See the technique. Understand the care.

ENGLISH EDITION

ADULT OBSERVATIONS

Vital signs

A visual learning companion



Temperature · Oxygen saturation · Blood pressure · Breathing · Pulse · Alertness

Marcela Fuentes Canales · MFC Nursing Resources

Clinical scenes and detailed diagrams from the app. Larger print, one language per edition.

How to use this guide

Read, observe and practise with supervision.

01 READ THE EXPLANATION

Read the explanation beside each clinical scene. The detailed panel highlights the learning point.

02 OBSERVE THE TECHNIQUE

Follow the step labels and the device instructions. A contextual scene is not proof that every visible action is clinically correct.

03 PRACTISE WITH SUPERVISION

Practise within your training and local policy. This companion does not certify clinical competence.

Working companion: 21 concept cards and 105 practical step cards from the existing app. It is not the complete approved conversion of the 78-page source guide. NEWS2 is excluded.

Understand the technique. Observe the detail.

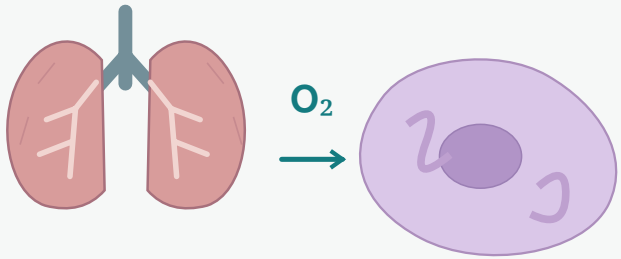
Clinical context and a focused explanation.

001 · Oxygen saturation · SpO_2

CONCEPT

Oxygen

Oxygen is a gas breathed into the lungs. It passes into blood and is carried to cells, which use it to release energy.



Oxygen moves into blood, then to cells

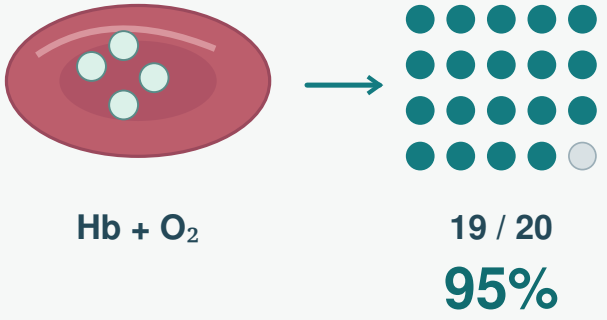
APP DIAGRAM

002 · Oxygen saturation · SpO_2

CONCEPT

Haemoglobin

Hb is a protein inside red blood cells that carries oxygen. Hb amount and the percentage loaded with oxygen are different measurements.



Illustrative binding sites

APP DIAGRAM

Understand the technique. Observe the detail.

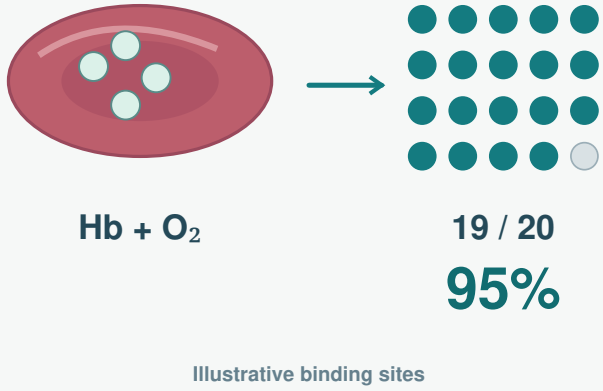
Clinical context and a focused explanation.

003 · Oxygen saturation · SpO_2

CONCEPT

Estimated oxygen saturation

SpO_2 means peripheral oxygen saturation estimated by pulse oximetry. The device uses light to estimate the percentage of Hb oxygen-binding sites occupied in arterial blood; it is not the oxygen percentage in air.



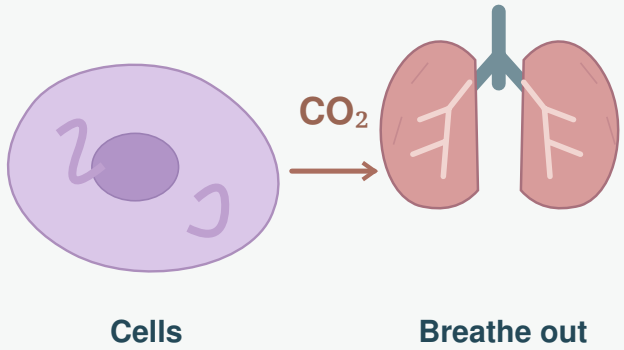
APP DIAGRAM

004 · Oxygen saturation · SpO_2

CONCEPT

Carbon dioxide

Cells produce this waste gas during energy metabolism. Blood takes it back to the lungs and breathing out removes it. A standard pulse oximeter does not measure it.



APP DIAGRAM

Understand the technique. Observe the detail.

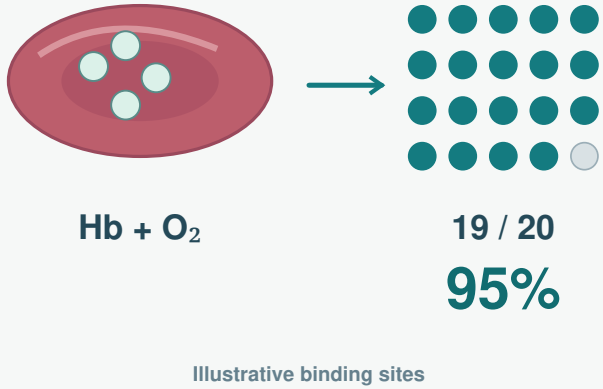
Clinical context and a focused explanation.

005 · Oxygen saturation · SpO_2

CONCEPT

How to read the display

95% is an example of an estimated fraction of available Hb oxygen-binding sites occupied. It is not 95% lung capacity. Compare with the prescribed target and clinical condition.



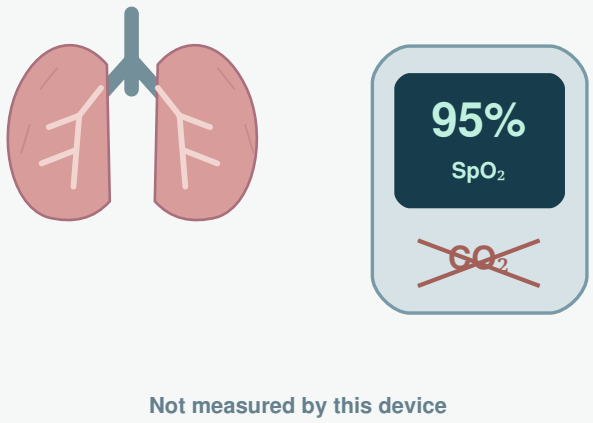
APP DIAGRAM

006 · Oxygen saturation · SpO_2

CONCEPT

Oxygenation is not ventilation

Oxygenation concerns oxygen reaching blood; ventilation is air moving in and out of lungs. SpO_2 does not directly assess CO_2 removal, and a reassuring value cannot exclude poor ventilation.



APP DIAGRAM

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

007 · Cuff fit & measurement errors

CONCEPT

Blood pressure

Blood pressure is the force of blood against artery walls. A cuff device estimates it; a single result is not a complete diagnosis.



CLINICAL CONTEXT



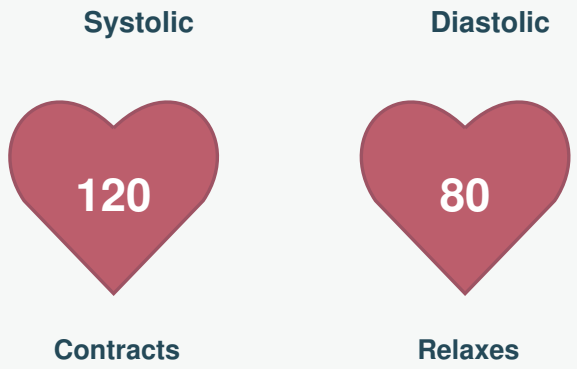
SAME SCENE, ENLARGED

008 · Cuff fit & measurement errors

CONCEPT

Systolic / diastolic

In this example, 120 is pressure when the heart contracts and 80 is pressure as it relaxes between beats. These are teaching values, not a universal target.



APP DIAGRAM

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

009 · Cuff fit & measurement errors

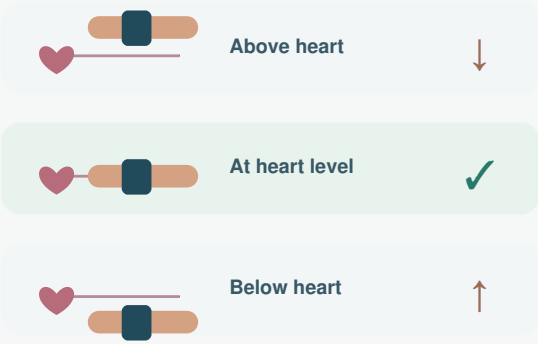
CONCEPT

Millimetres of mercury

mmHg is the pressure unit. The cuff, arm height, rest, movement and posture can affect the estimate; correct technique before interpreting an unexpected result.



CLINICAL CONTEXT



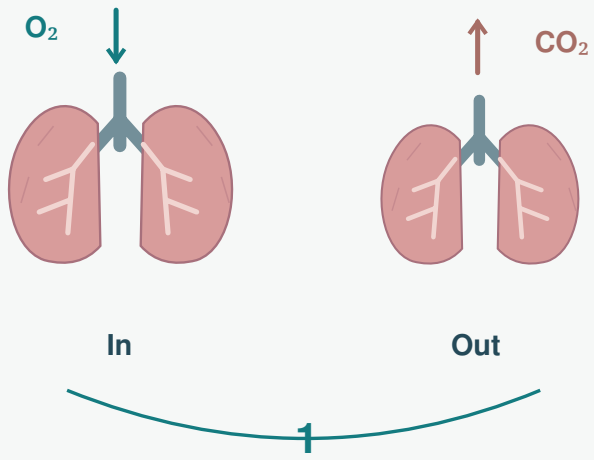
APP DETAIL

010 · Breathing: technique & distress

CONCEPT

Respiratory rate

The number of complete breaths in one minute. A rise plus a fall is one breath, not two.



APP DIAGRAM

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

011 · Breathing: technique & distress

CONCEPT

One full minute

Count natural breathing for 60 seconds. Also observe depth, regularity and effort; counting alone does not show every breathing problem.



CLINICAL CONTEXT



Count a full minute

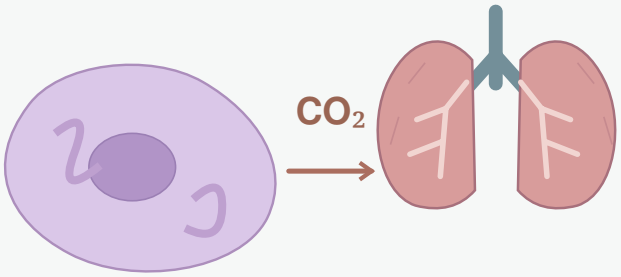
APP DETAIL

012 · Breathing: technique & distress

CONCEPT

Gas exchange

Breathing brings air in and out. In the lungs, oxygen passes into blood and carbon dioxide passes from blood into the air to be exhaled.



Cells

Breathe out

Energy metabolism → waste gas → lungs

APP DIAGRAM

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

013 · Pulse: rate, rhythm & strength

CONCEPT

A pressure wave

When the heart pumps, a pressure wave travels through arteries. The radial pulse is felt at the wrist on the thumb side.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

014 · Pulse: rate, rhythm & strength

CONCEPT

Rate

Beats per minute means how many palpable beats you count in a minute. Activity, symptoms and medicines can change the rate.



CLINICAL CONTEXT



Count a full minute

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

015 · Pulse: rate, rhythm & strength

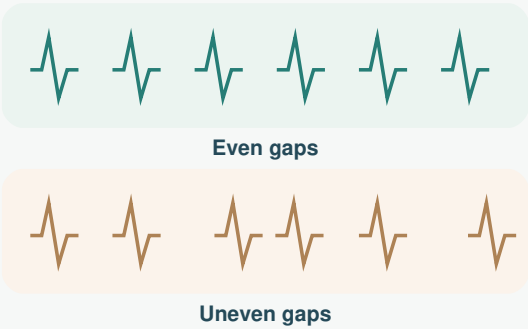
CONCEPT

Spacing between beats

Even gaps suggest a regular rhythm; uneven gaps suggest irregularity. Describe what you feel and seek review; palpation does not replace an ECG.



CLINICAL CONTEXT



APP DETAIL

016 · Temperature

CONCEPT

Body temperature

Temperature describes the body’s thermal state, measured in degrees Celsius here. It varies with the person, time and measurement site.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

017 · Temperature

CONCEPT

Where you measured

Ear, mouth and armpit measurements use different sites. Record the actual site and device so later readings can be compared sensibly.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

018 · Temperature

CONCEPT

Change over time

Compare actual results, technique and symptoms. An apparently normal number does not rule out serious illness or erase new symptoms.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

019 · Alertness & new confusion

CONCEPT

Wakefulness and response

Observe whether the person is awake and responding as usual. This is an observation, not a numeric measurement from a monitor.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

020 · Alertness & new confusion

CONCEPT

The person’s usual state

Compare with their normal behaviour and accessible communication method. Not hearing a voice is not the same as newly reduced consciousness.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

021 · Alertness & new confusion

CONCEPT

A reason for assessment

New confusion, reduced response or unusual drowsiness needs clinical assessment. Describe the change clearly and seek help promptly.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

022 · Prepare & communicate

LESSON 1 · STEP 1

Confirm identity and consent

Check two locally required identifiers and explain the observations. Ask for consent before touching the person.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

023 · Prepare & communicate

LESSON 1 · STEP 2

Clean hands and shared equipment

Clean hands and shared equipment according to infection-prevention policy. A clean-looking device is not necessarily disinfected.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

024 · Prepare & communicate

LESSON 1 · STEP 3

Explain what will happen

Show what you will do, allow questions and check agreement. The person can ask to pause or stop.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

025 · Prepare & communicate

LESSON 2 · STEP 1

Face the person at eye level

Position yourself facing the person at eye level. This makes facial expressions and demonstrations easier to see.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

026 · Prepare & communicate

LESSON 2 · STEP 2

Keep your face well lit

Light your face rather than standing in front of a bright window. Do not cover your mouth unnecessarily.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

027 · Prepare & communicate

LESSON 2 · STEP 3

Ask their preferred communication method

Ask whether the person prefers signing, an interpreter, pictures, writing or another method. Demonstrate and check understanding; do not assume lipreading.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

028 · Prepare & communicate

LESSON 3 · STEP 1

Review baseline and symptoms

Baseline means the person’s usual condition or previous comparable readings. Ask about new symptoms and recent activity.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

029 · Prepare & communicate

LESSON 3 · STEP 2

Check restrictions and equipment

Check the care plan for arm or site restrictions, suitable equipment and delegated skills before choosing where to measure.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

030 · Prepare & communicate

LESSON 3 · STEP 3

Agree the observation plan

Confirm which observations are due, how often they are needed and whom to contact about concerns.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

031 · Temperature

LESSON 1 · STEP 1

Write the value and °C

Temperature describes how hot or cold the body is. Write the actual device reading with degrees Celsius (°C).



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

032 · Temperature

LESSON 1 · STEP 2

Identify site and device

State the measurement site and device. Ear, mouth and armpit readings are not automatically interchangeable.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

033 · Temperature

LESSON 1 · STEP 3

Record time and compare consistently

Add the time. Compare the same site and technique where possible before treating a difference as a true change.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

034 · Temperature

LESSON 2 · STEP 1

Use a compatible clean cover

Use a new compatible probe cover if the device requires one. Prepare the equipment before positioning.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

035 · Temperature

LESSON 2 · STEP 2

Align and position as instructed

For an adult ear thermometer, align the ear and probe as the manufacturer shows. Do not force the probe or use an unsuitable site.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

036 · Temperature

LESSON 2 · STEP 3

Keep steady until measurement finishes

Keep the probe steady until the measurement is complete. Read and record the result; a sound is not essential if a visual completion signal is available.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

037 · Temperature

LESSON 3 · STEP 1

Check symptoms, not only the display

Look at the person as well as the number. Shivering, feeling hot or other new symptoms still matter.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

038 · Temperature

LESSON 3 · STEP 2

Repeat safely if appropriate

If safe, check site, positioning and device instructions and repeat as agreed. Never add an invented correction to a result.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

039 · Temperature

LESSON 3 · STEP 3

Report new abnormalities

Report unexpected results and deterioration. A seemingly normal temperature does not exclude serious illness.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

040 · Oxygen saturation · SpO_2

LESSON 1 · STEP 1

Support a warm, still hand

Support a comfortably warm hand with adequate blood flow. Perfusion means blood reaching the tissues; a cold finger may give a weak signal.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

041 · Oxygen saturation · SpO_2

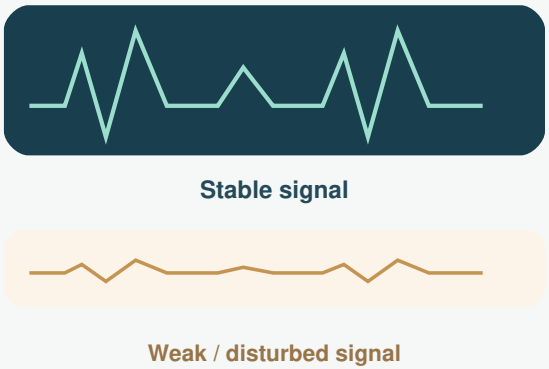
LESSON 1 · STEP 2

Check sensor fit and signal

Fit a compatible sensor as instructed. Check signal quality and whether the displayed pulse is plausible for the person.



CLINICAL CONTEXT



APP DETAIL

042 · Oxygen saturation · SpO_2

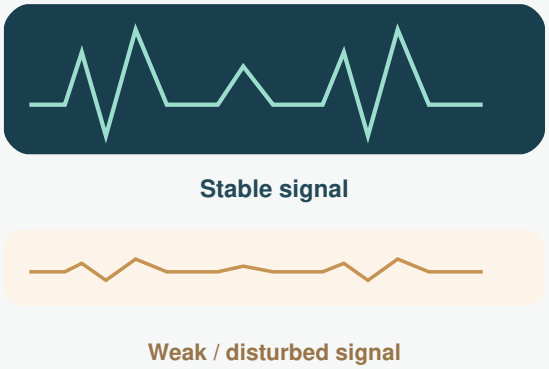
LESSON 1 · STEP 3

Wait for a stable reading

Keep the hand still and wait for a stable signal. Record the actual stable reading, symptoms and oxygen details.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

043 · Oxygen saturation · SpO_2

LESSON 2 · STEP 1

Cold or low perfusion weakens signal

Low perfusion means reduced blood flow at the sensor site. A weak light signal can make the number unreliable.



CLINICAL CONTEXT



APP DETAIL

044 · Oxygen saturation · SpO_2

LESSON 2 · STEP 2

Movement can create artefacts

Movement, poor placement, some nail products and strong light can interfere. Check the person and correct what is safe.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

045 · Oxygen saturation · SpO_2

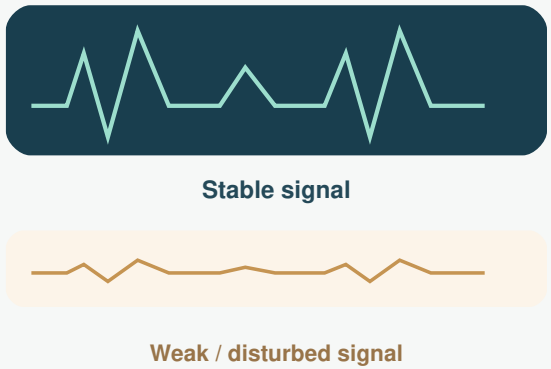
LESSON 2 · STEP 3

BP cuff inflation may interrupt flow

An inflating BP cuff can briefly interrupt flow to a sensor on the same arm. Follow the agreed measurement setup and recheck the signal.



CLINICAL CONTEXT



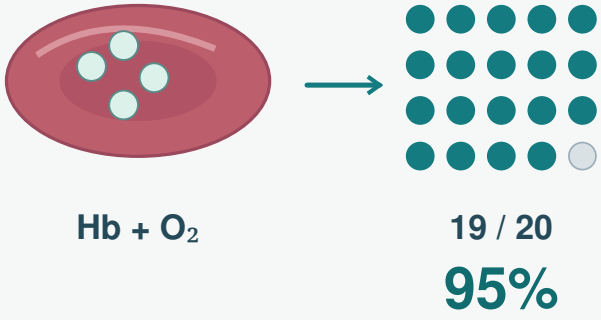
APP DETAIL

046 · Oxygen saturation · SpO_2

LESSON 3 · STEP 1

SpO_2 estimates saturation

Haemoglobin (Hb) is the oxygen-carrying protein in red blood cells. SpO_2 estimates the percentage of its oxygen-binding sites occupied by oxygen in arterial blood.



APP DIAGRAM

Understand the technique. Observe the detail.

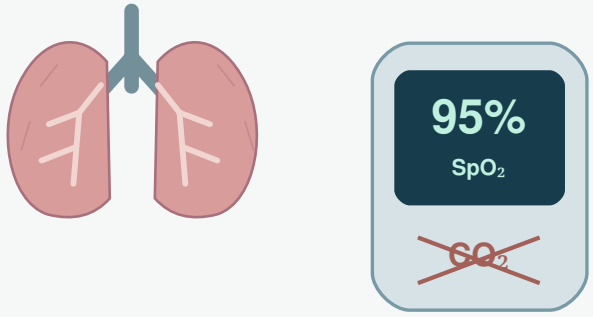
Clinical context and a focused explanation.

047 · Oxygen saturation · SpO_2

LESSON 3 · STEP 2

It does not measure CO_2 or Hb amount

CO_2 is carbon dioxide: a waste gas made by cells as they use energy. Blood carries it to the lungs to be breathed out. A standard pulse oximeter does not measure CO_2 or the amount of Hb.



APP DIAGRAM

048 · Oxygen saturation · SpO_2

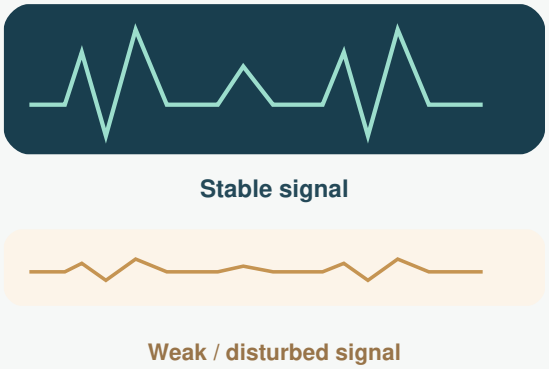
LESSON 3 · STEP 3

Symptoms and trends still matter

A reassuring saturation does not prove enough air is moving or exclude anaemia. Device bias and carbon monoxide (CO, a different gas from CO_2) can mislead; assess symptoms and trends.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

049 · Oxygen saturation · SpO_2

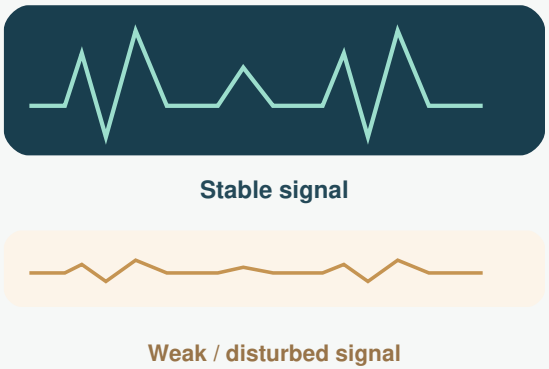
LESSON 4 · STEP 1

Match the sensor to its approved site

Use only a sensor approved for the chosen site. A finger clip that physically fits elsewhere may still be unsuitable.



CLINICAL CONTEXT



APP DETAIL

050 · Oxygen saturation · SpO_2

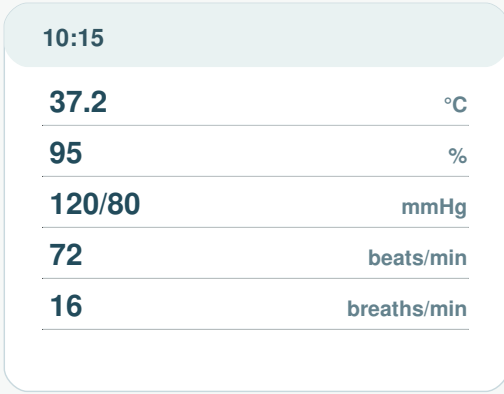
LESSON 4 · STEP 2

Record oxygen delivery and target

Record the site, oxygen device, prescribed flow and target. Litres per minute (L/min) describes delivered flow, not blood saturation.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

051 · Oxygen saturation · SpO_2

LESSON 4 · STEP 3

Ask for help with poor fit or signal

Ask for trained help if fit or signal remains poor or the person is unwell. Do not independently change prescribed oxygen to obtain a preferred number.



CLINICAL CONTEXT



APP DETAIL

052 · Cuff fit & measurement errors

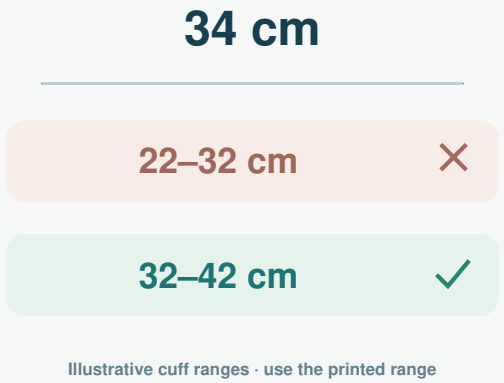
LESSON 1 · STEP 1

Find the upper-arm midpoint

Locate shoulder and elbow and identify their midpoint on the upper arm. The cuff size is chosen from circumference at this level.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

053 · Cuff fit & measurement errors

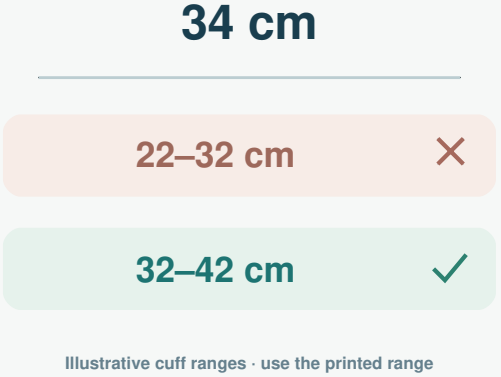
LESSON 1 · STEP 2

Measure circumference, not length

Wrap a measuring tape around the arm at the midpoint. Measure around the arm, not along its length.



CLINICAL CONTEXT



APP DETAIL

054 · Cuff fit & measurement errors

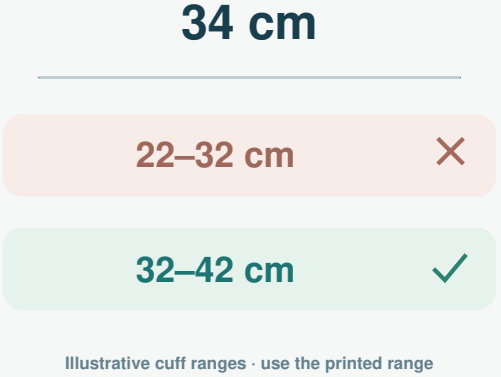
LESSON 1 · STEP 3

Choose a range that includes the value

Match the measured centimetres to the printed range of a compatible cuff. Colour or an adult label cannot confirm the size.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

055 · Cuff fit & measurement errors

LESSON 2 · STEP 1

ARTERY: alignment with artery

Align the artery marker as the manufacturer specifies. It shows orientation, not cuff size. Tube direction alone is not a universal guide.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

056 · Cuff fit & measurement errors

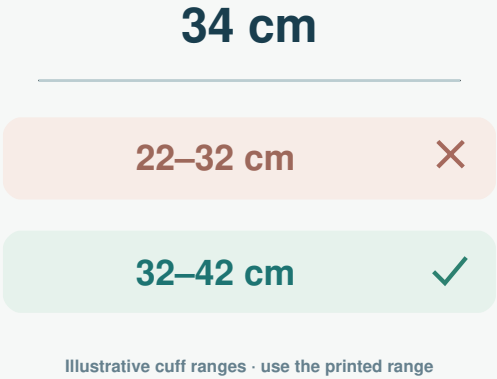
LESSON 2 · STEP 2

RANGE/INDEX: size and fit

Check the index lies within the stated range. Wrap evenly and snugly, without painful tightness or a constricting sleeve.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

057 · Cuff fit & measurement errors

LESSON 2 · STEP 3

Follow the stated elbow gap

Place on bare skin and follow the device-specific gap above the elbow. Support the arm with the cuff centre at heart level.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

058 · Cuff fit & measurement errors

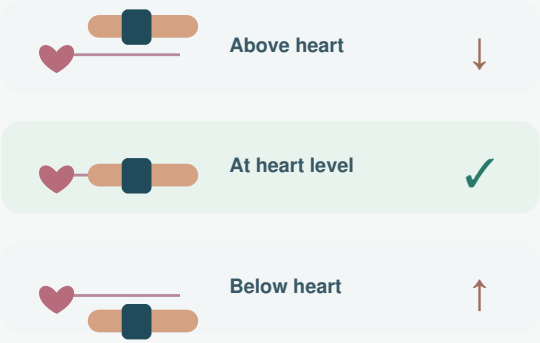
LESSON 3 · STEP 1

Too small can read falsely high

A cuff too small for the measured arm commonly overestimates pressure. Re-select by the printed range rather than correcting the number.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

059 · Cuff fit & measurement errors

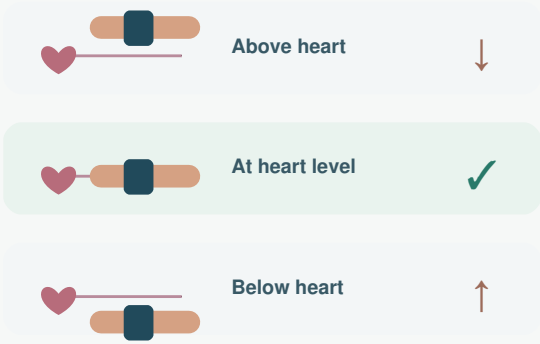
LESSON 3 · STEP 2

Too large can read falsely low

A cuff too large may underestimate pressure. An arm above the heart may also read low; below the heart may read high.



CLINICAL CONTEXT



APP DETAIL

060 · Cuff fit & measurement errors

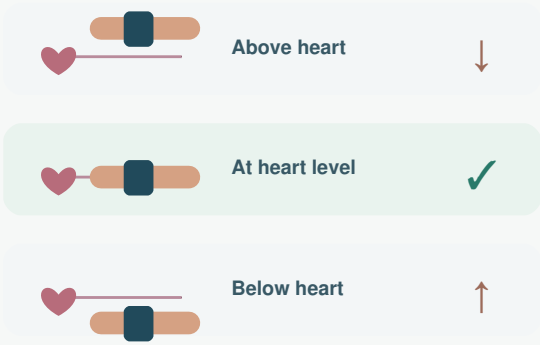
LESSON 3 · STEP 3

Correct technique, then repeat

Correct size, posture and support, then repeat as agreed. An unsupported arm or poor wrapping can add other errors; there is no fixed patient correction.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

061 · Cuff fit & measurement errors

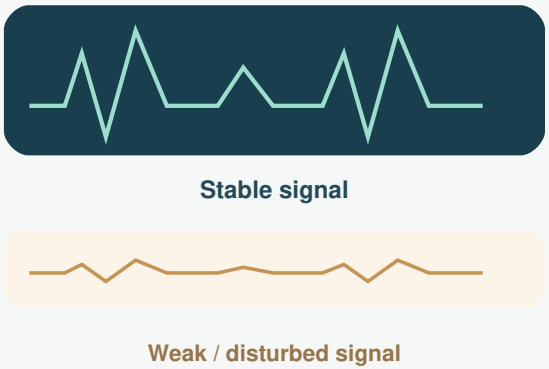
LESSON 4 · STEP 1

Check movement and connections

Check stillness, tubing, connectors and the displayed error. Do not keep inflating without checking the cause.



CLINICAL CONTEXT



APP DETAIL

062 · Cuff fit & measurement errors

LESSON 4 · STEP 2

Check limb restrictions and fit

Review arm restrictions and device/cuff suitability. An irregular pulse or a conical arm may need a different validated method.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

063 · Cuff fit & measurement errors

LESSON 4 · STEP 3

Persistent error: seek trained help

If errors persist, stop repeated squeezing and seek trained help. Record the problem rather than inventing a blood pressure.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

064 · Breathing: technique & distress

LESSON 1 · STEP 1

Explain observations and obtain consent

Explain the observations and obtain consent. Observing a natural pattern does not mean omitting accessible information or consent.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

065 · Breathing: technique & distress

LESSON 1 · STEP 2

After pulse, keep your position

After checking the pulse, keep your position if appropriate while looking at chest or abdominal movement.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

066 · Breathing: technique & distress

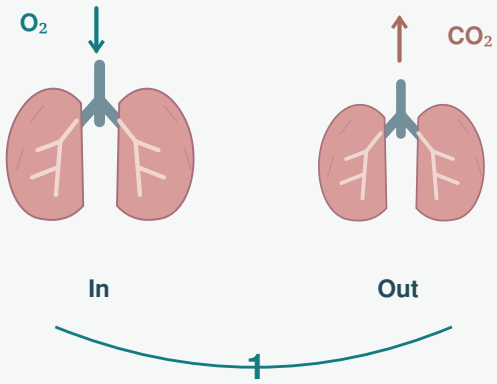
LESSON 1 · STEP 3

Observe natural chest or abdomen movement

Watch usual breathing without coaching deep or faster breaths. Coaching may change the rate you are trying to measure.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

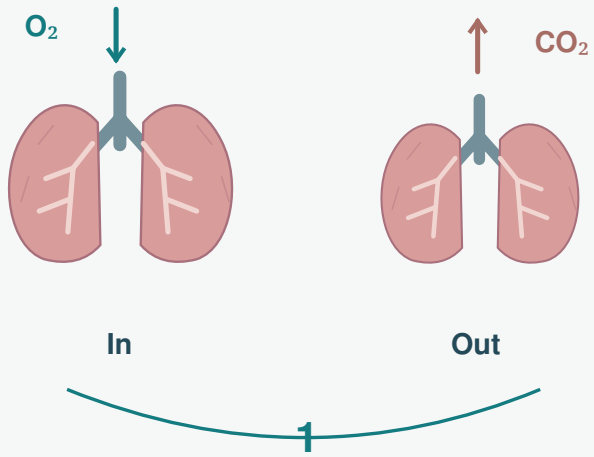
Clinical context and a focused explanation.

067 · Breathing: technique & distress

LESSON 2 · STEP 1

One rise plus one fall = one breath

One complete rise and fall counts as ONE breath. Inspiration draws air in; expiration lets air out. Do not count them as two breaths.



APP DIAGRAM

068 · Breathing: technique & distress

LESSON 2 · STEP 2

Count for a full 60 seconds

Count all complete cycles during a full 60 seconds. Write breaths per minute (breaths/min) using the count you observed.



CLINICAL CONTEXT



Count a full minute

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

069 · Breathing: technique & distress

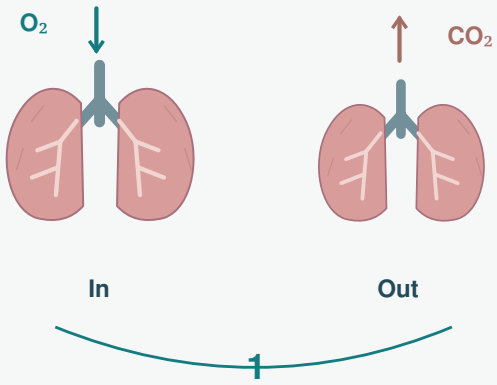
LESSON 2 · STEP 3

Also note rhythm, depth and effort

Also observe whether breaths are even, shallow or deep, laboured or unequal. Rate does not measure oxygen saturation or carbon dioxide.



CLINICAL CONTEXT



APP DETAIL

070 · Breathing: technique & distress

LESSON 3 · STEP 1

Look for severe effort or gasping

Marked effort, gasping or noisy obstructed breathing can signal serious difficulty. Seek urgent help rather than completing a routine count.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

071 · Breathing: technique & distress

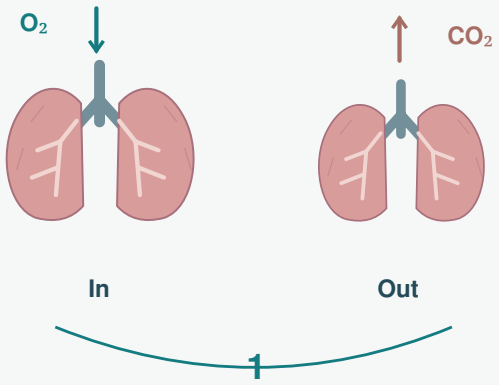
LESSON 3 · STEP 2

Notice speech, colour and alertness

Notice difficulty speaking, changes in colour and new drowsiness or confusion. Check the whole person even if the oximeter looks reassuring.



CLINICAL CONTEXT



APP DETAIL

072 · Breathing: technique & distress

LESSON 3 · STEP 3

Severe distress: call immediately

Activate the local emergency response for severe deterioration. Stay and support within current training; do not delay the call for another number.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

073 · Pulse: rate, rhythm & strength

LESSON 1 · STEP 1

Palm up; support the forearm

Support the forearm with the palm up and wrist relaxed. This gives a stable, comfortable place to feel the radial artery.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

074 · Pulse: rate, rhythm & strength

LESSON 1 · STEP 2

Use finger pads on the thumb side

Use index and middle finger pads at the inner wrist on the thumb side. Do not use your own thumb, which has a pulse.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

075 · Pulse: rate, rhythm & strength

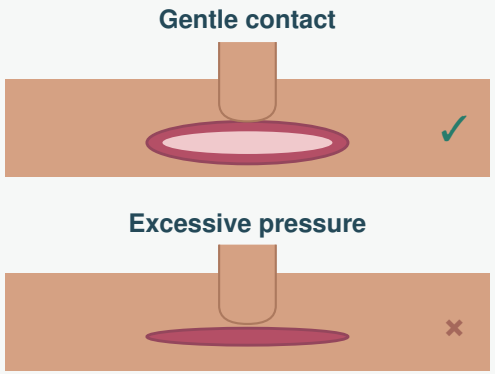
LESSON 1 · STEP 3

Apply gentle pressure

Press gently until beats are felt. Too much pressure may flatten the artery and make the pulse harder to feel.



CLINICAL CONTEXT



APP DETAIL

076 · Pulse: rate, rhythm & strength

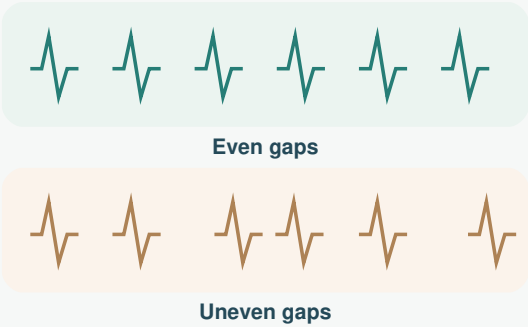
LESSON 2 · STEP 1

Regular: even gaps between beats

Pulse rate is the number of palpable pressure waves per minute, usually corresponding to heartbeats. Regular rhythm has even spacing.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

077 · Pulse: rate, rhythm & strength

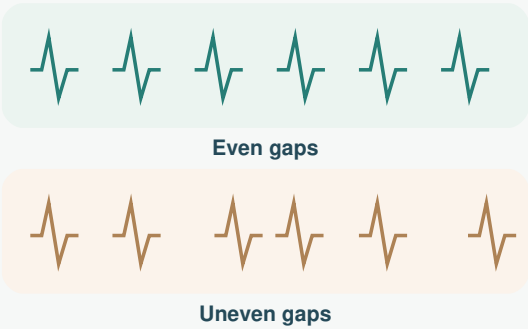
LESSON 2 · STEP 2

Irregular: uneven gaps

Irregular rhythm has uneven gaps between beats. Describe the pattern and report it; touch alone does not diagnose the rhythm on an ECG.



CLINICAL CONTEXT



APP DETAIL

078 · Pulse: rate, rhythm & strength

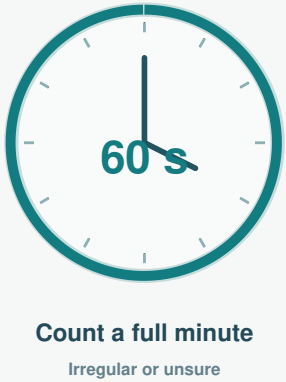
LESSON 2 · STEP 3

Irregular or unsure: count 60 s

Count a full minute if irregular or unsure. A shorter count multiplied up may miss variability. Follow local policy for a regular pulse.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

079 · Pulse: rate, rhythm & strength

LESSON 3 · STEP 1

Move finger pads slightly

If the pulse is difficult, reposition finger pads slightly at the thumb-side wrist. Do not search using fingernails.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

080 · Pulse: rate, rhythm & strength

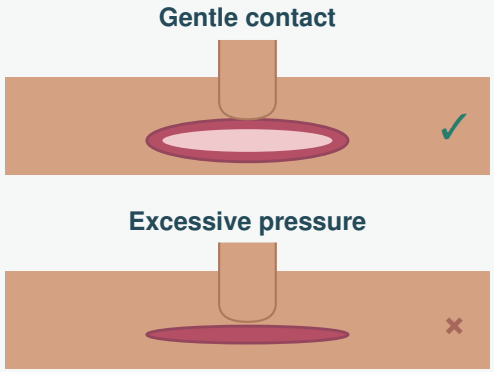
LESSON 3 · STEP 2

Ease excessive pressure

Ease pressure if you are pressing hard. Increasing pressure continuously can hide the beats.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

081 · Pulse: rate, rhythm & strength

LESSON 3 · STEP 3

Assess patient and seek help

Assess how the person looks and feels. If still difficult to find, get trained help and document the difficulty; never guess a rate.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

082 · Pulse: rate, rhythm & strength

LESSON 4 · STEP 1

Use only sites within your training

Use only pulse sites included in your training and the agreed assessment. Different sites have different purposes.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

083 · Pulse: rate, rhythm & strength

LESSON 4 · STEP 2

Never press both carotids together

Never press both carotid arteries at the same time. This is not an alternative routine method to try without training.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

084 · Pulse: rate, rhythm & strength

LESSON 4 · STEP 3

Emergency signs override routine counting

Unresponsiveness with abnormal breathing needs emergency action under resuscitation training. Do not delay by repeatedly searching for a wrist pulse.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

085 · Alertness & new confusion

LESSON 1 · STEP 1

Observe response and usual behaviour

Alertness concerns wakefulness and response. Look at how the person interacts, rather than treating a lack of spoken reply as a diagnosis.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

086 · Alertness & new confusion

LESSON 1 · STEP 2

Compare with the known baseline

Compare current behaviour with the known usual state. Baseline means what is usual for this individual, not what is usual for everyone.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

087 · Alertness & new confusion

LESSON 1 · STEP 3

Use the communication plan

Use the agreed accessible method. A Deaf person not hearing you is different from someone newly unresponsive.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

088 · Alertness & new confusion

LESSON 2 · STEP 1

New confusion or disorientation

New confusion or disorientation means a change from usual thinking or awareness. Describe what changed and when it began.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

089 · Alertness & new confusion

LESSON 2 · STEP 2

New agitation or reduced response

New agitation, drowsiness or reduced response can signal physical deterioration. Do not assume it is only a behaviour issue.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

090 · Alertness & new confusion

LESSON 2 · STEP 3

Ask for prompt clinical review

Seek prompt assessment for a new change. If you cannot establish whether confusion is new, request urgent clinical review.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

091 · Alertness & new confusion

LESSON 3 · STEP 1

Stay with the person

Get help while staying with the person or arranging someone to stay. A new change needs observation while help comes.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

092 · Alertness & new confusion

LESSON 3 · STEP 2

Maintain safety while getting help

Protect from falls and support safe positioning according to the situation. Use only assessment techniques included in your training.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

093 · Alertness & new confusion

LESSON 3 · STEP 3

Not breathing normally? Emergency response

If unresponsive and not breathing normally, activate emergency help and follow current resuscitation training. Do not improvise painful stimulation.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

094 · Support, recheck & report

LESSON 1 · STEP 1

Look at symptoms and safety first

First decide whether the person needs urgent help. Looking for a technical explanation must not postpone assessment of deterioration.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

095 · Support, recheck & report

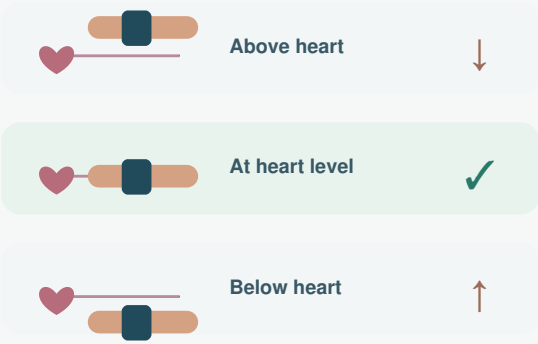
LESSON 1 · STEP 2

Correct safe-to-correct technique errors

Correct safe-to-correct positioning or signal problems. Describe the technical change instead of assuming the first value was meaningless.



CLINICAL CONTEXT



APP DETAIL

096 · Support, recheck & report

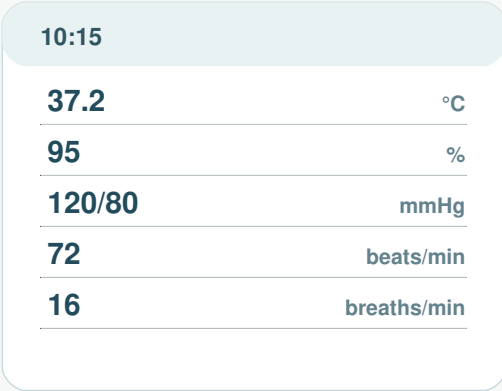
LESSON 1 · STEP 3

Keep original and repeat results

Keep the initial result and the repeat with times, symptoms and actions. An improved number does not erase the original observation.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

097 · Support, recheck & report

LESSON 2 · STEP 1

Stop walking if dizzy

Stop walking when dizziness occurs. Do not keep an unstable person standing to obtain a better pressure.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

098 · Support, recheck & report

LESSON 2 · STEP 2

Help sit or lie safely

Help the person sit or lie safely while maintaining comfortable breathing and following the care plan. Prevent a fall.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

099 · Support, recheck & report

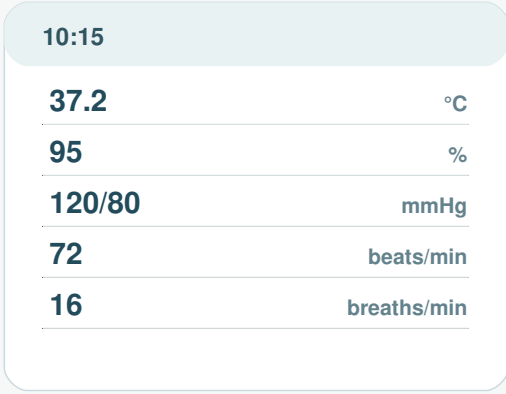
LESSON 2 · STEP 3

Report symptoms and readings

Tell the clinician about dizziness, the readings and the position. Position changes and symptoms belong in the handover.



CLINICAL CONTEXT



APP DETAIL

100 · Support, recheck & report

LESSON 3 · STEP 1

Alert and safe to swallow?

Before offering oral fluids, check alertness and safe swallowing. Do not offer a drink to a person who cannot swallow safely.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

101 · Support, recheck & report

LESSON 3 · STEP 2

Oral fluids permitted?

Check whether oral intake is allowed. Nil by mouth means no food or drink by mouth unless the clinical plan states otherwise.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

102 · Support, recheck & report

LESSON 3 · STEP 3

Restriction and plan checked?

Check fluid restrictions and the agreed plan. Drinking is not a substitute for assessment, and intravenous fluids require an authorised clinician.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

103 · Support, recheck & report

LESSON 4 · STEP 1

Confirm the delegated protocol

Lying/standing blood pressure checks for a pressure change with posture. It is a planned assessment, not treatment for a low number.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

104 · Support, recheck & report

LESSON 4 · STEP 2

Arrange safe assistance

Confirm the timing protocol, assistance and safety before standing. A common protocol includes readings at 1 and 3 minutes, if safe.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

105 · Support, recheck & report

LESSON 4 · STEP 3

Stop if dizzy, faint or unsteady

Stop for dizziness, faintness or unsteadiness. Support safety and report all positions, times, readings and symptoms.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

106 · Support, recheck & report

LESSON 5 · STEP 1

Support a comfortable position

Support a comfortable position that the breathless person tolerates. Do not force them flat or coach a breathing pattern to improve a display.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

107 · Support, recheck & report

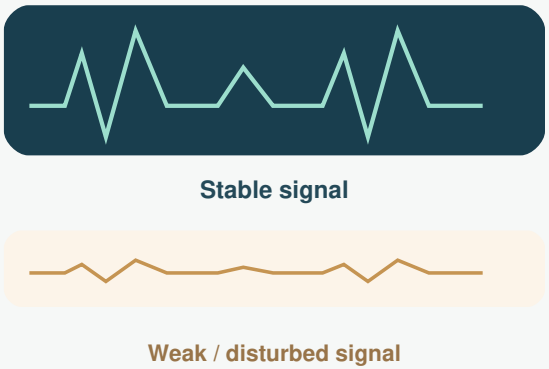
LESSON 5 · STEP 2

Check sensor and prescribed equipment

Check fit, signal and prescribed equipment within your role. Do not independently start or change oxygen.



CLINICAL CONTEXT



APP DETAIL

108 · Support, recheck & report

LESSON 5 · STEP 3

Persistent concern: seek review

Persistent concern needs review. Paper bags, forced breaths and breath-holding are not ways to correct unexplained low saturation.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

109 · Record & hand over

LESSON 1 · STEP 1

Record measured values with units

Record the actual measured values with units, including °C, %, mmHg, beats/min and breaths/min. A unit tells the reader what the number represents.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

110 · Record & hand over

LESSON 1 · STEP 2

Add time, site and position

Include time, temperature site and blood pressure arm/position. These help the next person compare equivalent observations.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

111 · Record & hand over

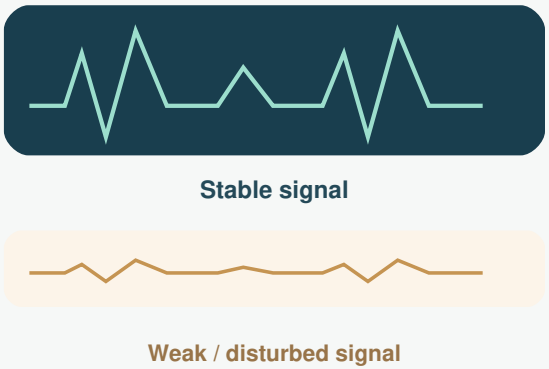
LESSON 1 · STEP 3

Include symptoms and oxygen details

Add symptoms, oxygen device/flow and prescribed target, and describe signal or technique problems.



CLINICAL CONTEXT



APP DETAIL

112 · Record & hand over

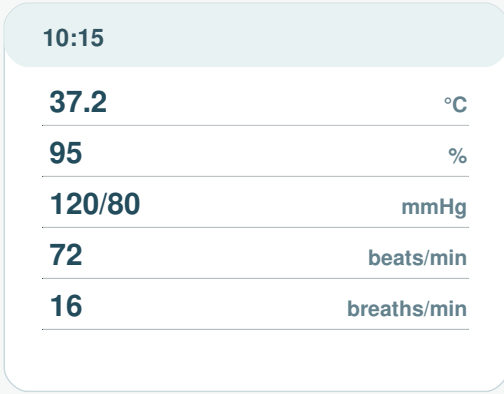
LESSON 2 · STEP 1

Initial reading + time

Write the first result with its time. Do not replace it with a more reassuring value later.



CLINICAL CONTEXT



APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

113 · Record & hand over

LESSON 2 · STEP 2

Care given + repeat reading

Document care or technique changes, then the repeat time and result. This shows the sequence and response.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

114 · Record & hand over

LESSON 2 · STEP 3

Who was informed + agreed plan

Record who received the concern, the response and next review plan. Re-escalate if the person worsens or help is delayed.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

115 · Record & hand over

LESSON 3 · STEP 1

Identify the immediate concern

Start with who you are, which patient you mean and the immediate concern. In an emergency call immediately rather than composing a perfect handover.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

116 · Record & hand over

LESSON 3 · STEP 2

State background, findings and trend

Give relevant background, the observations, symptoms and trend. Trend means how comparable readings change over time.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

117 · Record & hand over

LESSON 3 · STEP 3

Request review and confirm timing

Request the review needed and confirm timing and responsibility. Practise SBAR in English and SAER in Spanish.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

118 · Put it all together

LESSON 1 · STEP 1

Temperature + SpO_2 + BP

Temperature, oxygen saturation and blood pressure describe different body functions. Read them together, with correct units and technique.



CLINICAL CONTEXT

10:15	
37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

119 · Put it all together

LESSON 1 · STEP 2

Breathing + pulse + alertness

Add breathing, pulse and alertness. A reassuring number in one area cannot cancel deterioration in another.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

120 · Put it all together

LESSON 1 · STEP 3

Add symptoms, baseline and change

Add symptoms, usual condition and changes over time. The complete picture is more useful than one isolated number.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

121 · Put it all together

LESSON 2 · STEP 1

Stable after activity: check context

Recent walking may explain a temporary pulse rise in a stable person. Rest and repeat only within the agreed plan.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

122 · Put it all together

LESSON 2 · STEP 2

New symptoms: reassess urgency

Chest pain, severe breathlessness, collapse or new confusion changes the urgency. Do not assume activity explains new symptoms.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

123 · Put it all together

LESSON 2 · STEP 3

Never delay needed help for a repeat

Do not wait for another measurement when urgent help is needed. A better repeat does not rule out illness.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

124 · Put it all together

LESSON 3 · STEP 1

Use the fictional information given

Use only the fictional details in the exercise. Do not enter real patient identifiers into this educational app.



CLINICAL CONTEXT

10:15

37.2	°C
95	%
120/80	mmHg
72	beats/min
16	breaths/min

APP DETAIL

Understand the technique. Observe the detail.

Clinical context and a focused explanation.

125 · Put it all together

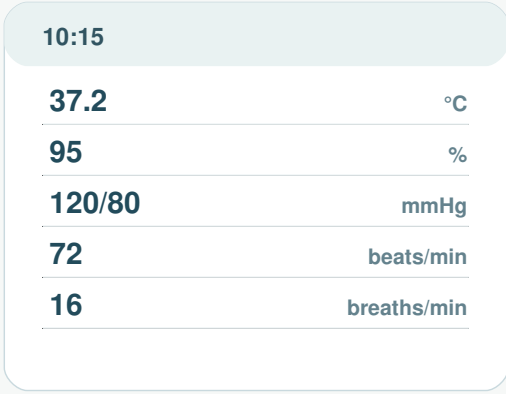
LESSON 3 · STEP 2

Explain your reasoning

Explain what you observed, what could be unreliable and why you would seek review. Compare your reasoning with the feedback.



CLINICAL CONTEXT



APP DETAIL

126 · Put it all together

LESSON 3 · STEP 3

Separate practice from real care

Apply skills in supervised practice and according to local policy. Completing an app exercise does not certify clinical competence.



CLINICAL CONTEXT



SAME SCENE, ENLARGED

Find the visible technique errors

Blood pressure: compare the scene with the correct preparation.



1 · Legs crossed

Rest both feet on the floor for a routine seated reading.

2 · Cuff over clothing

Use the correctly sized cuff on bare skin; avoid a tight rolled sleeve.

3 · Arm position

Support the arm with the centre of the cuff at heart level.

Teaching exercise based on source pages 25 and 35–38. Do not invent an exact mmHg correction.

Sources and supervised learning

References, illustrations and review status.

NHLBI — gas exchange, haemoglobin and CO_2

https://www.nhlbi.nih.gov/health/lungs/breathing-benefits

MHRA — pulse oximeter use and limitations

https://www.gov.uk/guidance/the-use-and-regulation-of-pulse-oximeters-information-for-healthcare-professionals

AHA — blood pressure measurement statement

https://pmc.ncbi.nlm.nih.gov/articles/PMC11409525/

NHS — blood pressure test

https://www.nhs.uk/tests-and-treatments/blood-pressure-test/

BHF — checking your pulse

https://www.bhf.org.uk/informationsupport/tests/checking-your-pulse

NHS — temperature measurement in adults

https://www.nhs.uk/symptoms/fever-in-adults/

Resuscitation Council UK — ABCDE

https://www.resus.org.uk/library/abcde-approach

References are carried over from the existing app and have not been newly verified for this language and layout revision. The original 78-page guide remains the controlled source. A separate requirements document tracks exclusions, adaptations and review decisions.

Clinical scenes are educational simulations, not photographs of actual care. Original PNG images are retained without additional compression. Diagrams remain vector graphics; photo detail is limited by the resolution of the available originals. Clinical review is pending.