

# Pulse Oximeter

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

PURPOSE:  Teaching / Practice  
 Test Result: Pass / Fail / Retest

## Scenario Overview

The scenario is set in the newborn care ward where a pulse oximeter has malfunctioned. Participants should assess and troubleshoot the device, implement needed repairs and return the device for use.

### Reminder to Facilitator

The facilitator team decides what is essential for participants' understanding. We suggest the team underline or mark these essential items in the **INFORMATION/RESULT** column before beginning the session to ensure these are highlighted throughout the practice.

**ALWAYS REMEMBER THE CANDIDATE SHOULD START WITH THE 4 Ss**

**Safety:** for you, the staff around you and the patient on the device

**Setting:** for possible checks and repairs to the devices

**Supplies:** adequate tools and spare parts for this device

**Shout:** for additional technical support if necessary

### Begin Scenario

**SETTING THE SCENE:** The nurse in the nursery cannot make the pulse oximeter give a good trace reading. She has been trying for quite some time. She has called you for help. **WHAT DO YOU DO?**

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
1	Go to the ward and introduce yourself to the in-charge.	Sister Amissah is glad to see you.	
2	Ask what the problem is.	The nurse has been trying to use the pulse oximeter all morning but has been unable to get a stable trace.	
3	Ask to see the device.	The pulse oximeter is in a patient cot next to a newborn patient.	
4	Advise the in-charge of the link between device location and infection prevention on the ward.  Pulse oximeters should never be kept in the cot with the patient to ensure appropriate infection prevention control. As pulse oximeters are used on many patients, you may find that infections are passed from bed to bed with the pulse oximeter.	Sister Amissah is advised about the link between infection and devices. Alarmed, she immediately removes the pulse oximeter and probe from the patient cot and disinfects it.	
5	Ask if it is okay for you to do some minor checks on the machine where it is.	Sister Amissah is happy for you to do so.	
6	Perform minor checks on the device.  Put on a pair of gloves. Turn on the pulse oximeter. Attach the pulse oximeter probe and check the screen for any alarms.	The pulse oximeter shows the alarm "No Probe Connected".	
7	Interpret these results for Sister Amissah.  The pulse oximeter does not seem to be recognising the provided probe. Is there another probe available that we can try?  Advise Sister Amissah to clean the probe.  Plug in the replacement probe. Check the screen for any alarms.	Explain the results to Sister Amissah in layman's terms.  There is another pulse oximeter probe, but it is currently connected to another device. Sister Amissah removes it and brings it to this pulse oximeter to try.  Sister Amissah cleans the probe.  No alarms are visible.	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
8	<p><b>What do you do next?</b></p> <p>Advise Sister Amissah to try using the probe with the pulse oximeter on a patient.</p>	Sister Amissah places the probe on the foot of a newborn patient. A trace appears and begins to stabilise.	
9	<p><b>Advise the in-charge that an additional replacement probe should be procured.</b></p> <p>You tell the in-charge that you will return to the maintenance unit and check in your stocks for an appropriate probe.</p>	Three additional paediatric clip probes with generic ports are available.	
10	<p><b>Return to the Newborn Care Unit.</b></p> <p>Return to the Newborn Care Unit. Plug in and test one of the generic probes with the same pulse oximeter. Check the screen for any alarms.</p>	No alarms are visible.	
11	<p><b>Remove the inappropriate probe to the Maintenance Unit.</b></p> <p>Place in Spare Parts storage and label ward location and repair details, including that the probe appears to be malfunctioning or for a non-generic pulse oximeter. Document probe delivery in Equipment Maintenance &amp; Repair Records.</p>	Documentation is completed.	

**THANK YOU**

**i REMIND PARTICIPANTS**

Poorly fitting probes and patient movement can lead to inaccurate readings. Pulse oximeters should also never be placed in the cot of a patient to ensure appropriate infection prevention on the ward.

**⚠ INFECTION PREVENTION AND CONTROL**

Be sure to wash your hands thoroughly and to put on gloves before handling any equipment. After every use, remember to disinfect all consumables and equipment before using them again. Pulse oximeters should also never be placed in the cot of a patient to ensure appropriate infection prevention on the ward.

**Scenario end**

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