Quick Start Guide

EM Evidence Sim · for instructors running scenarios · updated 10 October 2026

What you need

You can run a simulation with one laptop and one screen the team can see. Everything runs in a web browser at emsimulator.com; there is nothing to install.

Device	Who uses it	Needed?
Laptop or tablet: the **instructor screen**	You, out of the team's sight	Always
A second screen, TV, projector or device: the **room monitor**	The team	Always
A tablet: the **defib**	The team	Only for Defib Sim, or if you want the team to use a defibrillator
A tablet: the **ventilator** (HAMILTON-T1, or the Dräger Atlan A350 or HAMILTON-C6 for Anaesthetics / ICU)	The team	Optional, for Ventilator Sim or a ventilated patient. Without one, the ventilator shows on the room monitor instead

- Every device needs an internet connection. The screens link to each other online using a session code.
- Sound (alarms and beeps) plays on the room monitor by default, so turn its volume up.
- You do not need to sign in to run the built-in scenarios.

Step 1: Open the app

1. On your laptop, open emsimulator.com. It asks **What is this device for?** Choose **Controller**.
2. Note the six-character **Session Code** (for example K7PQ3M). It is shown at the bottom of the start screen and in the top right corner as "Session ID" once a scenario is running.
3. The code is what links the room monitor, the defib and the ventilator to your screen. Each group can keep the same code all day.

Starting with a new group? Open **Connect patient screens** and press **New code**. Any monitor or defib still on the old code will need to join again.

Step 2: Choose a scenario

The start screen asks **What do you want to run?** Pick a card. For most teaching, use **Scenario library**. **All options** takes you back to the cards.

Card	Use it for	How to start
Scenario library	A ready-written scenario (anaphylaxis, sepsis, trauma, paediatrics and more)	Pick a category, press **Load**, read the brief, press **Start Scenario**, then **START**
Quick Sim	A blank patient you control by hand, for ad-hoc bedside teaching	Set age, weight and starting rhythm, press **Start Quick Sim**, then **START**
Defib Sim	Defibrillation, cardioversion and pacing skills on the defib tablet	Pick Education or Assessment, pick a scenario, press **Start Defib Sim**, then **START** (or it starts at the learner's first press on the defib)
Ventilator Sim	Ventilator skills on the HAMILTON-T1: nine scenarios covering NIV, CPAP, invasive ventilation, troubleshooting, mucus plugging and transfer	Pick Education or Assessment, pick a scenario, press **Start Ventilator Sim**, then **START**
Anaesthetics / ICU	The Dräger Atlan A350 anaesthetic machine for anaesthetic emergencies for novice anaesthetists (Quick Reference Handbook), and the HAMILTON-C6 ICU ventilator for ICU ventilation	Pick the machine, Education or Assessment and a scenario, press **Start anaesthetic machine scenario** (or **Start ICU ventilator scenario**), then **START**
Random scenario	A generated patient from a category and acuity you choose	Press **Generate Scenario**, then start it
My scenarios	Scenarios you have written or imported, saved to your account (sign in to save)	Load one from **Saved**, or write one in **Builder**, then start it

The brief shown before **Start Scenario** has the patient story, equipment, expected progression, key interventions and learning objectives. Read it before the team comes in.

Step 3: Set up the room monitor (and defib)

You do not have to set the screens up before you start: you can connect screens at any time, from **Connect patient screens** at the bottom of the start screen or from **Screens** during a scenario.

On each patient screen (tablet, laptop or TV), scan the QR code shown on the controller. No camera? Open the site, choose **Patient screen**, type the code and press **Connect**. That is all: the screen does not ask what it is.

On the controller, every screen appears numbered (1, 2, 3 …), and while the Screens panel is open each screen shows its big number, so you can see which is which. For each screen, tick what it shows: **Monitor**, **Defib**, **Ventilator**, or a mix. Or press a **Quick set-up**, such as **Monitor | Defib + ventilator**. Change it whenever you like, even mid-scenario; the screen changes straight away.

A screen plugged into this computer (an extra monitor or projector): press **Open a patient screen on this computer**, drag the new window onto that screen and make it full screen.

A new screen starts by showing everything (the monitor, switching to the defib or ventilator when you bring them in). If you bring in a device that no screen shows, the controller warns you.

Then:

1. On the room monitor, tap **Tap to Enable Sound** if it shows. Browsers block sound until someone taps the screen; once sound is allowed the button does not come back for later scenarios.
2. Check the badge at the top of your instructor screen. It should read **Live** and name the linked screen (for example "Live · patient monitor").

Step 4: Run the scenario

You play the patient. When the team does something, you press the matching button, and the monitor and patient respond.

When the team...	You press...
Puts on ECG, sats, cuff and temperature probe	**Attach** on the Monitoring & access bar. Until then the room monitor shows no numbers
Asks for a blood pressure	**Cycle NIBP Now**. The room monitor only shows a new BP when the cuff cycles. When you change the BP, choose **Change, don't send** (they see it at the next cycle) or **Change and cycle cuff now**
Gives a drug or does a procedure	Find it in the search box or the tabs (Common, Drugs, Airway...) and tap it
Does something that should change a vital sign	Tap that vital's tile, type the new value, choose **Now**, 30 s, 2 min or 5 min, then **Confirm** (BP starts on Now and has its own two buttons)
Lets the patient arrest	**ARREST ▾** and choose the rhythm
Gets the patient back	**ROSC ▾**

Also useful:

- **PAUSE / START** (or the space bar) stops and starts the clock.
- **Back** pauses the scenario and returns to the setup screen. Press **Return to scenario** there to carry on where you left off.
- **Patient condition** shows whether the patient gets worse on their own (AUTO) or only when you change things (MANUAL). **Better** and **Worse** nudge the whole patient.
- **Event log** (bottom right) records everything with a time. Type a note and press **Add note**, or tap the flag beside any entry to discuss it later.
- **Simple / Full** (top bar): Simple hides the advanced controls. Use Full when you need them.

Step 5: Finish and debrief

1. Press **Finish** and confirm. The debrief screen opens on your laptop.
2. Use it to lead the debrief:
   - **Performance Summary**: which learning objectives were met, partly done or not done.
   - **Defib Sim feedback** (Defib Sim) and **Ventilator feedback** (any session that used the ventilator): good practice and areas for improvement. The ventilator feedback also lists when each problem was injected and how long it took to fix.
   - **Obs, interventions and changes**: a graph of the patient's obs over the whole session, with the rhythm, every treatment, every change you made and your flags marked and numbered. Hover over it to read the values at any moment.
   - **Simulation Log**: every action with its time.
3. Press **Download PDF** to keep a copy, or **Print**. **Certificate** (Defib Sim only) makes a certificate of completion for the learner.
4. Press **Exit to Menu** to set up the next scenario. The room monitor, defib and ventilator stay linked, and the ventilator starts afresh for the next scenario.

Quick fixes

Problem	Fix
Room monitor shows no numbers	The team has not "attached" monitoring yet. Press **Attach** on the Monitoring & access bar
No sound	Tap **Tap to Enable Sound** on the room monitor if it shows, and check its volume. **Tools → Sound plays on** chooses which screen plays it
Badge says **Sync error**	Check the internet connection on each device
Room monitor or defib not following your changes	Check it has the same session code as your laptop; join again if not
Instructor tab closed by mistake	Reopen the site and press **Resume** under "Resume Previous?"
Pressed **Back** by mistake	The scenario is paused, not lost. Press **Return to scenario** on the setup screen, then **START**
Defib Sim log times stuck at 00:00	The clock has not started. Press **START**, or it starts at the learner's first press on the defib

Keyboard shortcuts: `Space` = pause or start; `F` = finish; `D` = drug calculator; `T` = timer alerts; `?` = list of shortcuts. They work straight after you click a button, except that `Space` then presses that button again; they do nothing while you are typing in a box or a pop-up is open.

For everything else, see the Full Instructor Guide.