ResusSim

USER GUIDE

Running a simulation with ResusSim

Everything from installing the app to the debrief: setting up the host computer and the Wi-Fi, signing in, pairing tablets, building a case, running it, what learners see on each device, and reviewing what happened.

For ResusSim 0.1.0-beta.2 · Updated 13 October 2026

CONTENTS

1. Quick start
2. What you need
3. Choose the network
4. Set up the host computer
5. Sign in
6. Connect the tablets
7. The control room
8. Set up a case
9. AI features
10. Run the simulation
11. The learners' devices
12. Debrief
13. Secure mode: sensors, live audio, recording
14. Troubleshooting
15. Getting help

1

Quick start

The shortest path from a new install to a running case. Each step links to the full explanation.

1. **Install ResusSim on one computer, the host.** A Mac or a Windows PC, from sim.resussummit.com/download. Nothing gets installed on the tablets.

2. **Put the host and every tablet on the same Wi-Fi.** Hospital or guest Wi-Fi often stops devices talking to each other. If tablets won't connect, use a phone hotspot or a small router of your own.

3. **Open ResusSim.** The very first time, it opens on a network check called "Get the room connected". Close that window, then click ResusSim in the Dock (Mac) or open ResusSim again from the Start menu (Windows).

4. **Sign in** with your beta account.

5. **Scan the QR code** on the "Connect the room" screen with each tablet's camera, and tap what each one is: Monitor, Ventilator, Pumps, EMR, POCUS or Phone.

6. **Press Enter control room.** On **Scenarios**, pick a built-in preset or describe a patient and let the AI build the case.

7. **Connect the monitoring.** On **Vitals**, tick **ALL**. The monitor shows nothing until you do.

8. **Press ▶ to start.** Learners power on their own devices: **Admit patient** on the monitor, **Power on** on the pumps and ventilator, **Sign in** on the EMR.

9. **When it's over, press ■**, at the bottom left of the console. The debrief opens straight away.

2

What you need

One computer runs the simulation. Everything else just opens a web page on it.

WHAT	DETAILS
The host computer	A Mac (macOS 11 or newer, Apple silicon or Intel) or a Windows 10/11 PC. It runs the simulation and the instructor console. Keep it plugged in with the lid open; a closed lid sends it to sleep and stops the sim.
Bedside devices	Any tablets, phones or laptops with a current browser (Safari or Chrome from the last few years). iPads from about 2020 onwards draw the monitor and ventilator waveforms smoothly; older ones look rough. Nothing needs installing on them.
A shared network	Wi-Fi that the host and every device can join, and that lets them talk to each other. See Choose the network.
Internet	Only to download the app, to sign in, and for the AI features. A running simulation never needs it.
A beta account	Created at sim.resussummit.com/download. The same account unlocks the downloads and signs you in inside the app.

How many devices? As many as you like. A good starting set is three tablets: monitor (with the defibrillator built in), EMR, and one more for the ventilator or pumps. One device can also show two or four devices at once (see Split screens).

3

Choose the network

This is the step that most often goes wrong, so choose before the day. The host and all devices must be on the **same** network, and that network must let them reach each other.

Option A: the Wi-Fi you already have

Fine in a sim centre or at home. In hospitals and on guest networks it often fails: many are set up so devices can reach the internet but not each other (“client isolation”). The tablet scans the code and then never connects. You can test this in a minute with the setup check.

Option B: a phone or iPad hotspot (best for in-situ drills)

1. Turn on **Personal Hotspot** (iPhone/iPad) or **Mobile hotspot** (Android) on a phone you're not using in the sim.
2. Join that hotspot from the host computer and from every tablet.
3. That's all. The simulation traffic stays between the devices. Mobile data is only used for things that need the internet, such as the AI features.

Keep the hotspot phone plugged in for long sessions. Some phones limit how many devices can join a hotspot (often about five), so for a bigger set-up use a router.

Option C: a small router of your own (best for a sim centre)

A cheap travel router that's used only for ResusSim. Plug it in, join the host and tablets to it, and it works the same way every time. It doesn't need an internet connection.

Not recommended: making a network from the computer itself

A Mac can still create a computer-to-computer network, but it's hidden in current macOS, has no password, and many phones and tablets can't join it. Windows' **Mobile hotspot** usually won't start unless the PC is already connected to another network. Options B and C are more reliable.

> **Turn off VPNs**
> A device with a VPN switched on is effectively on a different network. It will scan the code and never connect. Switch VPNs off on the host and on every device.

4

Set up the host computer

Install

Download from sim.resussummit.com/download. Creating your account there unlocks the installers straight away, and the download page walks through each step with pictures.

- **Mac:** open the .dmg and drag ResusSim into Applications. The app is signed and notarised by Apple, so it opens normally.
- **Windows:** run the installer. The Windows build isn't code-signed yet, so Windows shows "Windows protected your PC". Click **More info**, then **Run anyway**.

Allow network connections

Tablets connect *into* the host, so the computer's firewall has to allow it.

- **Mac:** if macOS asks whether ResusSim may accept incoming network connections, click **Allow**.

- **Windows:** if Windows Defender Firewall asks about ResusSim, allow it on **Private networks**. On a managed hospital PC this may need IT. Also check the Wi-Fi you're on is set to *Private*, not *Public*, in Windows' network settings.

The first launch: the setup check

The first time it opens, ResusSim shows **Get the room connected**, a three-step check that the network will work. It's worth doing once (see below). This screen has no button through to the console. When you've finished with it:

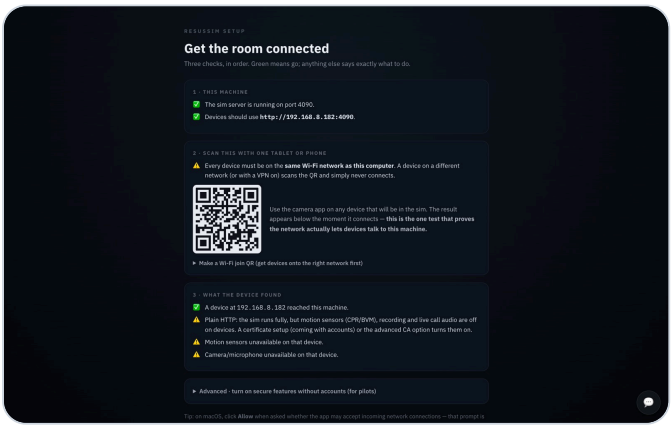
- **Mac:** close the window, then click ResusSim in the Dock.
- **Windows:** close the window, then open ResusSim again from the Start menu, or click its icon in the system tray (bottom right, near the clock) and choose **Open console**.

From then on, ResusSim opens straight onto the console.

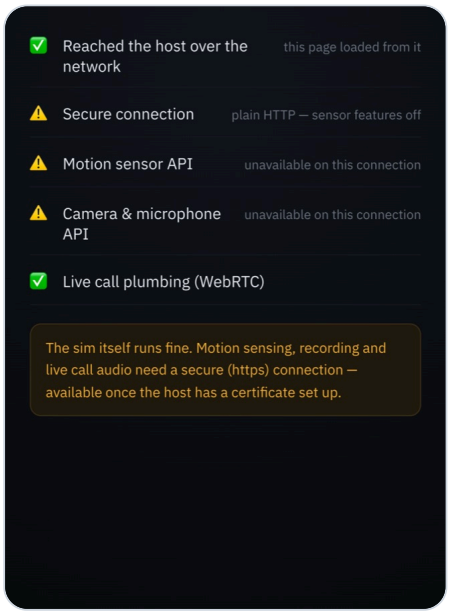
The setup check

Run this once on any new network. It proves the tablets can actually reach the host, before a room full of people is waiting.

1. **1 · This machine** shows the address devices will use, such as `http://192.168.1.20:4000`. If it says the computer isn't connected to any network, join the Wi-Fi or hotspot first. If another program was already using port 4000, an amber line says so and ResusSim uses the next port (see Troubleshooting).
2. **2 · Scan this**: point one tablet's or phone's camera at the QR code and open the link.
3. **3 · What the device found**: within a few seconds, "A device at … reached this machine" appears with a green tick. That means the network works.



On the host: the phone got through.



On the phone: "Connected ✓".

The amber lines about plain HTTP, motion sensors and camera are normal. They only matter for the optional extras in Secure mode. If nothing appears after a scan, see Troubleshooting.

The page also has **Make a Wi-Fi join QR**: type the network name and password, and devices can scan it to join the right Wi-Fi first.

You can come back to this check at any time: ⚙ **Network setup & device check** on the console's **Devices** tab, or **Open setup check** from the ResusSim menu-bar or tray icon.

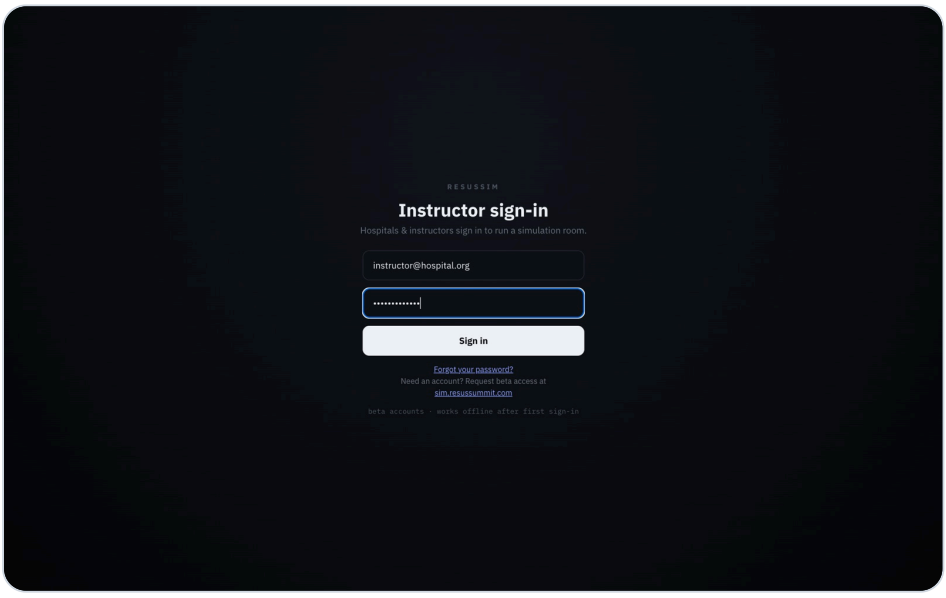
Keep it running

- **Closing the window doesn't quit ResusSim.** It keeps hosting in the background, shown by its icon in the menu bar (Mac) or tray (Windows). To get the window back, click ResusSim in the Dock (Mac) or open it again from the Start menu (Windows). Quit from the menu-bar or tray icon, or press `⌘Q` on a Mac.
- **Updates** download automatically and install when you quit, never mid-session. This works from version 0.1.0-beta.2 on: if you have an earlier version, install the new one once by hand from sim.resussummit.com/download. Your rooms and settings are kept.

5

Sign in

Sign in with the email and password of your beta account. You only need the internet for this first sign-in.



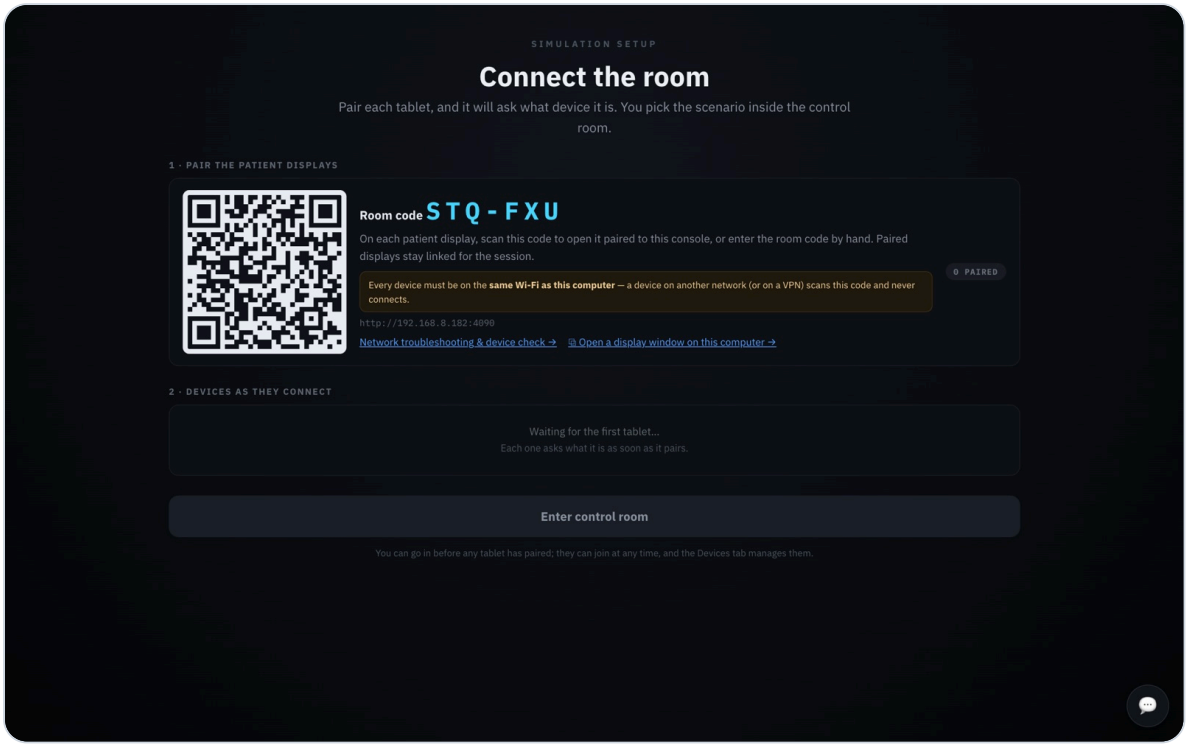
Instructor sign-in.

- **You stay signed in**, including after restarts. There's no sign-out button.
- **Offline:** if you're asked to sign in with no internet, it still works as long as this computer has been online at some point in the last 7 days.
- **"Your account is awaiting approval"** appears only when the team is approving new accounts by hand. You'll get an email when yours is approved.
- **Forgot your password?** The link under the button opens the reset page.

6

Connect the tablets

After you sign in, the console opens on **Connect the room**. Pair every device here, before you go into the control room.

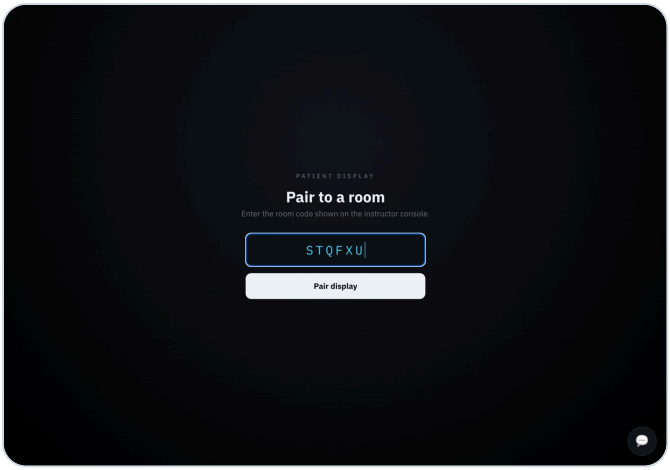


Connect the room: the pairing QR code and the room code. Your address will be different.

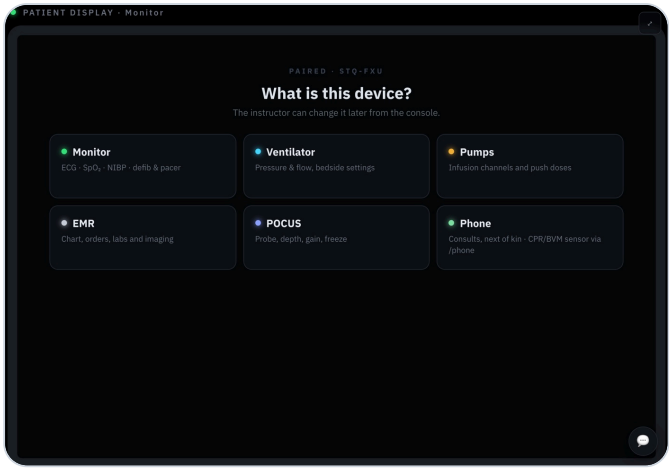
Pair a tablet

1. Make sure the tablet is on the same Wi-Fi as the host.
2. Open the tablet's camera and point it at the QR code. Tap the link that appears. The tablet opens already paired to your room.
3. The tablet asks **What is this device?** Tap its role.

No camera, or the QR won't scan? Type the address shown under the room code, followed by `/display`, into the tablet's browser, for example `http://192.168.1.20:4000/display`. Then enter the room code and tap **Pair display**.



Pairing by typing the room code.

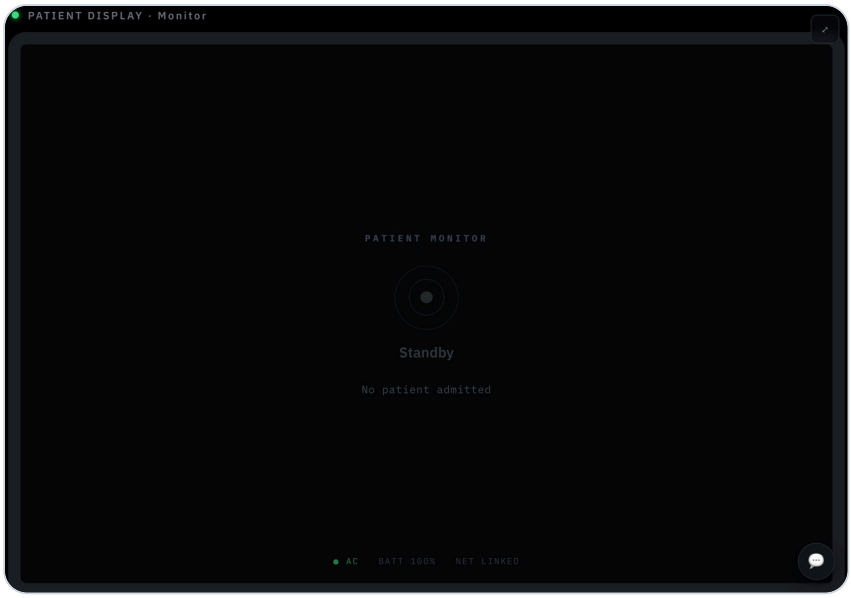


Each tablet chooses what it is.

The six roles

ROLE	WHAT IT BECOMES
Monitor	The patient monitor (ECG, SpO_2, blood pressure, respiratory rate, $EtCO_2$, temperature), with the defibrillator and pacer built in.
Ventilator	A ventilator with pressure and flow waveforms and bedside settings.
Pumps	Infusion pumps. Infusions are started from the EMR, then run and titrated here.
EMR	The electronic record: chart, ambulance handover, notes, prescribing, nursing orders, labs and imaging, disposition.
POCUS	A point-of-care ultrasound screen with depth, gain and freeze.
Phone	A ward phone for calling specialists and next of kin. You answer as the specialist.

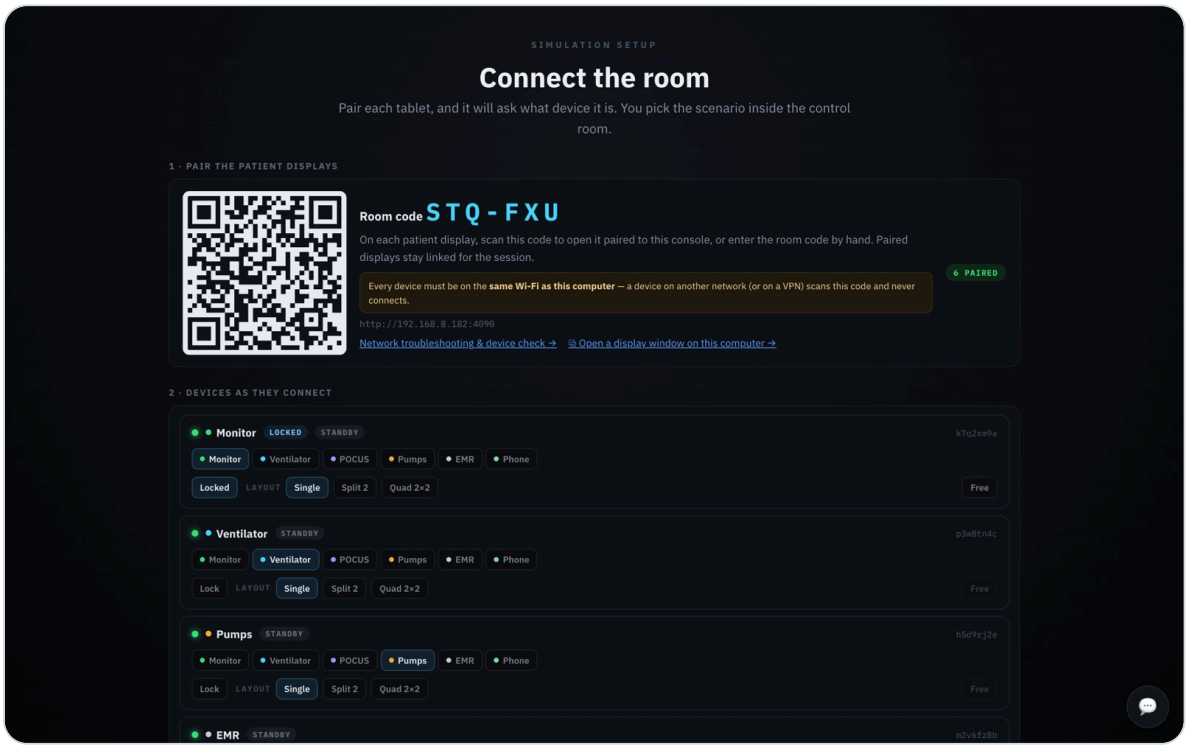
The tablet then waits on a standby screen. It comes to life when the simulation starts and the learner switches it on (see Run the simulation).



A monitor waiting for the simulation to start.

Watch them arrive

Each paired device appears under **2 · Devices as they connect**, with its role. You can change any role here.



Six tablets paired; one is still choosing what it is.

Enter the control room

When everything's paired, press **Enter control room**. You can go in before any device has paired.

Pair everything first

Once you enter the control room, the pairing QR code isn't shown again until the case ends. To add a tablet later, type the address with `/display` on the end (step above) and enter the room code. The room code is always shown at the top right of the console. You can also find the address on the setup check.

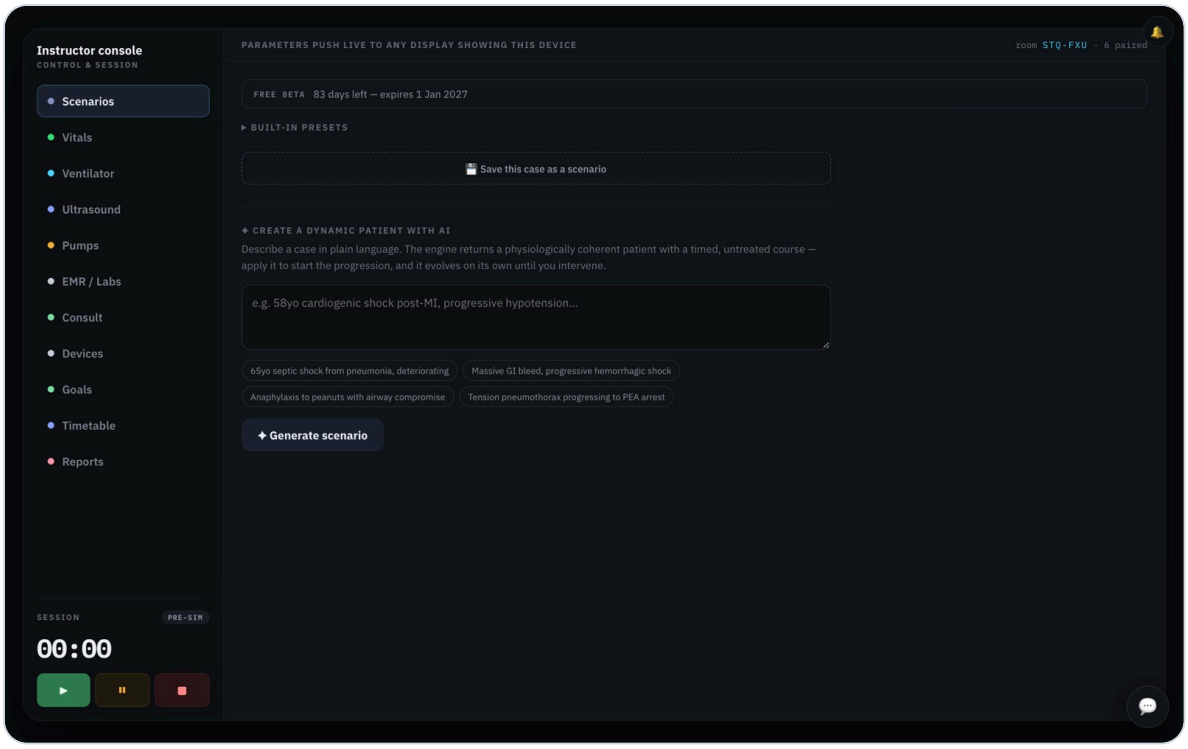
A display on the host computer

⧉ **Open a display window on this computer** opens a display in a second window, for a second screen or a projector. Type the room code into it. The window can take any role, just like a tablet.

7

The control room

This is your side of the simulation. Everything you change here reaches the learners' devices immediately.



The control room before a case.

The tabs

TAB	WHAT IT'S FOR
Scenarios	Load a preset, generate a case with AI, follow the running case, save cases.
Vitals	The patient: rhythm, vital signs, blood pressure cuff and arterial line, CPR, ROSC, the 12-lead ECG, and what shocks and pacing do.
Ventilator	Ventilator mode and settings, lung mechanics, oxygen supply failure.
Ultrasound	Choose where the probe is and what the scan shows.
Pumps	See running infusions; trigger pump alarms.
EMR / Labs	The chart the learners see, the units, and results for labs and imaging.
Consult	Answer the learners' phone calls and messages as the specialist.
Devices	Change, lock, split or free each tablet.
Goals	What the case tests, ticked off as the team does it.
Timetable	A timed log of everything that happened.
Reports	Beta feedback sent from the feedback bubble. Not a session report.

A tab flashes with an amber number when something is waiting: a test the learners have requested (**EMR / Labs**), a phone call or message (**Consult**), or a tablet that hasn't chosen a role (**Devices**).

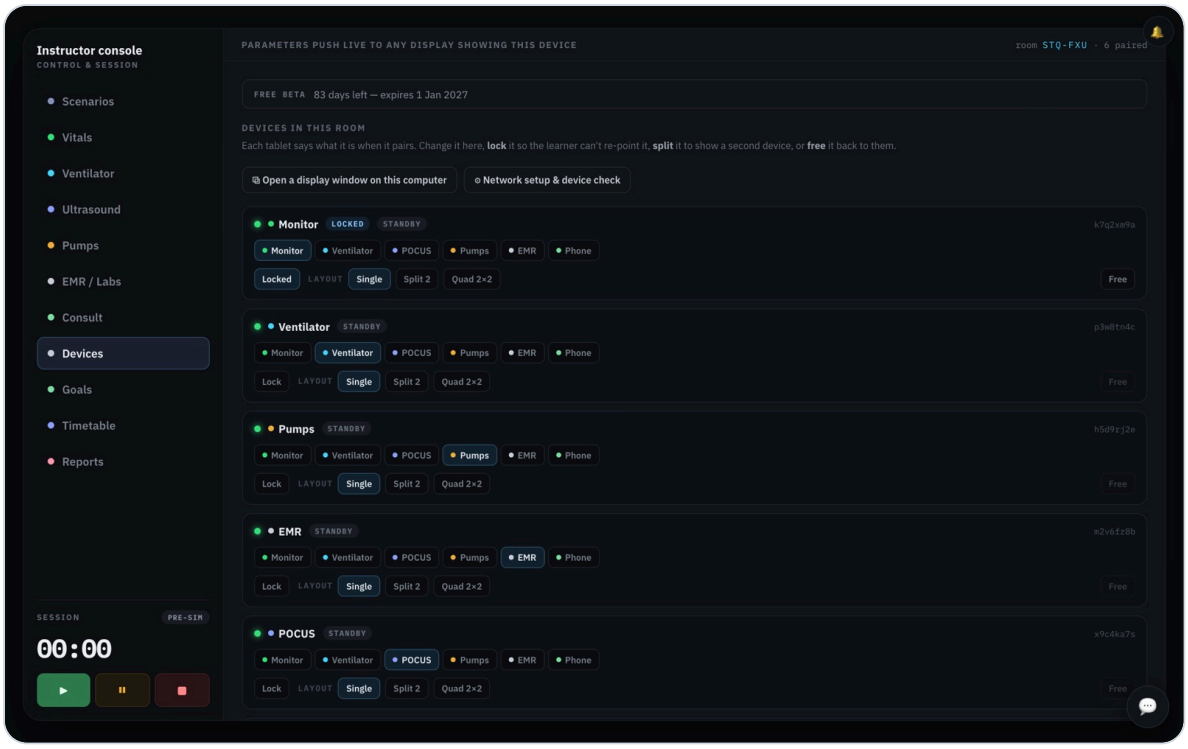
The session controls

Bottom left: the status (**PRE-SIM**, **RUNNING**, **PAUSED**, **ENDED**), the clock, and three buttons:

- ▶ **Start / resume**
- ⏸ **Pause**. See Pausing: on its own, it doesn't pause a timed case.
- ■ **Stop** ends the case and opens the debrief **immediately, with no confirmation and no way back**.

The 🔔 at the top right mutes the console's rings and alerts. The 💬 bubble at the bottom right sends feedback to the ResusSim team (see Getting help).

The Devices tab



Devices: the top tablet is locked as the monitor.

- **Role chips** change what a tablet shows. Changing a role sends that tablet back to standby; the learner switches it on again.
- **Lock** stops learners changing the tablet themselves.
- **Layout: Split 2** or **Quad 2×2** shows two or four devices on one screen, which is handy for a big TV or for when you're short of tablets.
- **Free** unlocks and un-splits it, keeping the role.
- **Forget** removes a tablet that's gone offline.
- **All screens at once** makes every display show the same device, for example to put the monitor on every screen.

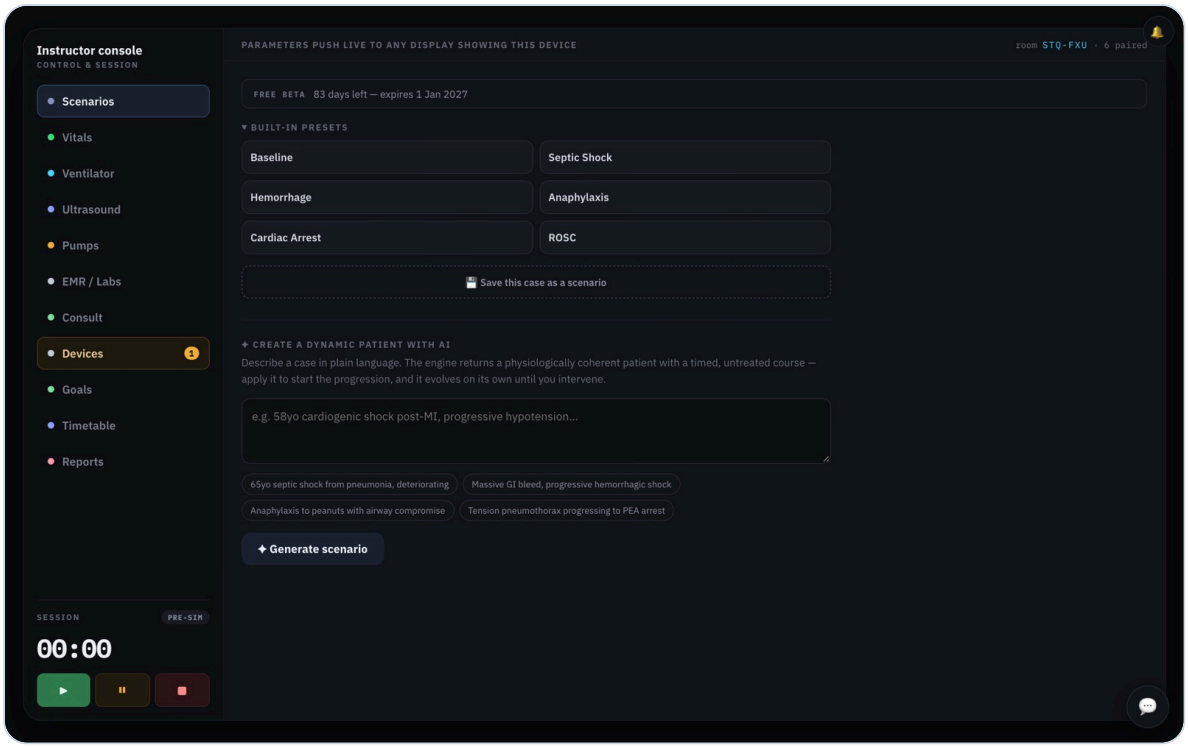
8

Set up a case

Choose a patient on the **Scenarios** tab, check the chart, decide what you're assessing, then connect the monitoring.

Option 1: a built-in preset

Open **BUILT-IN PRESETS** and click one: Baseline, Septic Shock, Hemorrhage, Anaphylaxis, Cardiac Arrest or ROSC. Presets set the starting vital signs and rhythm only. They don't change on their own; you drive the patient from the Vitals tab.



The built-in presets, and the AI case builder below them.

Option 2: describe a patient and let the AI build it

Type a one-line description under ✦ **CREATE A DYNAMIC PATIENT WITH AI**. You get a complete case: vital signs, a timed course if untreated, what happens if the team acts in time, the ambulance handover and background, results, and goals. See AI features.

Option 3: one of your saved scenarios

Cases you've saved appear under **MY SCENARIOS**. Click one to load it. A ▸ after the name means it has a timed course.

The patient's chart

The **EMR / Labs** tab holds what the learners will read on the EMR: the **EMS handover** (complaint, pre-hospital observations, story, treatment en route) and the **background** (past history, regular medicines, allergies). AI-built cases fill these in. Edit any field; changes save when you click out of the box.

Set the units for the whole room here too: **US conventional**, **UK** or **SI**. This changes lab units, temperature (°C or °F) and $EtCO_2$ (kPa or mmHg). ResusSim starts in US units; choose UK or SI here. Starting a new case puts them back to US, so set them again for each case. The screenshots in this guide use UK units.

Patient details

The name, age and weight on the monitor and EMR (A. Doe, 68, 82 kg) are the same for every case in this beta.

Goals

Goals are what the case tests: things the team must do (essential), should do (recommended), and must not do (harmful), optionally with a deadline. ResusSim ticks most of them automatically as the team acts. Goals are written in the AI case preview (Write the goals), before you apply the case.

Save the case

💾 **Save this case as a scenario** keeps the current patient, chart, ECG, lungs, results and timed course under **MY SCENARIOS**.

> **Where saved cases live**
> Saved scenarios are kept in this app on this computer only. They don't include the goals.

Connect the monitoring

The monitor starts with nothing attached: it shows **LEADS OFF** and no numbers. On the **Vitals** tab, tick **ALL**, or tick each box as the team puts on the ECG leads, the saturation probe and the capnography. Learners can take a blood pressure themselves from the monitor.

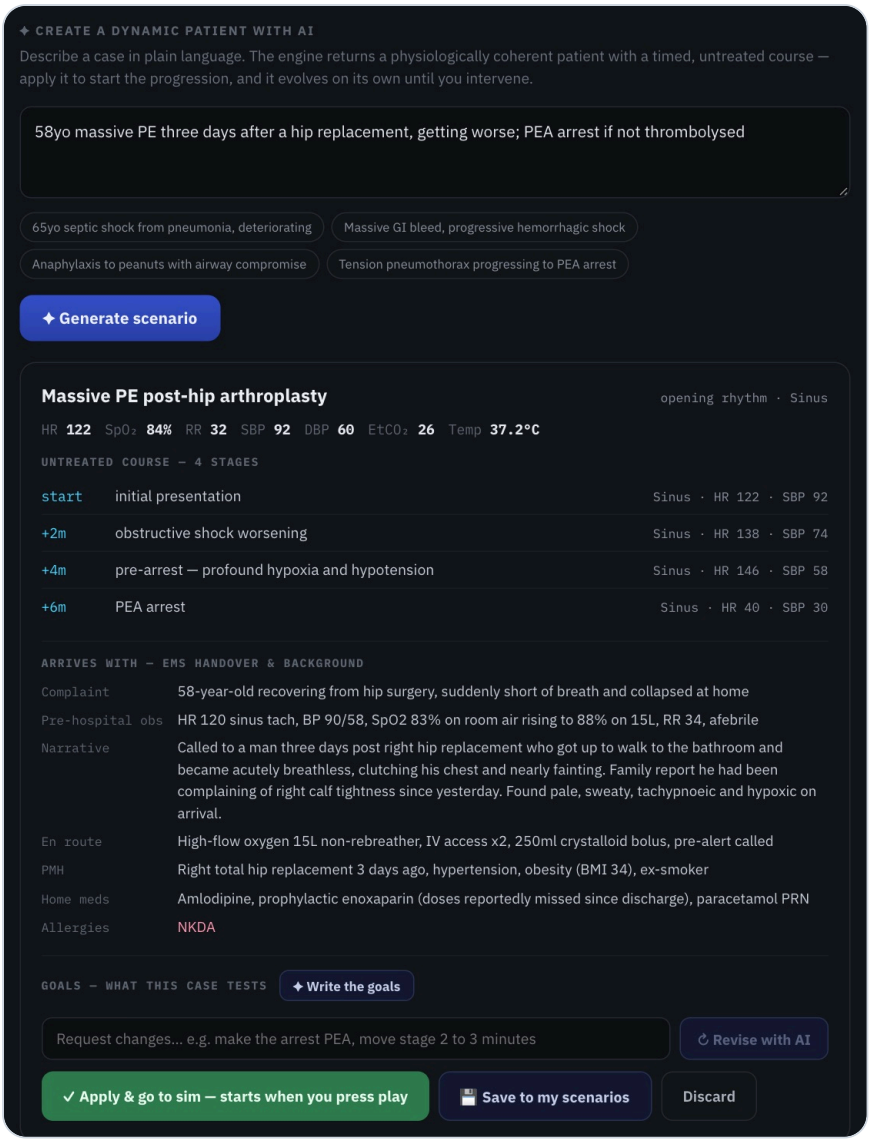
9

AI features

Four things in ResusSim use AI. They need the host to be online and signed in. Everything else works offline.

Build a case from a description

1. On **Scenarios**, type a description in the box, such as "65yo septic shock from pneumonia, deteriorating", or tap one of the examples.
2. Press ✦ **Generate scenario**. It takes a few seconds.
3. Read the preview: opening rhythm and vital signs, the **untreated course** stage by stage, and the ambulance handover and background.
4. Not quite right? Type what to change, such as "make the arrest PEA, move stage 2 to 3 minutes", and press ↻ **Revise with AI**.
5. Press ✓ **Apply & go to sim**. The case is loaded and waits for you to press ▶.



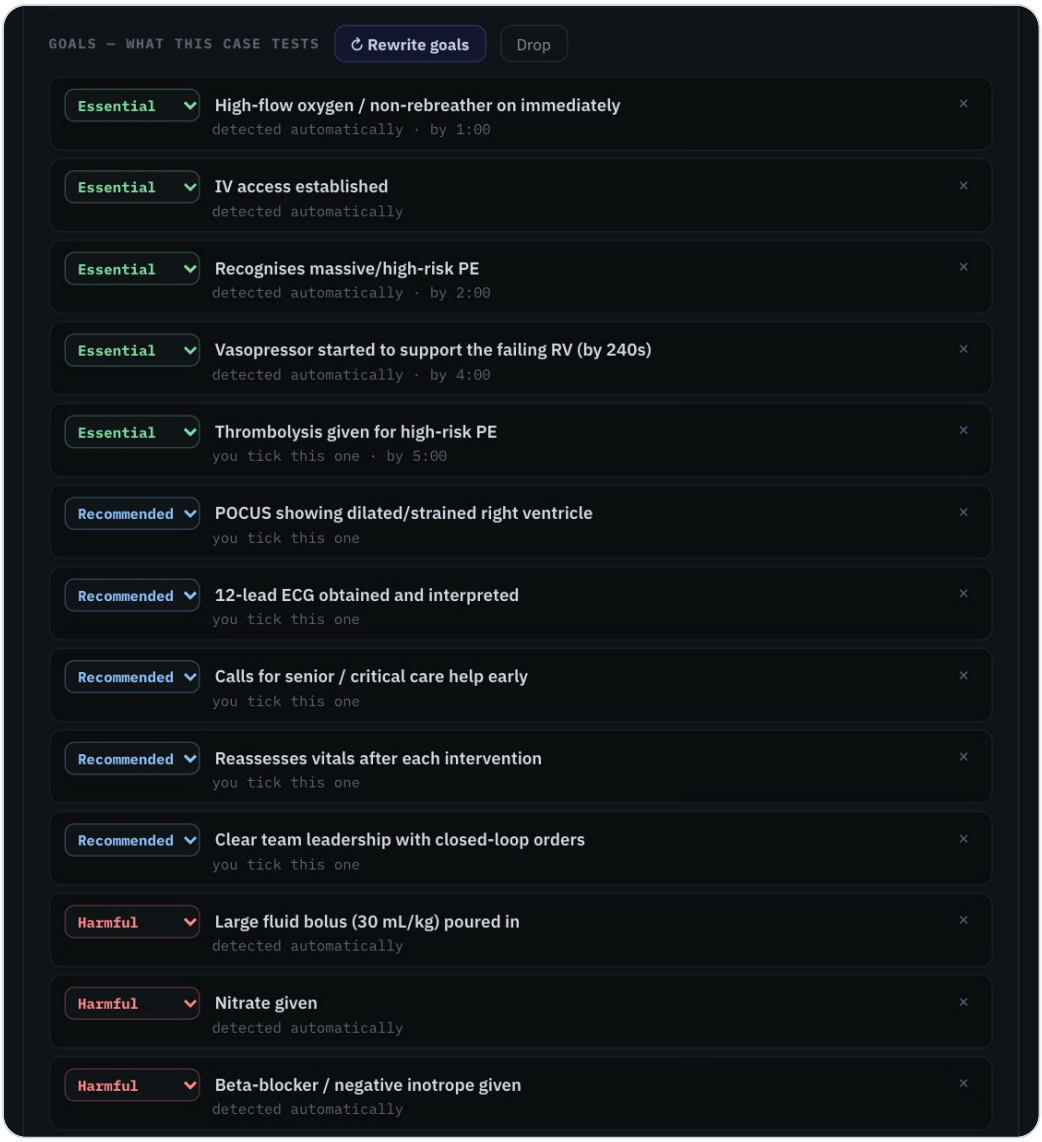
An AI-built case before you apply it: opening observations, the untreated course, and the ambulance handover and background.

You can fine-tune anything after applying, using the normal tabs. To use the case again, press 💾 **Save to my scenarios** in the preview.

> **Turn staging off before applying**
>
> If ⏱ **STAGE** is switched on (Vitals tab), applying an AI case keeps only its opening vital signs and drops the rest. Leave it on ● **SEND LIVE** when you apply a case.

Write the goals

In the preview, ✦ **Write the goals** drafts what the case tests. Change any goal's tier (Essential, Recommended, Neutral, Harmful), edit its wording, or delete it. Goals marked "you tick this one" are things only you can judge, such as leadership. Apply the case, and the goals appear on the **Goals** tab.



Drafted goals. Change a tier from its menu, edit the wording, or remove a goal with ×.

Change what happens next

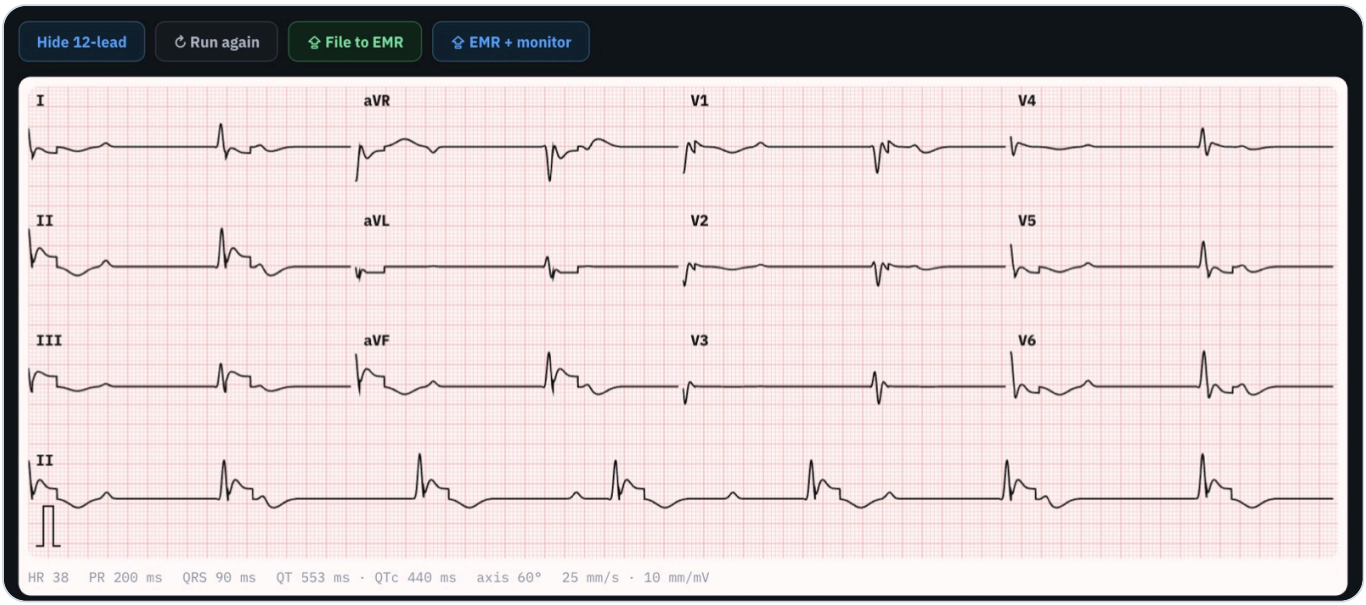
While a case is running, the box under the case on **Scenarios** rewrites the rest of it. For example: “they’re coping too well — make them arrest in two minutes unless they get adrenaline”. Press **Change the case**. The patient stays where they are; only what’s still to come changes.

Describe an ECG

On **Vitals**, open **ECG MORPHOLOGY**. Under **DESCRIBE THE ECG**, type something like “inferior STEMI with complete heart block at 38” and press **Build it**. ResusSim sets the ECG controls to match and shows what it built, so you can check it. This changes the live rhythm and heart rate, so use it before the case or when you mean to.



The AI sets the controls and says what it built.



The 12-lead it produced. Check it before you send it to the learners with **EMR + monitor**.

Your daily allowance

The AI features run on a commercial AI service that charges for every request. We're paying for it during the free beta, which is why each account has a daily allowance. We hope to find a sponsor to cover these costs, so ResusSim can stay free for as long as possible and the features already in the pipeline can follow.

Each beta account has **10 AI requests per rolling 24 hours**, enough for three or four complete cases. The console shows how many you've used. Every press of a button counts: generate, revise, write goals, change the case, build an ECG. A generated case with ECG findings counts as two.

When the AI isn't available

With no internet, ResusSim falls back to built-in content. For a new case it says so clearly: **NOT GENERATED — OFFLINE FALLBACK**, with a stock case that doesn't reflect what you typed. The other three fall back without a warning: **Write the goals** gives five generic goals, **Build it** matches keywords only, and **Change the case** applies a stock course. When you're offline, check what they produce, or set things by hand.

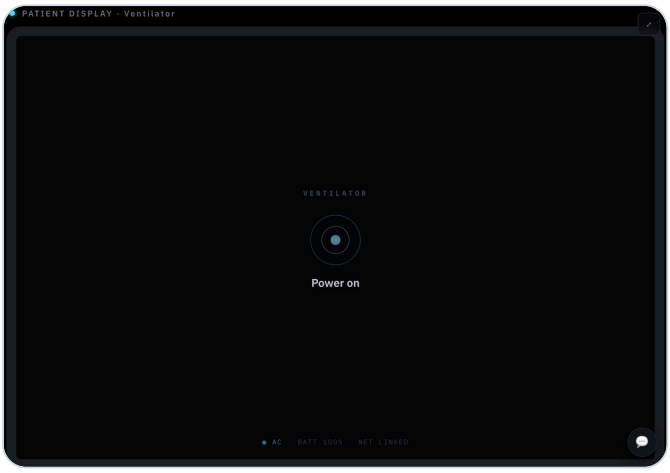
Generate cases while you're online and save the ones you like, so you can run them anywhere.

10

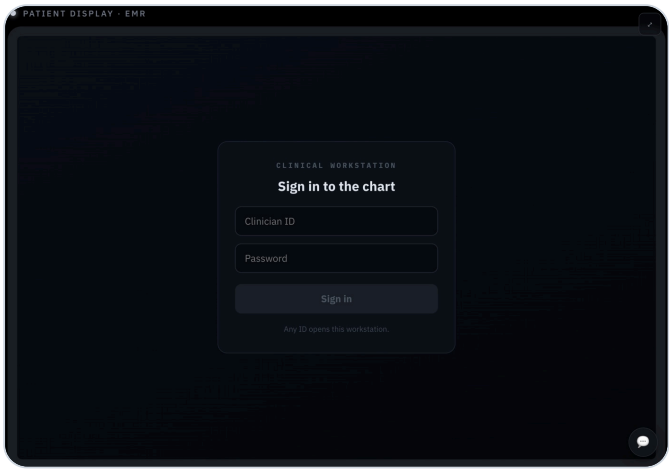
Run the simulation

Start

1. Press ▶. The status changes to **RUNNING** and the clock starts.
2. The learners switch on their own devices, just as they would in real life: **Admit patient** on the monitor, **Power on** on the ventilator and pumps, **Begin exam** on the ultrasound, and **Sign in** on the EMR (any name, any password).



Once you press ▶, each device can be switched on.

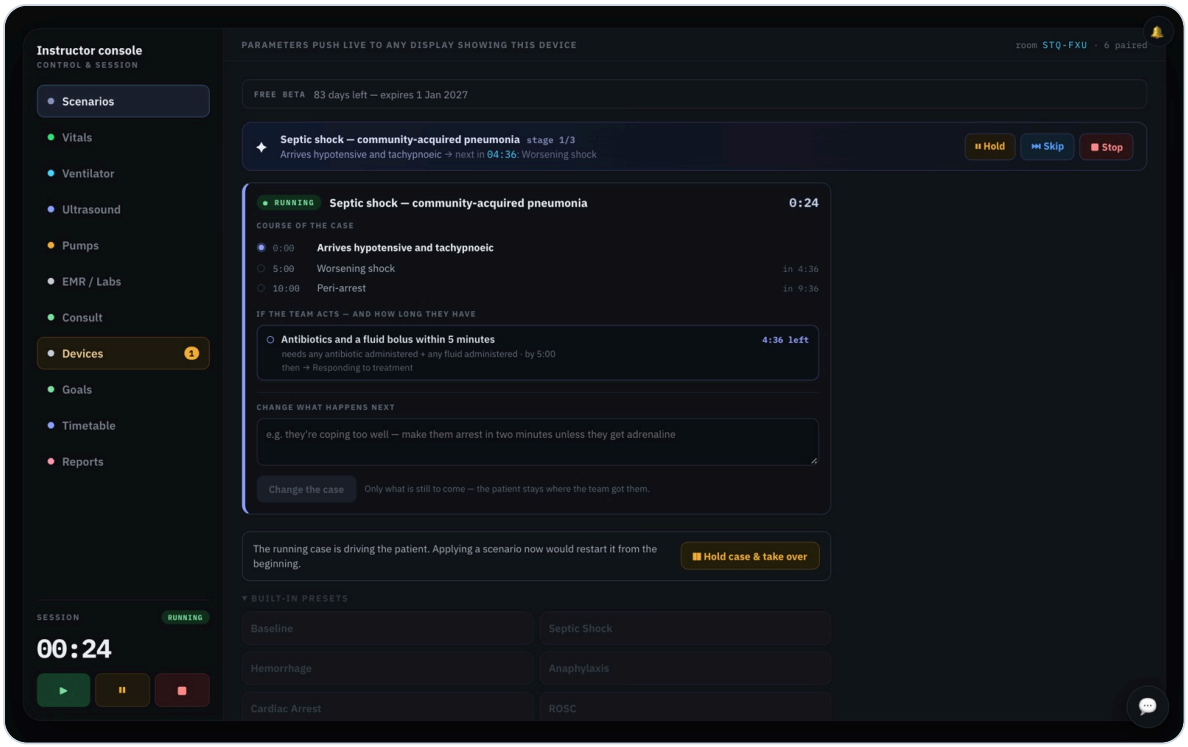


The EMR accepts any ID.

Follow a timed case

AI-built and saved cases with a course run on their own. The banner across the top and the card on **Scenarios** show:

- **Course of the case:** each stage of the untreated course and when it's due.
- **If the team acts, and how long they have:** what the team has to do, by when, and what happens if they do. When they do it in time, it shows **DONE — case forked**.



A running case: stage 1 of 3, and the team has 4:36 left to give antibiotics and fluid.

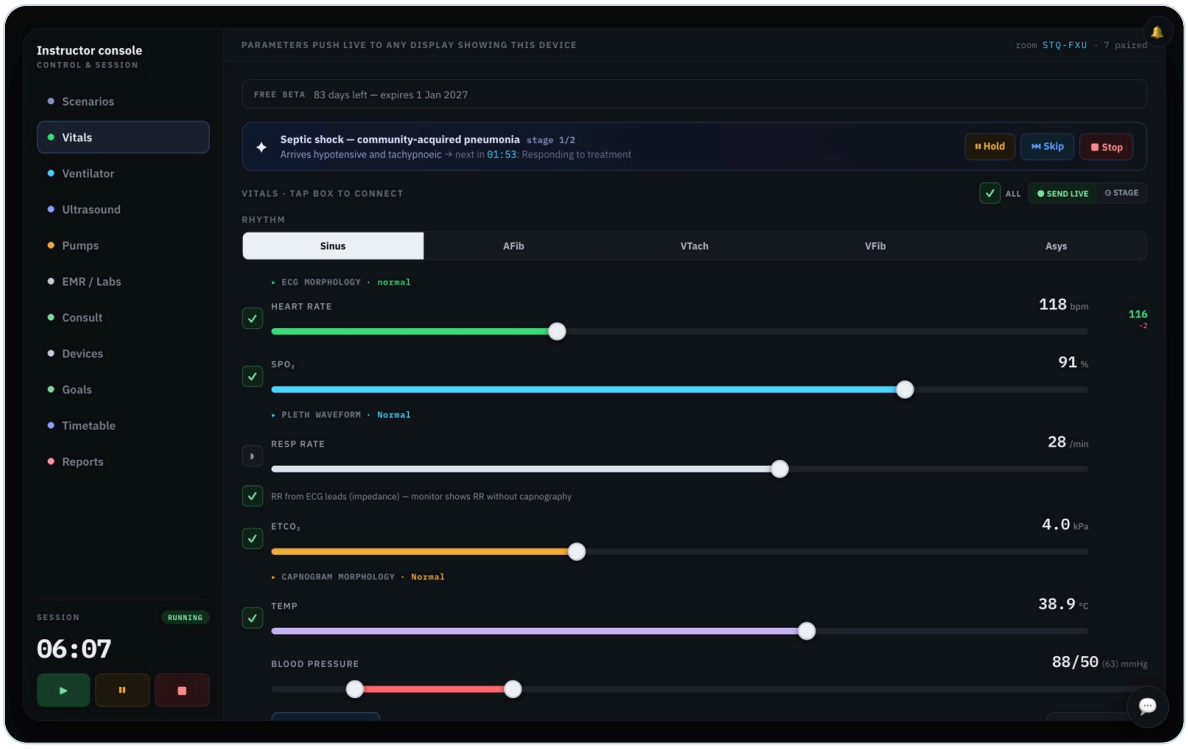
The banner buttons: ⏸ **Hold** freezes the course, ⏭ **Skip** jumps to the next stage, and ⏹ **Stop** ends the timed course but leaves the patient as they are. Banner Stop doesn't end the session. To take over the patient by hand, use ⏸ **Hold case & take over**.

Pausing

Press ⏸ Pause and ⏸ Hold

The ⏸ in the session controls pauses the clock and the devices, but a timed case keeps counting. When you resume, any stage that came due fires straight away. To pause a timed case properly, press ⏸ **Hold** on the banner as well. When you're ready, press ▶ and then ▶ **Resume** on the banner.

Change the patient: Vitals



Vitals: the sliders set the illness; the small coloured numbers on the right show the real value after treatment.

- **Rhythm:** Sinus, AFib, VTach, VFib or Asys.
- **Sliders** set the illness. Treatment acts on top of it, and the small coloured number beside each slider shows what the monitor is actually reading.
- **Blood pressure:** ↻ **Cycle NIBP now** takes a cuff reading (about 15 seconds). **Arterial line** adds an arterial line, which the learners have to zero on the monitor.
- **Resuscitation:** start and stop compressions, set CPR quality, mark the patient pulseless (PEA), give a breath, or ⚡ **ROSC**.
- ● **SEND LIVE** sends changes immediately. ❂ **STAGE** queues them so you can release several at once.

Shocks and pacing

Learners charge and shock, or pace, on the monitor. On **Vitals**, under **LEARNER THERAPIES**, you decide what the patient does:

- **Shock outcome:** ROSC, Refractory or Asystole after a shock for VF or VT. Shocking any other rhythm is logged but changes nothing, so for synchronised cardioversion (of AF, say), change the rhythm yourself after the shock.
- **Pacing:** the current (mA) needed for electrical and mechanical capture, and whether learners are allowed to start pacing.

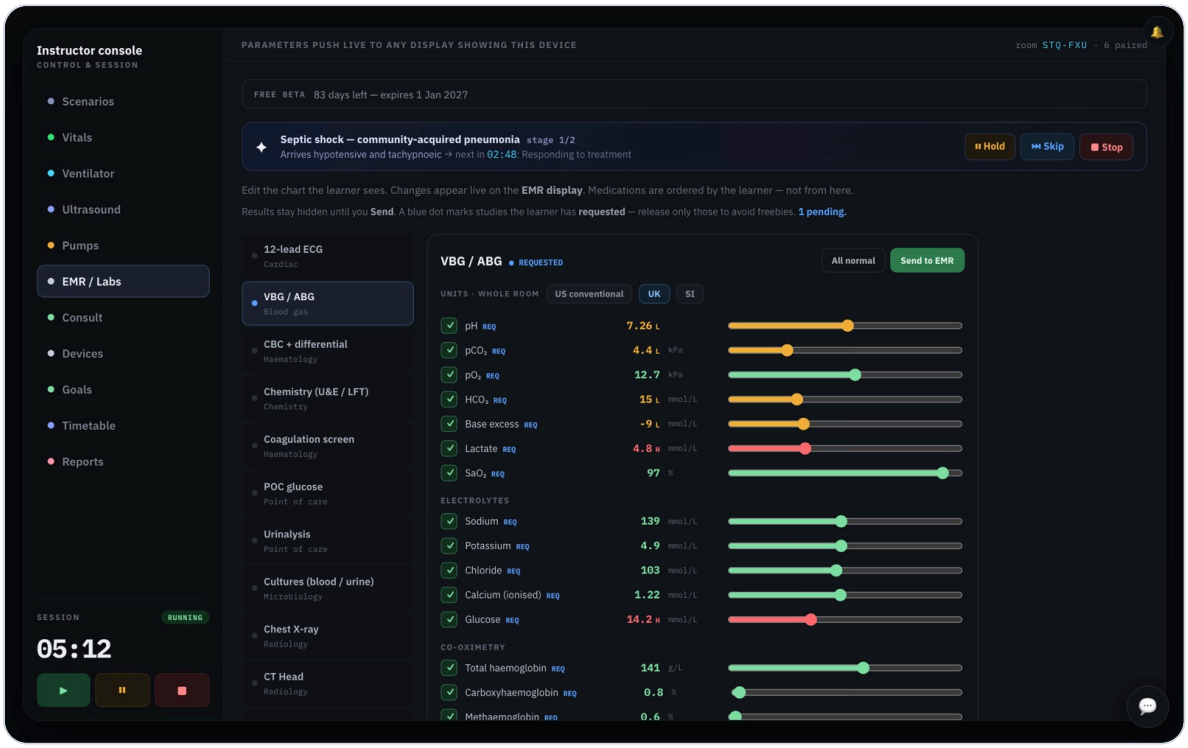
12-lead ECG

Open **ECG MORPHOLOGY** on **Vitals** to shape the ECG: blocks, bundle branch blocks, ST changes by territory, intervals, axis, named patterns such as Brugada or WPW, or describe it in words (AI).

Preview 12-lead shows it to you. **⏏ EMR + monitor** gives it to the learners; use this rather than **⏏ File to EMR** so the team sees the tracing on the monitor.

Labs and imaging

1. A learner orders a test on the EMR. The **EMR / Labs** tab flashes and the test shows a blue dot, with **REQ** beside each value they asked for.
2. Set the values with the sliders. AI-built cases come with results already set. H and L flags follow the values.
3. Press **Send to EMR**. The result appears on the learners' EMR.

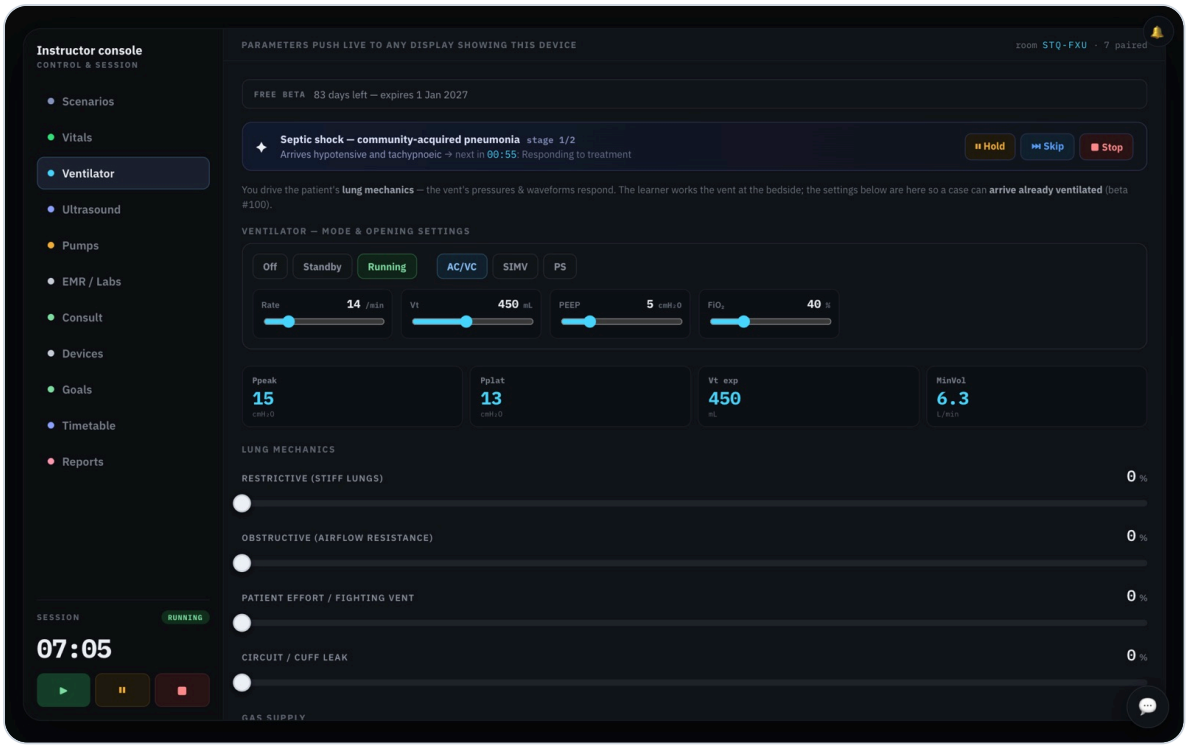


A blood gas the team has requested, ready to send.

Results are a snapshot. If the patient changes later, press **Re-send** to give the team a fresh sample. For imaging, write the report and optionally add a real image with **↥ Choose an image**.

Ventilator

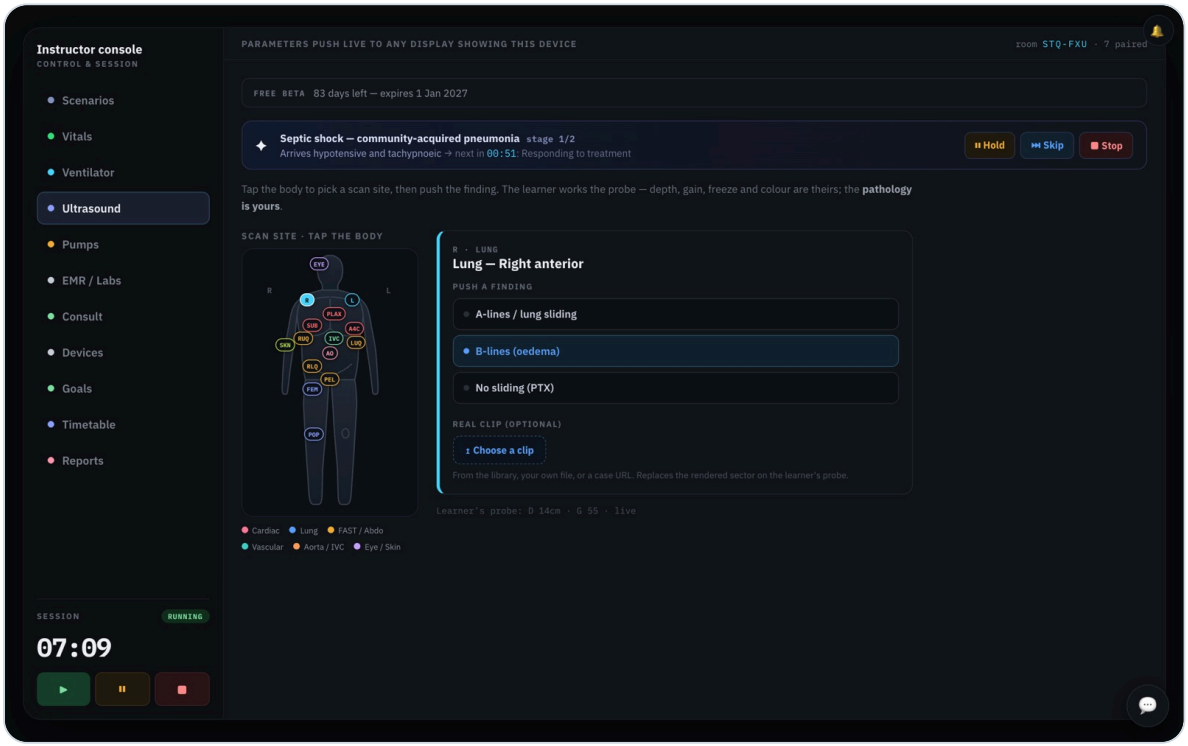
The **Ventilator** tab sets the mode and starting settings, the lungs (with presets such as ARDS, COPD/asthma, breath stacking, a circuit leak or a patient fighting the ventilator), and can fail the oxygen supply. Learners change settings on the ventilator itself and the patient responds.



The Ventilator tab.

Ultrasound

On **Ultrasound**, tap the body where the probe is, then choose what it shows, such as B-lines, a pericardial effusion or free fluid. You can also add a real clip. The learner controls depth, gain and freeze.



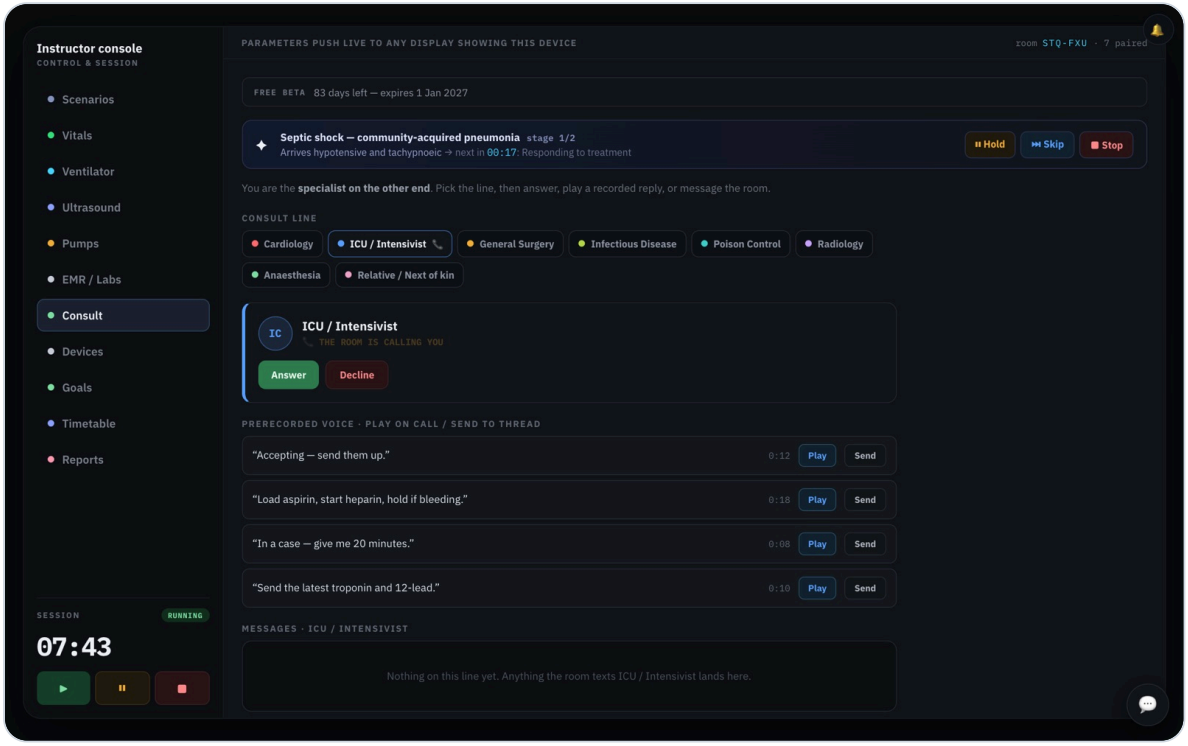
Choosing the right anterior lung, showing B-lines.

Pumps

The **Pumps** tab shows every infusion running. You can't start infusions from here (learners do that on the EMR), but you can cause an ⚠ **Occlusion**, ⚠ **Air in line** or ⚠ **Infusion complete** alarm, which stops the drug until the learners deal with it.

Phone calls: you're the specialist

When the learners call someone from the Phone, the **Consult** tab rings. Press **Answer**, then reply as the specialist: out loud from where you are, by text message, or with one of the prepared replies (these appear as text on the phone). You can also call the room yourself with 📞 **Ring the room**.

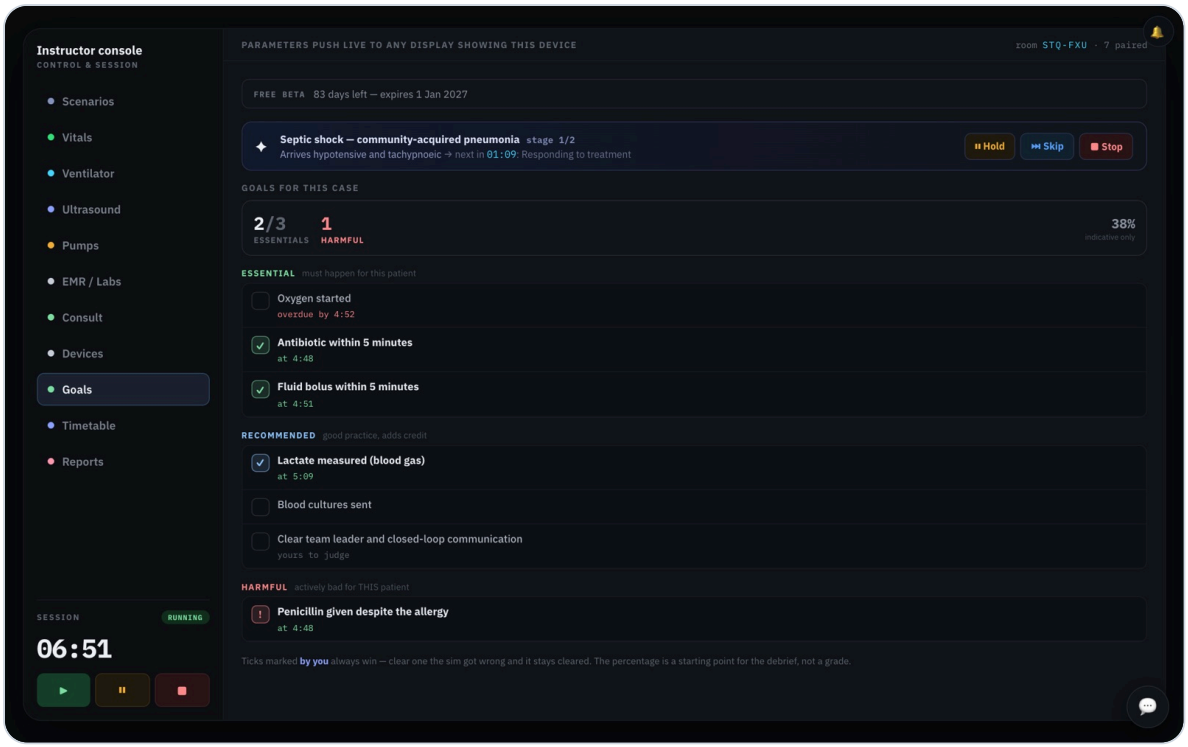


The room is calling ICU.

Talking through the tablet (🎧 **Join live audio**) needs Secure mode. Without it, answer the call and speak to the team directly, or use the messages. If the phone can't open its microphone, it says why and links to the certificate and the step-by-step manual.

See what the team is doing

The **Timetable** logs every action, by you and by the learners, with the time, and you can search it. The **Goals** tab ticks goals off as they're met, shows deadlines counting down, and flags anything harmful. Click a goal to tick or untick it yourself; your mark always wins.



Goals during a case: antibiotics and fluid given in time, oxygen overdue, a penicillin given despite the allergy.

11

The learners' devices

What the team sees and does on each tablet. Everything they do changes the patient and is logged for the debrief.

On every device

- The **SOURCE** bar at the top lets learners change what a tablet shows, unless you've locked it (**INSTRUCTOR SET**). Changing it puts the tablet back to standby.
- ◫ **SPLIT** shows a second device alongside.
- **Sound:** tap the monitor once after admitting the patient to switch on its beeps and alarms. iPads won't play sound until someone has touched the screen.
- Use the browser's full-screen option, or add the page to the home screen, so it fills the tablet.

Monitor and defibrillator



The monitor.

- **Blood pressure: ↻ Cycle** takes a reading (about 15 seconds). **Auto** repeats it every 1–15 minutes.
- **Lead:** choose the lead shown in the top lane.
- **Arterial line:** when you insert one, the learners have to press **ZERO** before it reads.
- **Alarms** flash for VF/VT, asystole, low saturation and low blood pressure.

Defibrillation: press **DEFIB**, set the energy with – and +, press **CHARGE**, then ⚡ **SHOCK**. **SYNC** arms synchronised cardioversion. Every screen flashes when a shock is given. **Pacing:** press **PACER**, set the rate and current, and press **START PACING**.

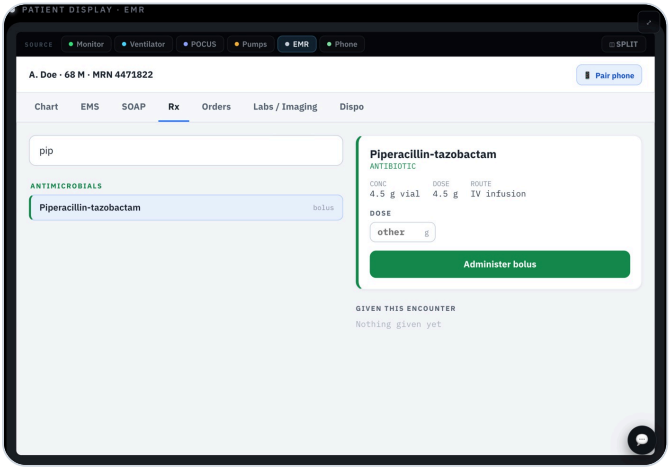


VF, charged to 200 J and ready to shock.

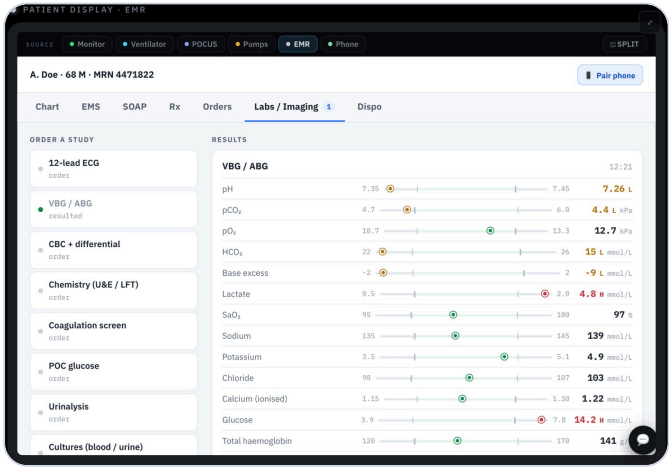
EMR

The team signs in with any name. The tabs:

- **Chart** and **EMS**: background and the ambulance handover.
- **SOAP**: the team's notes, shown in the debrief.
- **Rx**: prescribe and give medicines. Search for a drug, choose a dose, then **Administer** for a bolus or **Start infusion**, which loads it onto the pumps. Doses matter: too little has little effect, and too much causes side effects.
- **Orders**: oxygen, position, IV/IO access, catheter and other nursing orders. Oxygen and position change the patient.
- **Labs / Imaging**: order tests. Results appear only when you send them.
- **Dispo**: where the patient goes, the working diagnosis, and ■ **End case**.



Rx: choose a drug and give it.



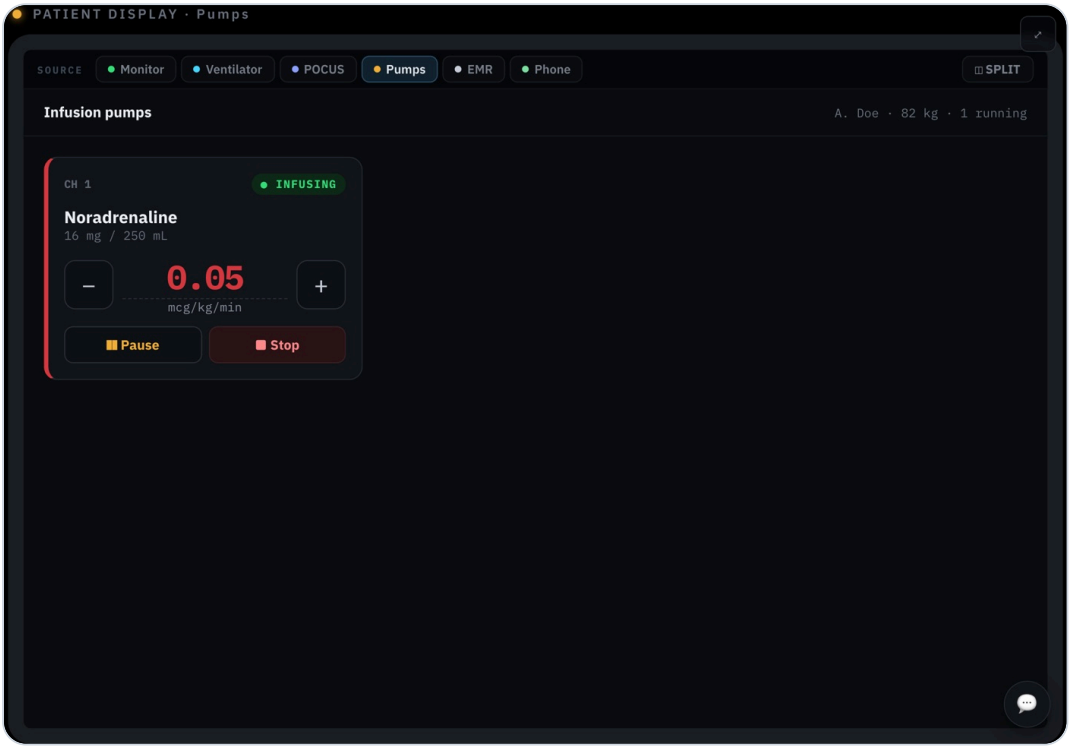
Labs / Imaging: a result you've sent.

A test can be ordered once. For a repeat (say, a second blood gas), use **Retract** and then **Send** on your side.

📱 **Pair phone** at the top of the EMR shows a QR code that learners can scan with their own phones (see Student phones).

Pumps

Infusions started on the EMR appear here. The team changes the rate with – and + or by typing it, then presses ✓ **Confirm**. They can also **Pause** and **Stop**. After an alarm, **Silence & clear** leaves the pump paused; press ▶ **Resume** to restart it.



Noradrenaline running at 0.05 mcg/kg/min.

Ventilator

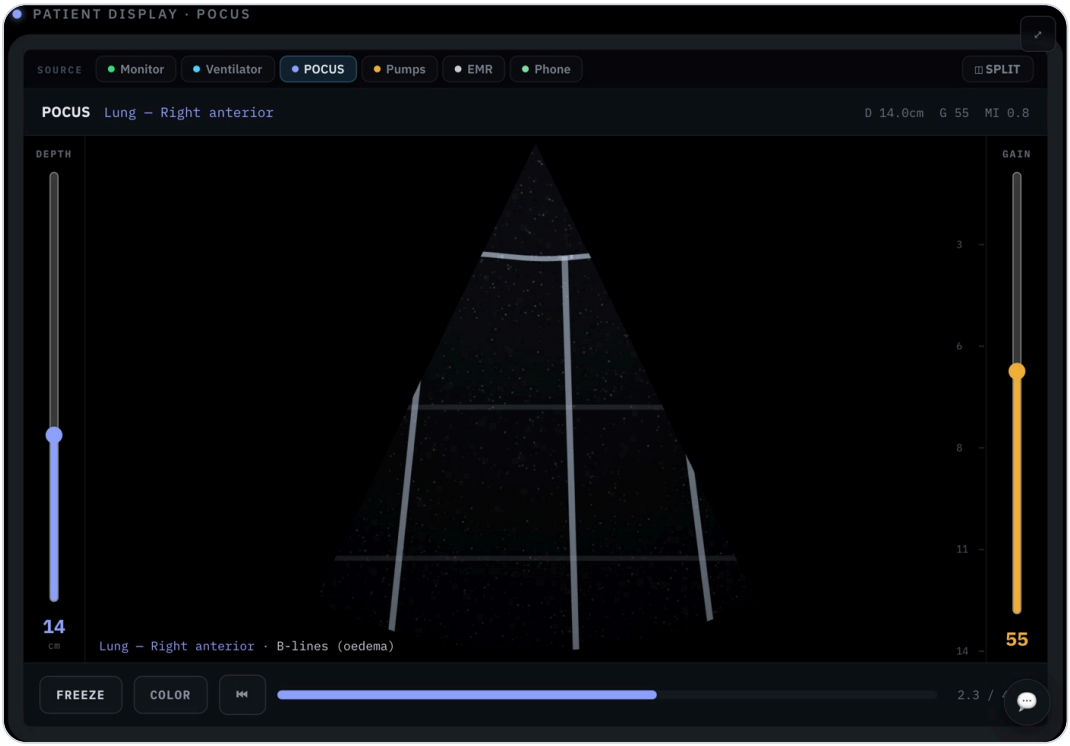
After **Power on**, the ventilator starts switched off. Press ⏻, then ▶ **Start ventilation**. Change a setting by tapping it (Rate, Vt, PEEP, O_2), adjusting it, and pressing ✓ **Confirm**. ⋯ **MORE** has alarm limits, I:E and an expiratory hold.



The ventilator, ventilating in AC/VC.

Ultrasound (POCUS)

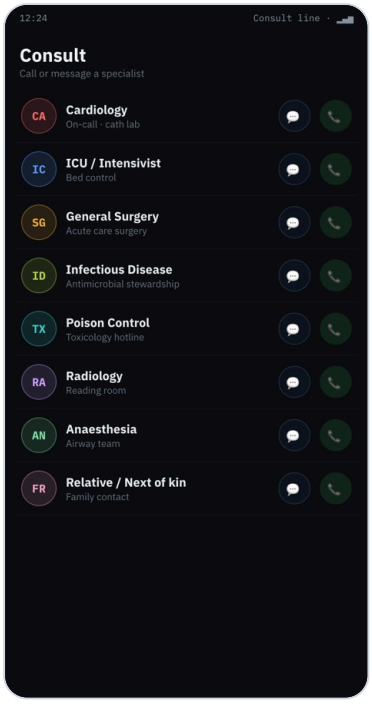
Shows the view you've chosen on the console. Learners adjust **depth** and **gain**, and can **FREEZE** and scroll back through the clip.



B-lines in the right anterior lung.

Phone

A contacts list: cardiology, ICU, surgery, infectious diseases, poisons, radiology, anaesthesia and next of kin. Learners call (📞) or message (💬), and you answer on the **Consult** tab.

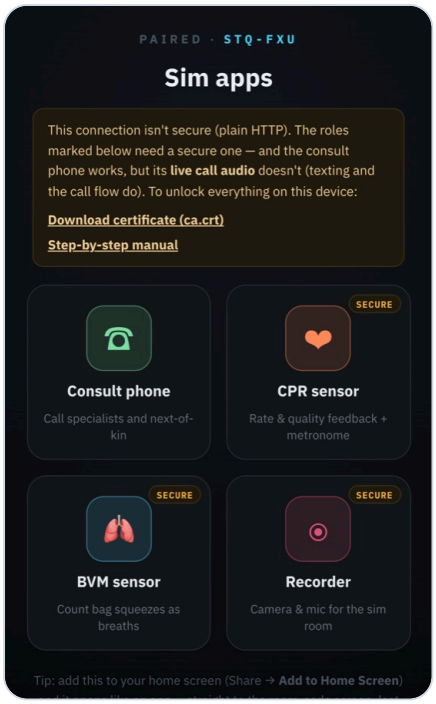


The ward phone.

A tablet set to Phone fills the screen with the phone. To change it back, use the Devices tab.

Student phones

Learners can join with their own phones by scanning 📱 **Pair phone** on the EMR. Their phone offers four **Sim apps**: **Consult phone** (works straight away), and **CPR sensor**, **BVM sensor** and **Recorder**, which need Secure mode.



Sim apps on a student phone. The three marked SECURE need Secure mode.

Student phones don’t appear on your Devices tab, and a phone used as the CPR sensor overrides the compressions switch on your Vitals tab. Close the CPR sensor when it isn’t in use.

12

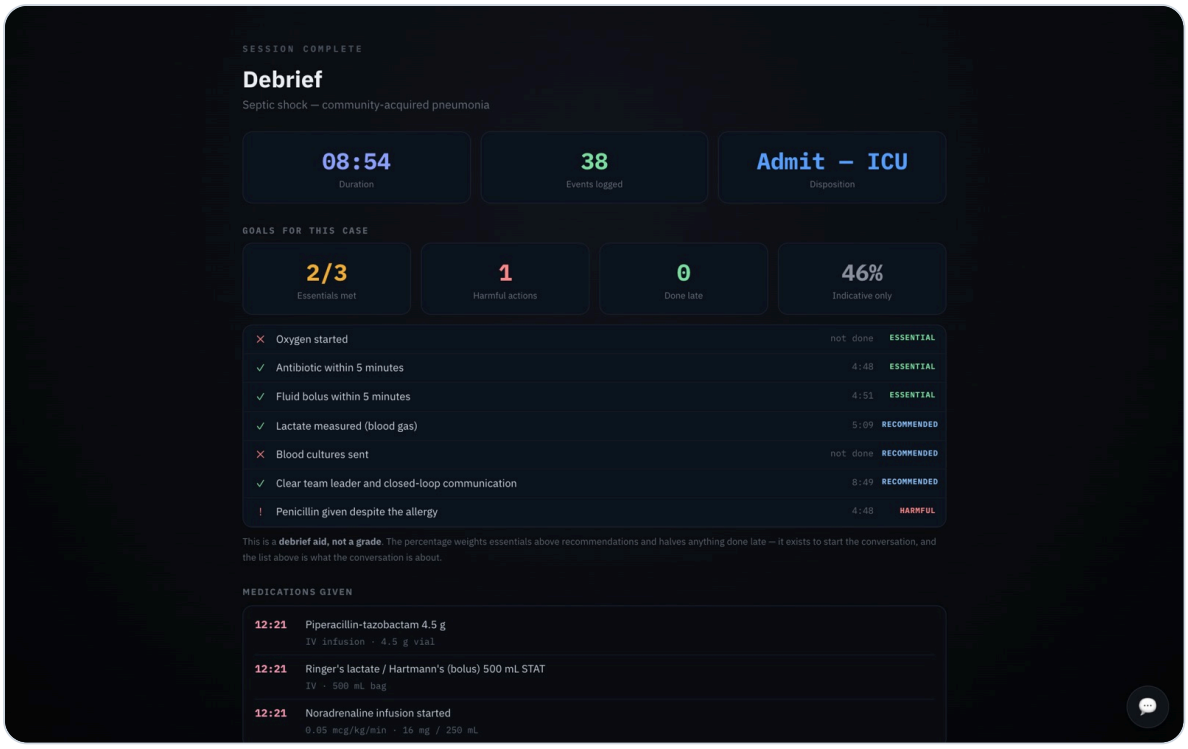
Debrief

Ending the case

- **You:** press ■ in the session controls. The debrief opens immediately.
- **The team:** on the EMR’s **Dispo** tab, choose where the patient is going, press ■ **End case**, then ■ **Confirm — end the case for everyone**.

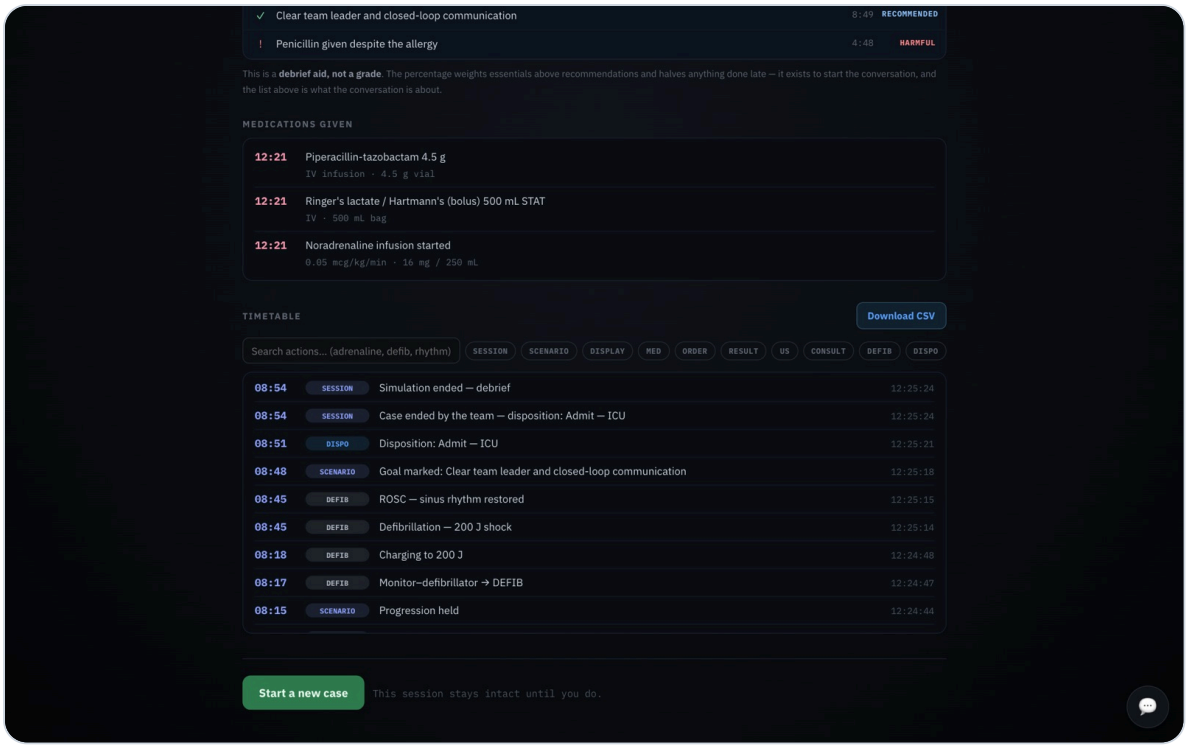
All the learner devices go back to standby. The debrief appears on your console only. To show it to the room, share your screen or put the console on a projector.

What the debrief shows



The top of the debrief: how long it took, the disposition, and each goal.

- **Duration, events logged and disposition.**
- **Goals for this case:** essentials met, harmful actions, anything done late, and a percentage. It's a starting point for the conversation, not a grade.
- **Medications given**, with times and doses.
- **Timetable:** everything that happened, searchable and filterable. **Download CSV** saves it as a spreadsheet.
- **Learner's note:** what the team wrote in SOAP.



Medications and the timetable, ready to download.

Next case

Start a new case clears the patient and the log and takes you back to “Connect the room”. The tablets stay paired, so you can go straight back into the control room. It also resets the units to US; set them again on **EMR / Labs**. The debrief stays until you press it, so you can take your time.

13

Secure mode: sensors, live audio and recording

Optional. Everything in this guide so far works without it. Turn it on only if you want one of these:

- **Live call audio**: talking to the learners through the phone.
- **CPR sensor**: a phone strapped to the manikin’s chest measures compression rate and depth.
- **BVM sensor**: a phone on the bag counts breaths.
- **Recorder**: a phone or tablet films the room for the debrief.

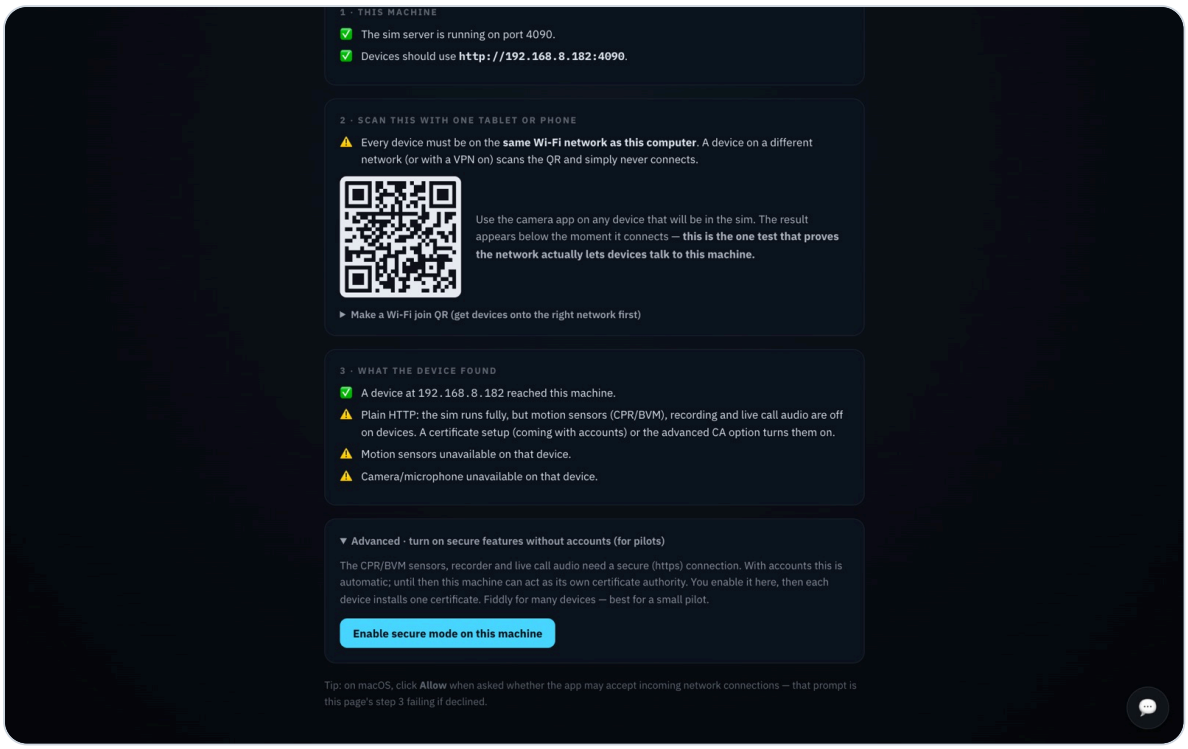
Browsers only allow the camera, microphone and motion sensors on a secure (https) connection. Secure mode gives the host a certificate, which each device has to trust once.

1. On the host, open the setup check (**Open setup check** from the menu-bar or tray icon, or ⚙ **Network setup & device check** on the Devices tab). Expand **Advanced · turn on secure features without accounts (for pilots)** and press **Enable secure mode on this machine**.

2. **iPhone / iPad:** scan the certificate QR code in Safari, install the profile (Settings ▸ General ▸ VPN & Device Management), then turn on full trust for **ResusSim Local CA** in Settings ▸ General ▸ About ▸ Certificate Trust Settings.

3. **Android, Chromebook or laptop:** download the certificate (ca.crt) from the same panel and install it as a trusted certificate.

4. After that, devices switch to the secure connection on their own.



The Advanced panel on the setup check.

The step-by-step guide with pictures for each kind of device is at sim.resussummit.com/secure-mode.

Recording is experimental in this beta

On a phone or tablet in Secure mode, choose **Recorder** in Sim apps, allow the camera, and press ● **Start recording**. Press ■ **Stop recording** when the case ends; the video then appears in the debrief, and clicking a timetable row jumps to that moment. Keep the recording phone unlocked and on that screen throughout. We haven't yet tested this end to end on every device, so try it before relying on it, and please tell us how it goes.

Troubleshooting

WHAT YOU SEE	WHAT TO DO
A tablet scans the code but never connects	Check it's on the same Wi-Fi as the host and that its VPN is off. If it still fails, the network is blocking devices from talking to each other. Switch to a phone hotspot or your own router (Choose the network). Run the setup check to confirm.
Nothing connects to a Windows host	Allow ResusSim in Windows Defender Firewall for Private networks, and set the Wi-Fi to Private in Windows' network settings. On a managed PC, ask IT.
Nothing connects to a Mac host	System Settings ▸ Network ▸ Firewall ▸ Options: make sure ResusSim is allowed to accept incoming connections.
The app opened on "Get the room connected" and there's no way on	That's the first-launch check. Close the window, then click ResusSim in the Dock (Mac) or open ResusSim again from the Start menu (Windows).
The monitor says LEADS OFF and shows dashes	Connect the sensors: tick **ALL** on the Vitals tab.
Device buttons say "Standby" and can't be pressed	The simulation hasn't started. Press ▶.
A tablet says "Waiting for the instructor to start the simulation" even though it's running	It has lost its connection to the host. Check its Wi-Fi, then reload the page.
The consult phone has no live audio, or says it could not open the microphone	The phone doesn't trust the host's certificate yet. If Safari's address bar says "Not Secure", finish every step in Secure mode, especially the trust switch in Certificate Trust Settings. If you installed a ResusSim certificate before, from another computer or while ResusSim was on different ports, remove that profile first (Settings ▸ General ▸ VPN & Device Management), then install it again from the certificate QR code on the setup check.

The setup check shows a port other than 4000	Another program on the host was using the usual port, so ResusSim took the next one. Use the address the setup check shows, and scan its new QR codes on devices you set up before. To get the usual port back, quit the other program, then quit ResusSim from the menu-bar or tray icon and open it again.
No sound from the monitor	Tap the monitor screen once. Check the speaker icon isn't muted and the tablet's volume is up.
A tablet arrives after the case has started	Type the address shown on the setup check with `/display` on the end, then the room code from the top right of the console.
All the tablets show "Pair to a room" and the room code has changed	If the console is closed and nothing is connected for 15 minutes, the room closes. Pair the tablets again with the new code.
A stage fired as soon as I resumed	⏸ alone doesn't hold a timed case. Use ⏸ Hold on the banner too (Pausing).
I pressed ■ by mistake	The case can't be resumed. Go through the debrief, then **Start a new case**.
"AI allowance used for today"	You've made 10 AI requests in the last 24 hours. The message says when you can generate again. Saved and built-in cases still work.
The AI case says OFFLINE FALLBACK	The host isn't online, or isn't signed in. Connect to the internet and generate again.
The sim stopped when I closed the laptop	A closed lid puts the computer to sleep. Keep it open and plugged in.

15

Getting help

The 💬 feedback bubble is on every screen, on the console and on every tablet. Choose **Bug**, **Feedback** or **Change request**, describe what happened, and press **Send**. It goes straight to the ResusSim team, with the screen it was sent from attached. If you're offline, it sends when you're next online.

Email resussim@resussummit.com for anything else, including installation problems. Say whether your host is a Mac or a Windows PC, and include a screenshot if you can.

This is a beta, so your feedback shapes what we build next. Thank you for testing it.

ResusSim is part of Resus Summit. This guide describes version 0.1.0-beta.2. Screenshots were taken from a test session; your addresses and room codes will be different.