

CaRE: Quick Start Guide

Welcome to the quick start guide for the Cardiovascular and Respiratory Examination Trainer (CaRE) this guide will help you quickly navigate sections of the trainer you will need to use.

1. **Cardiac Skills/Respiratory Skills** – Play individual cardiovascular/respiratory palpation and auscultation pathologies.
2. **Clinical Cases** – To practice the diagnosis of different clinical presentations.
3. **Assessment Mode**
 - a. Creating Assessments – Create your own unique patient profile based of a Clinical case that can be used for assessments.
 - b. Playing Assessments – Allows users to diagnose an unknown patient’s profile and compare findings.
4. **Lesson Playlists** – How assessors/teachers create lesson playlists.
 - a. Creating Lessons – Create custom lesson playlist.
 - b. Playing Lessons – Allows users to play through custom lessons playlists.
5. **System**
 - a. Admin password – Changing the standard admin password
 - b. Updates – Update the model with the latest software.

1 Cardiac Skills/Respiratory Skills

The skills section is where users can run through a variety of individual pathologies covering cardiovascular palpitation and auscultation, respiratory palpation, auscultation, and mouth sounds.

To play a pathology on the trainer, follow these steps:

1.1 Click the menu icon in the top left corner. This will open the menu, you can then select any of the skills. For example 'pulses'.

The screenshot displays the 'limbs&things' application interface. At the top, there is an orange header bar with the 'limbs&things' logo and the tagline 'CLOSER TO LIFE'. On the right side of the header, there are several icons: a QR code icon, a pulse icon showing '24%', a heart rate icon showing '23%', a person icon showing '100%', and a gear icon for settings. Below the header, a menu is open on the left side, listing various skills under three categories: 'CARDIO SKILLS' (PULSES, APEX BEATS, THRILLS, HEAVES, AUSCULTATION), 'RESPIRATORY SKILLS' (BREATHING PROFILES, POSITION TRACHEA, MOUTH SOUNDS, AUSCULTATION), and 'CASE LEARNING' (CLINICAL CASES, ASSESSMENT MODE, LESSON PLAYLISTS). The main content area features a 'Welcome!' message, a QR code for the User Guide, and the text 'Scan the QR Code for the User Guide or get started using the menu'. Below the QR code is the label 'User Guide'. On the right side of the main content area, there is a line drawing of a human torso with the respiratory system highlighted in orange. On the left side, there is a line drawing of a human torso with the heart highlighted in orange.

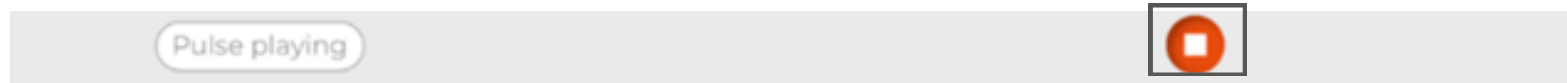
1.2 You will be able to choose from various pathology characteristics. The image below shows a weak, regular pulse, 120 beat rate and radio radial symmetry has been selected. In some cases, you will only have one characteristic to choose from. You can also select the gender of your simulated patient.

Note: If any options are greyed out, it means that they are unavailable to select with other characteristics you've already selected

The screenshot displays the 'limbs&things' simulator interface. At the top left is the logo 'limbs&things CLOSER TO LIFE'. On the top right, there are three status indicators: a pulse rate of 24%, a pulse rate of 23%, and a patient status of 100%, along with a gear icon for settings. Below the header is a 'Reset' button. The main interface is divided into four sections: 'PULSE CHARACTER', 'RHYTHM', 'RATE', and 'SYMMETRY'. The 'PULSE CHARACTER' section has buttons for Normal, Bounding, Weak (selected), and Slow Rising, with Alternans and Bisferiens also visible. The 'RHYTHM' section has buttons for Regular (selected), Regularly Irregular, and Irregularly Irregular. The 'RATE' section has buttons for 30, 40, 60, 90, 120 (selected), and 170. The 'SYMMETRY' section has buttons for Normal, Radio Radial (selected), and Radio Femoral. To the left of these settings is a diagram of a female patient with red dots indicating pulse measurement sites on the neck, wrists, and ankles. Below the diagram are gender selection icons for female and male. At the bottom center, there is a play button icon.

1.3 When you have clicked and selected your characteristics, click the play button to begin playing this pathology on the CaRE simulator.

1.4 When you're finished or would like to play a new pathology, you MUST first stop/pause the pathology you're already playing. The first pathology will continue to play until it is stopped/paused.



1.5 If you'd like to choose new characteristics for the pathology, click reset and select them again. If you'd like to play a new pathology, go back to the menu in the first step of this process.

2 Clinical Cases

Clinical Cases are medical conditions made up of multiple different pathologies from the skills section. Here you can experience a lifelike scenario with a patient displaying a realistic condition.

These pre-set Clinical Cases allow students to practice their diagnosis skills.

To play a case on the trainer, follow these steps:

2.1 Click the menu icon in the top left corner. This will open the menu, you can then select 'clinical cases'.

The screenshot displays the 'limbs&things' application interface. The top navigation bar is orange and features the 'limbs&things' logo on the left and several status icons on the right, including pulse rate (91, 24%), oxygen saturation (91, 23%), a person icon (100%), and a gear icon. Below the navigation bar, a menu is open on the left side, listing various skills and learning options. The 'CLINICAL CASES' option is highlighted with a black border. The main content area shows a 'Welcome!' message, a QR code for the User Guide, and two anatomical diagrams of a human torso. The left diagram shows the heart and lungs, while the right diagram shows the lungs and trachea.

limbs&things
CLOSER TO LIFE

limbs&things
CLOSER TO LIFE

CARDIO SKILLS

- PULSES
- APEX BEATS
- THRILLS
- HEAVES
- AUSCULTATION

RESPIRATORY SKILLS

- BREATHING PROFILES
- POSITION TRACHEA
- MOUTH SOUNDS
- AUSCULTATION

CASE LEARNING

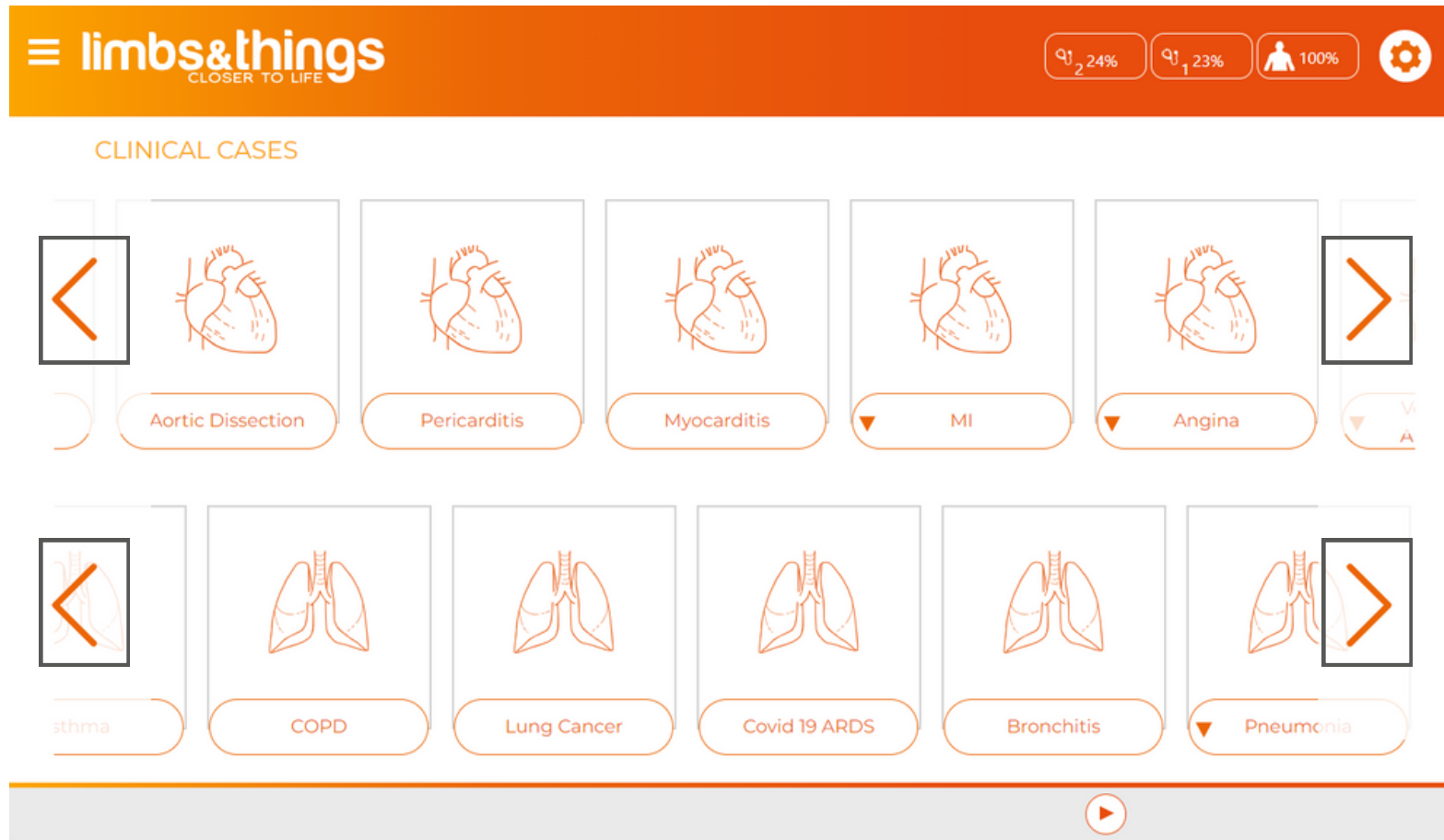
- CLINICAL CASES**
- ASSESSMENT MODE
- LESSON PLAYLISTS

Welcome!

Scan the QR Code for the User Guide or get started using the menu

User Guide

2.2 Use the right and left arrows to scroll through the different Clinical Cases. When you find the correct Clinical Case, click on this and you'll see a new page including life signs.



2.3 Under the life signs heading you will see a list of the vitals that the simulator will play for the Clinical Case. Click the play button to start playing these on the trainer.

The screenshot displays the 'limbs&things' simulator interface. At the top, the logo 'limbs&things' is accompanied by the tagline 'CLOSER TO LIFE'. To the right, there are three circular indicators: a pulse rate of 24% (labeled 'Q1_2'), a pulse rate of 23% (labeled 'Q1_1'), and a 100% status indicator. A gear icon for settings is also present.

The main content area is titled 'CLINICAL CASES - NORMAL'. On the left, a 'PATIENT HISTORY' panel shows a female patient icon, gender symbols (♀ and ♂), and input fields for 'Name: CNT1' and 'Age: CAT1'. Below this, a 'Clinical History' section contains the text 'CHT1'. A vertical sidebar on the right of the patient history panel lists 'HISTORY', 'OBSERVATION/INVESTIGATION', 'DIAGNOSIS', and 'MANAGEMENT PLANS'.

On the right side of the interface, a box titled 'LIFE SIGNS FOR NORMAL' lists the following vital signs:

- PULSE TYPE: Normal
- PULSE RHYTHM: Reg/Reg
- PULSE RATE: 60 bpm
- PULSE SYMMETRY: Symmetrical
- HEART SOUND: S1+S2
- RESPIRATORY PATTERN: Eupnoea
- RESPIRATORY RATE: 14 bpm
- RESPIRATORY SYMMETRY: Symmetrical
- MOUTH SOUND: Normal
- LUNG SOUND: Vesicular

At the bottom of the interface, there is a control bar with three buttons: a left arrow, a play button, and a right arrow.

2.4 **Reminder:** Like with the skills section, you must first pause/stop what the trainer is playing before you're able to play another Clinical case.

3 Assessment Mode

Assessment mode allows users to complete pre-set assessments based on the patient data of a clinical case. After an assessment has been complete the observations can be compared to that of the teachers/ assessors.

In this mode an assessor/ teacher can create a unique patient profile with case notes based off a Clinical case of your choice. This covers the patient's history, what the diagnosis is and what the management plan should be.

The patient profile will be saved as an assessment to the Assessment Mode section where a student can be tested to see if their diagnosis and management plan matches the assessors. Only the patient file section will be visible to the student when carrying out the assessment.

To create an assessment follow these steps (admin only):

3.1 Select assessment mode in the burger menu.

The screenshot displays the limbs&things application interface. The top navigation bar is orange and features the limbs&things logo on the left and user statistics (Q1, Q2, Q3, Q4) and a settings gear icon on the right. Below the navigation bar, a sidebar menu is visible on the left, listing various skills and learning resources. The 'ASSESSMENT MODE' option is highlighted with a black border. The main content area shows a 'Welcome!' message, a QR code for the user guide, and two anatomical diagrams of a human torso: one showing the heart and lungs, and another showing the respiratory system.

limbs&things
CLOSER TO LIFE

limbs&things
CLOSER TO LIFE

CARDIO SKILLS

- PULSES
- APEX BEATS
- THRILLS
- HEAVES
- AUSCULTATION

RESPIRATORY SKILLS

- BREATHING PROFILES
- POSITION TRACHEA
- MOUTH SOUNDS
- AUSCULTATION

CASE LEARNING

- CLINICAL CASES
- ASSESSMENT MODE**
- LESSON PLAYLISTS

Q1 24% Q2 23% Q3 100% Q4 100%

Q1 24% Q2 23% Q3 100% Q4 100%

Welcome!

Scan the QR Code for the User Guide or get started using the menu

3.2 Select the plus sign. You will be prompted to enter your admin password, enter the password, and click submit; you can now create your new assessment. (Use the 'Assessment based on' drop down to select a Clinical Cases to base your assessment off).

3.3 Click through the right-hand tabs filling out the free text boxes in the patient History (including name, age, and gender), Observations, Investigations, Diagnosis and Management plan, as if you were diagnosing the patient and suggesting treatment. (The ticks will turn orange once a tab has been filled out).

limbs&things
CLOSER TO LIFE

Q1 24% Q1 23% 100%

NEW ASSESSMENT

PATIENT HISTORY

♀ ♂

Name:

Age:

Clinical History:

HISTORY ✓

OBSERVATIONS ✓

INVESTIGATIONS ✓

DIAGNOSIS ✓

MANAGEMENT PLANS ✓

CLEAR

Assessment name:

Assessment based on:

SAVE

LIFE SIGNS FOR

PULSE TYPE:

PULSE RHYTHM:

PULSE RATE:

PULSE SYMMETRY:

HEART SOUND:

RESPIRATORY PATTERN:

RESPIRATORY RATE:

RESPIRATORY SYMMETRY:

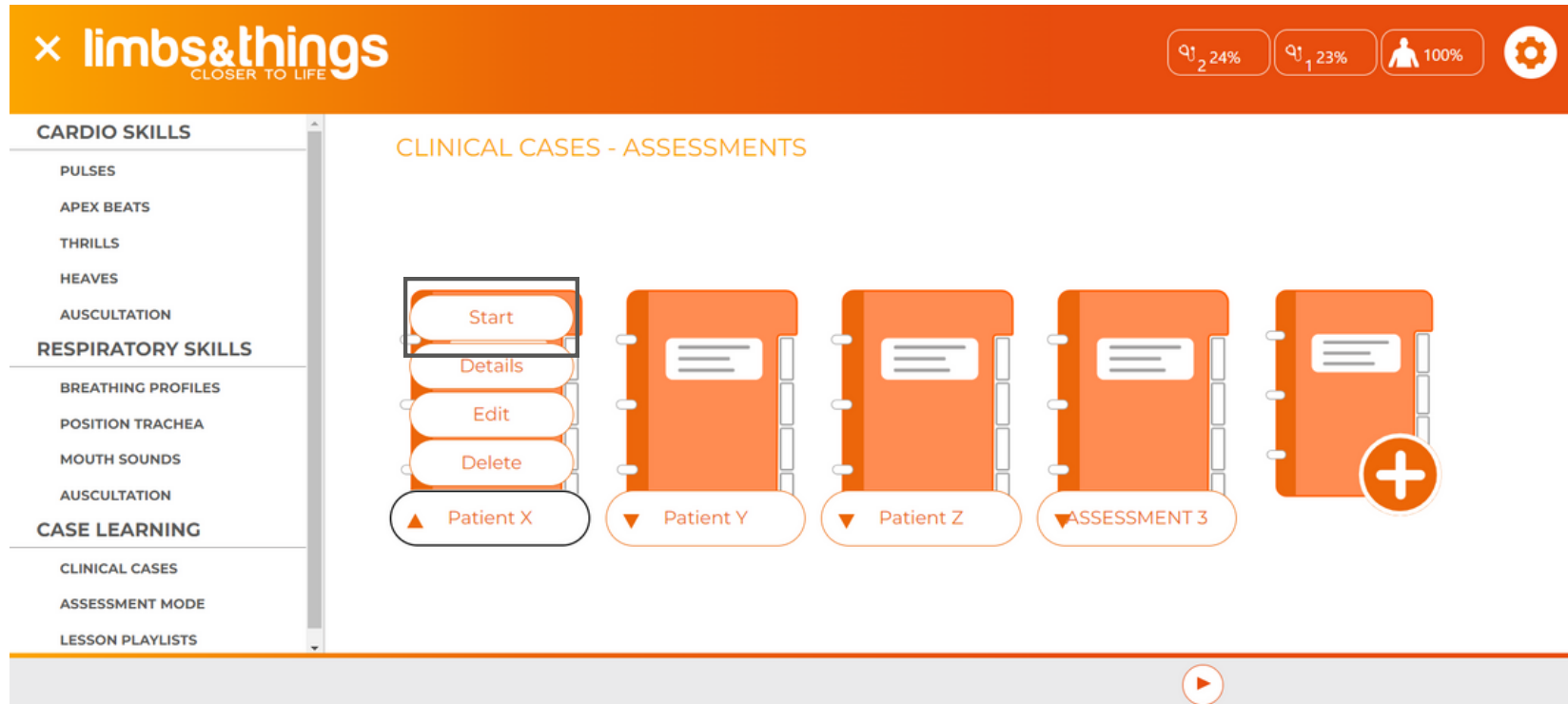
MOUTH SOUND:

LUNG SOUND:

3.4 When you have filled out the patient profile, click Save, you will then be prompted to confirm the save and this will be added to the Assessment Mode section, ready for a student to be tested. Make sure that you give the patient a name too.

To start an assessment, follow these steps:

3.5 To start an assessment, you need to click one of the patient profiles and then click start.



3.6 Press the play button to start playing the case, the student can then carry out an examination on the CaRE simulator to make an assessment.

3.7 Once the student has examined the simulator, they can go through the patient folder completing each blank text box. Observations will start highlighted but the box needs to be clicked to start filling in this section. Move through each section filling in the relevant information.

limbs&things
CLOSER TO LIFE

Q₂ 76% Q₁ 24% 50% ⚙️

ASSESSMENT - PATIENT A

PATIENT HISTORY

Name:

Age:

Clinical history:

HISTORY ✓

OBSERVATIONS ✓

INVESTIGATIONS ✓

DIAGNOSIS ✓

MANAGEMENT PLANS ✓

END TEST

Currently playing: Assessment mode - Patient X

3.8 When done, click the end test button and you'll be presented with the student's assessments notes alongside the true diagnosis and management plan from the assessor.

The screenshot displays the 'limbs&things' interface in 'Assessment Mode'. The top navigation bar is orange and contains the 'limbs&things' logo on the left, a '100%' progress indicator, and a settings gear icon on the right. Below the navigation bar, two panels are shown side-by-side. The left panel is titled 'ASSESSMENT - CNT2' and the right panel is titled 'True Diagnosis And Management Plan'. Both panels have a 'PATIENT HISTORY' section with a patient icon, gender selection buttons (♀ and ♂), and input fields for 'Name: CNT2' and 'Age: CAT2'. Below these is a 'Clinical History' text area containing the text 'CNT2'. On the right side of each panel, there are vertical tabs for 'ASSESSMENT', 'PRACTICE', 'EXERCISES', and 'NEW TESTS'. At the bottom right of the interface, there is a red-bordered button labeled 'EXPORT NEW TEST'. A play button icon is visible in the bottom center of the interface.

3.9 You can then either export the notes or start a new test in the bottom right or navigate away using the burger menu in the top left.

4 Lesson Playlists

As an assessor/teacher, you'll probably want to create lesson plan, ahead of time. Lesson plans can be made up of pathologies from the Skills Section, conditions from Clinical Cases and Assessments.

To add to your Lesson Playlists, follow these steps (Admin only):

4.1 Select lesson playlist in the burger menu.



The screenshot displays the 'limbs&things' app interface. The top navigation bar is orange and features the app logo 'limbs&things CLOSER TO LIFE' on the left. On the right side of the bar, there are four circular icons: a QR code with '24%', a person icon with '23%', a person icon with '100%', and a gear icon. Below the navigation bar, a white sidebar menu is visible on the left, listing various categories: 'CARDIO SKILLS' (PULSES, APEX BEATS, THRILLS, HEAVES, AUSCULTATION), 'RESPIRATORY SKILLS' (BREATHING PROFILES, POSITION TRACHEA, MOUTH SOUNDS, AUSCULTATION), 'CASE LEARNING' (CLINICAL CASES, ASSESSMENT MODE, LESSON PLAYLISTS), and 'LESSON PLAYLISTS' is highlighted with a black border. The main content area is white and features a 'Welcome!' message in a cursive font. Below the message, it says 'Scan the QR Code for the User Guide or get started using the menu'. A large orange QR code is centered in the main area, with the text 'User Guide' underneath it. To the right of the QR code is a line drawing of a human torso with the respiratory system highlighted in orange. To the left of the QR code is a line drawing of a human torso with the heart and lungs highlighted in orange.

4.2 Select the plus sign. You will be prompted to enter your admin password, enter the password, and click submit; you can now create your new Lesson Playlist.

4.3 Give your playlist a name and then go to each of the parameters you want to add to the plan and click Add; you can add any of the skills and Clinical Cases.

The image displays two screenshots of the 'limbs&things' Lesson Builder interface. The top screenshot shows the 'Select Parameters' screen. On the left, there is a list of categories: PULSES, APEX BEATS, THRILLS, HEAVES, CARDIO, BREATH-POSITIVE, MOUTH, RESPIRATORY, CLINICAL, and CLINICAL. An 'ADD' button is positioned between the list and the main content area. The main content area has a 'SAVE' button and a text input field for 'Notes about this track'. The bottom screenshot shows the 'LESSON PLAN 1' screen. The central list contains several parameters, each with edit, add, and delete icons: Clinical Case - Normal, Pulses - NORMAL - NORMAL - REGULAR - 30 BPM, Breathing - TACHYPNOEA - 24 BPM - SYMMETRICAL, Apex Beat - NORMAL - NORMAL - 60 BPM, Cardio Auscultation - S1 + S2, Distended EJV - DISTENDED, and Heaves - RIGHT VENTRICULAR. The 'Heaves - RIGHT VENTRICULAR' parameter is highlighted. To the right, there is a list of categories with an 'ADD' button. The 'HEAVE TYPE' dropdown is set to 'Right Ventricular'. A note 'Right heave' is visible in the 'Notes about this track' field.

4.4 When complete, you can save your plan and it will appear on the Lesson Playlist home page. The playlist can be loaded by the student later on by selecting the chosen plan and clicking start. The student can then click anything listed in the lesson plan to quickly navigate to that section.

The screenshot displays the 'limbs&things' application interface. At the top, the logo 'limbs&things' is accompanied by the tagline 'CLOSER TO LIFE'. To the right, there are three progress indicators: 'Q2 24%', 'Q1 23%', and a user profile icon with '100%'. A gear icon for settings is also present.

The main content area is divided into two sections. On the left, under the heading 'LESSON PLAN 1', there is a sub-heading 'Step-by-step walkthrough for self-directed study'. Below this, a list of clinical findings is shown, with 'Clinical Case - Normal' selected. The findings include: Pulses - NORMAL - NORMAL - REGULAR - 30 BPM; Breathing - TACHYPNOEA - 24 BPM - SYMMETRICAL; Apex Beat - NORMAL - NORMAL - 60 BPM; Cardio Auscultation - S1 + S2; Distended EJV - DISTENDED; Heaves - RIGHT VENTRICULAR; Respiratory Auscultation - Vesicular; Breathing - EUPNOEA - 14 BPM - SYMMETRICAL; and Mouthsounds - Normal. Below the list is a section titled 'Notes about this track' with a text box containing the note 'This is a note'.

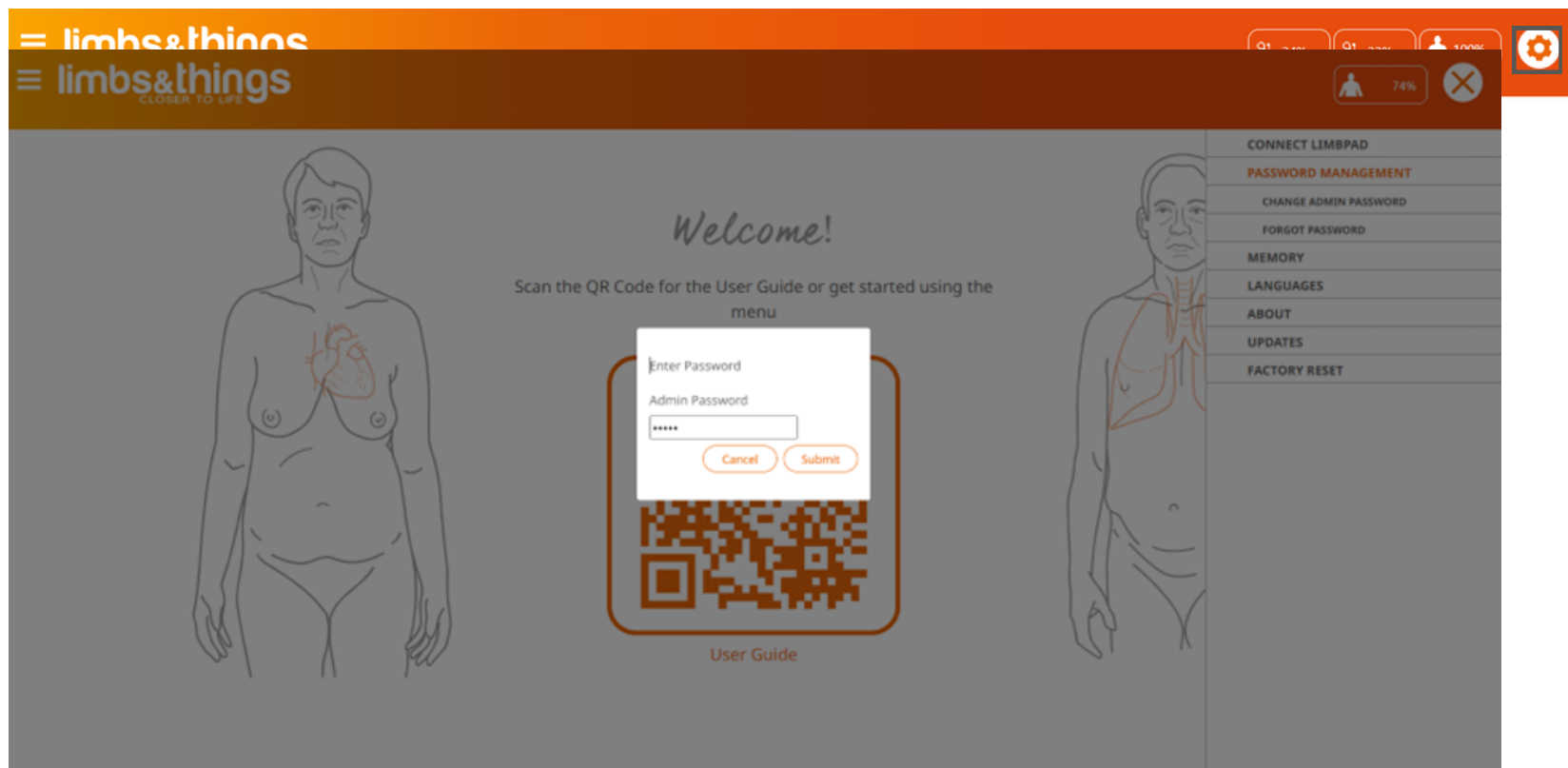
On the right, a 'PATIENT HISTORY' form is displayed. It features a female patient icon, gender selection buttons (♀ and ♂), and input fields for 'Name: CNT1' and 'Age: CAT1'. A 'Clinical History' section contains the text 'CHT1'. A vertical sidebar on the right side of the form includes buttons for 'HISTORY', 'DEFINITIONS', 'INVESTIGATIONS', 'DIAGNOSIS', and 'MANAGEMENT PLANS'. At the bottom center of the interface is a play button icon.

5 Systems

As an assessor/teacher, you'll probably want to create lesson plan, ahead of time. Lesson plans can be made up of pathologies from the Skills Section, conditions from Clinical Cases and Assessments.

To Change Admin Password:

5.1 Select 'Password Management' in the settings menu, then select change admin password. Enter the admin password (N.B. default password is **admin**). Enter new password and confirm.



To perform a software update (admin only):

4.2 To perform a software update, check the version of software current on the model by checking the about section on the settings menu. Check on the CaRE downloads section of the Limbs & Things website to see if this matches the latest software version available.

4.3 If the software is not the latest version download the file from the Limbs & Things website. Reconnect to the model, open updates in the settings menu. Select 'choose file' and select the correct file. Now press update and enter the admin password. The trainer will begin to update (the model cannot be used whilst updating). Once finished the model will reset and you will need to reconnect to the model again.

