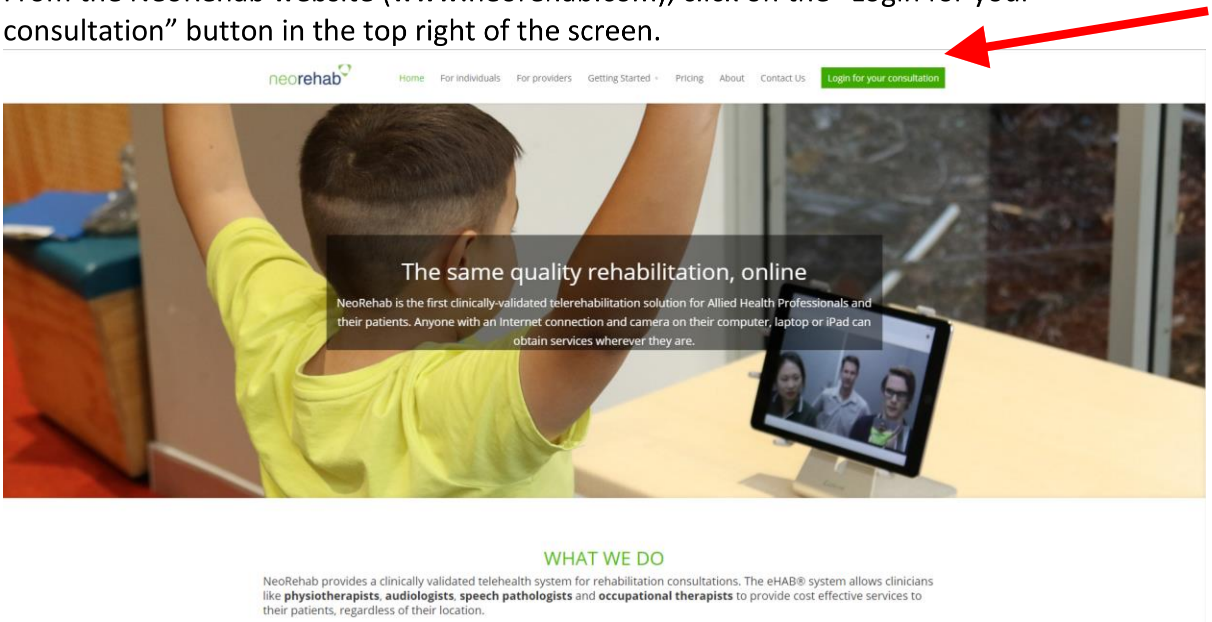
Once installed, an icon will appear on the iPad. Click on the icon to launch the application. When you launch the app, you will be asked to enter a 10-digit code (arrow). This code identifies the client in the system and is available from the email sent when the clients account was created. The code is also viewable in the 'Clients' area when the practitioner logs into the website.



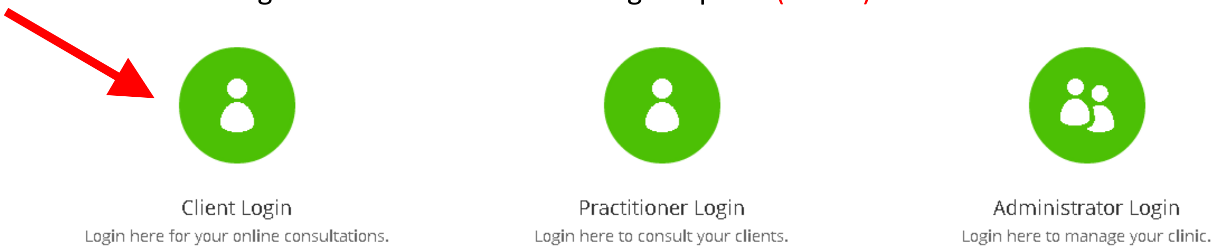
Once the code has been successfully entered you will be placed in a waiting room. Your next appointment (if any) will be displayed on the screen.

5.3 Launching the app in a browser

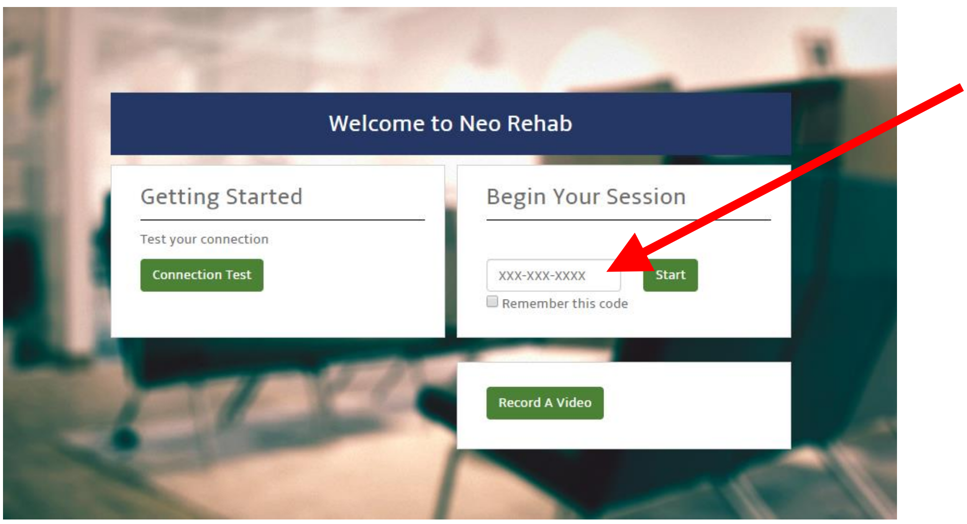
From the NeoRehab website (www.neorehab.com), click on the “Login for your consultation” button in the top right of the screen.



On the following screen select the ‘Client Login’ option (arrow).

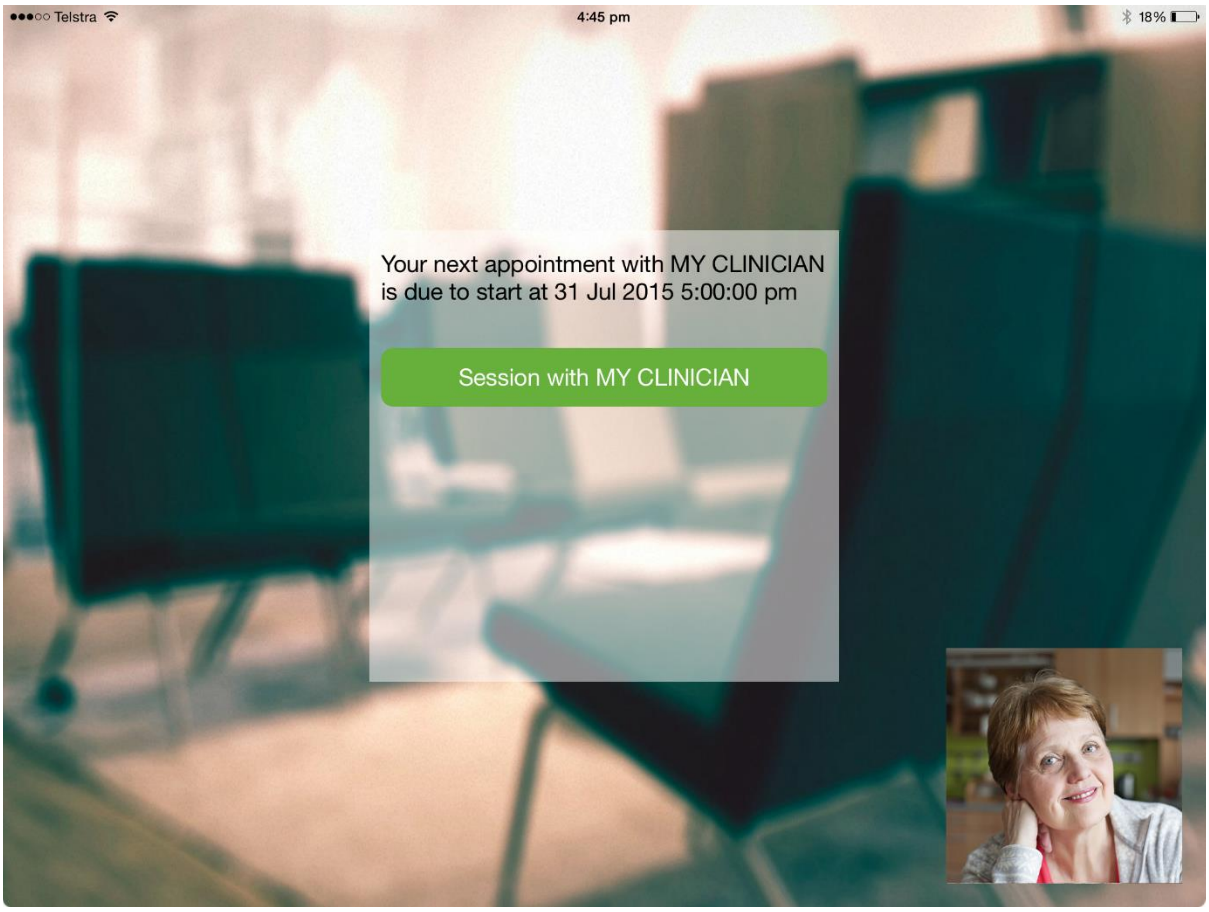


The webpage that loads is similar to the screen seen on the iPad client and will ask for a 10 digit code (arrow). This code identifies the client in the system and is available from the email sent when the clients account was created. The code is also viewable in the ‘Clients’ area when the practitioner logs into the website.



5.4 Answering a call

When a call is placed by the practitioner, a tone will play and a green button will appear on the screen. Click on the green button to launch the call.



5.5 Upload a file to the Practitioner

During a call, the client can upload any video or image file stored on the iPad or on their computer if using the web client. Click on the upload icon in the top right corner and select the image to send. The image will appear in the Session Files window on the practitioner's end.

5.6 Start a text Chat

To start a text chat with the practitioner, click on the chat icon in the top right corner. A chat window and keyboard (iPad) will appear and text messages can be sent to the practitioner.

5.7 Ending a Call

To end a call, click on the large (X) in the top right corner of the screen