



## Learning Objectives for Clients and Caregivers

For Masimo® Rad-G®

Questions?

Call us during business hours

*Mon-Fri 8:30am-4:30pm*

to speak with a Registered Respiratory Therapist

**1-800-633-8977**

Visit our website for more information

[www.ontvep.ca](http://www.ontvep.ca)

Client Name: \_\_\_\_\_

DOB: \_\_\_\_\_ (*yyyy/mm/dd*)

Caregiver(s) Present: \_\_\_\_\_

Clinical Educator: \_\_\_\_\_

Date: \_\_\_\_\_ (*yyyy/mm/dd*)

## GOAL:




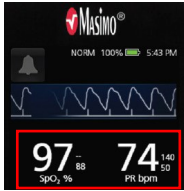
To develop knowledge, understanding and skills related to using the Masimo® Rad-G® oximeter.



















## CLINICAL EDUCATOR WILL:

- Explain the rationale for using the Masimo® Rad-G® oximeter
- Demonstrate the set-up, maintenance and troubleshooting of the Masimo® Rad-G®
- Assess the client and caregivers understanding of the information

Learning Objectives: The learner(s) will:	Goal Met	N/A
1. Explain why the oximeter is needed		
2. Discuss the limitations of an oximeter		
3. State the alarm limits prescribed and the significance of each parameter <ul style="list-style-type: none"> <li>• High SpO<sub>2</sub></li> <li>• Low SpO<sub>2</sub></li> <li>• High HR (heart rate)</li> <li>• Low HR (heart rate)</li> </ul>		
4. Locate the following parts of the device <ul style="list-style-type: none"> <li>• Patient cable connector</li> <li>• Power on/off button</li> <li>• Display screen               <ul style="list-style-type: none"> <li>◦ Alarm indicator</li> <li>◦ Mode</li> <li>◦ Battery indicator</li> <li>◦ Plethysmograph</li> <li>◦ Signal IQ® indicator</li> <li>◦ SpO<sub>2</sub> value and alarm setting</li> <li>◦ Pulse rate value and alarm setting</li> <li>◦ RRp, PVi® and Pi indicators</li> <li>◦ Main menu button</li> <li>◦ Home button</li> <li>◦ Backward navigation</li> </ul> </li> <li>• Speaker</li> <li>• DC input connector</li> </ul>		

Learning Objectives: The learner(s) will:	Goal Met	N/A
<p><b>5. Demonstrate how to set up and use the Masimo® Rad-G®</b></p> <ul style="list-style-type: none"> <li>• Connect the Masimo® Rad-G® to an AC power source</li> <li>• Connect the patient cable to the monitor and secure with latch</li> <li>• Attach the sensor to patient. Ensure the Emitter and Detector are aligned directly opposite each other. The Emitter (stars symbol with red light) should be on the nail bed and the Detector (black box) on the fleshy skin side</li> <li>• Attach the sensor to the patient cable</li> <li>• Press and hold the Power Button for more than 2 seconds</li> <li>• Verify the emitter is illuminated</li> <li>• Verify plethysmograph is displayed</li> <li>• Verify all SpO<sub>2</sub>, PR and Pi measurements and alarm settings</li> </ul>		
<p><b>6. Describe the Perfusion Indicator (Pi) reading</b></p> <ul style="list-style-type: none"> <li>• What indicates low perfusion (<math>Pi &lt; 1.0</math>)</li> <li>• Explain the actions to take if the perfusion indicator is poor               <ul style="list-style-type: none"> <li>◦ Always assess the patient first</li> <li>◦ Warm the site, reapply sensor or locate a better perfused site</li> <li>◦ Verify oxygenation status through other means</li> <li>◦ <b>CAUTION: Very low perfusion at the monitored site may result in no or incorrect readings</b><sup>1</sup></li> </ul> </li> <li>• Contact clinician if low perfusion persists</li> </ul>		
<p><b>7. Describe the Signal IQ® (SIQ) reading</b></p> <ul style="list-style-type: none"> <li>• Provides an indicator for signal quality</li> <li>• Explain the height of the bar on each pulsation provides an assessment of the confidence in SpO<sub>2</sub> value (indicates measured SpO<sub>2</sub> is based on good quality signal)</li> <li>• <b>CAUTION: Displayed parameters may not be accurate when a low SIQ message is provided</b><sup>1</sup></li> </ul>		
<p><b>8. Adjust the pulse volume</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how to adjust or disable the pulse volume</li> </ul>		
<p><b>9. Indicate frequency for changing the sensor site</b></p> <ul style="list-style-type: none"> <li>• 3-5 hours as instructed by clinician to prevent pressure ulceration</li> </ul>		

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<p><b>10. Discuss the care and use of the internal battery</b></p> <ul style="list-style-type: none"> <li>Describe the visual indicator when battery is connected to AC power and fully charged </li> <li>Describe the visual indicator of battery while charging </li> <li>Describe the frequency and duration for charging the oximeter</li> <li>State the expected duration when device is operating on battery power (approx. 24 hrs.)</li> <li>Explain when battery run time is significantly reduced, it is advisable to completely discharge and fully recharge the battery</li> <li>Describe the action needed when the Battery Charge Status is red and a "low Battery" message appears </li> </ul>		
<p><b>11. Understand troubleshooting scenarios and how to respond</b></p> <ul style="list-style-type: none"> <li>"Sensor Off" or "Pulse Search" message</li> <li>Difficulty obtaining a reading or unexpected readings due to: <ul style="list-style-type: none"> <li>Improper sensor type or application</li> <li>Inappropriate sensor size</li> <li>Sensor displacement</li> <li>Low perfusion</li> <li>Excessive motion artifact</li> <li>Excessive ambient or strobing light</li> </ul> </li> </ul>		
<p><b>12. Describe the appropriate response to alarm condition as per the care plan as provided by the <u>clinical team</u></b></p> <ul style="list-style-type: none"> <li>How to respond to alarm conditions (low/high SpO<sub>2</sub> and PR)</li> </ul>		
<p><b>13. Discuss the monitoring vs non-monitoring state of oximeter</b></p> <ul style="list-style-type: none"> <li>A monitoring state refers to the oximeter displaying a patient measurement/reading</li> <li>A non-monitoring state refers to the oximeter displaying a "Sensor off Patient" or "Pulse Search" message</li> <li><b>Application of sensor does not equal monitoring state</b></li> <li>Be able to differentiate between monitoring and non-monitoring state of the oximeter and acknowledge that alarms may not be active in the non-monitoring state</li> </ul> 		

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<p><b>14. Discuss the Alarm Silence function</b></p> <ul style="list-style-type: none"> <li>• How to enable and disable the alarm silence function</li> <li>• Discuss the importance of disabling the alarm silence function before leaving the room</li> <li>• <b>CAUTION: When the Alarm Silence Button is pressed during a "Sensor Off Patient" message, it will indicate to the oximeter the end of monitoring. In this "non-monitoring" state, all further alarms are silenced until the oximeter starts reading patient measurements again</b></li> </ul>														
<p><b>15. Identify the Alarm Silence Icons</b></p> <table border="1" data-bbox="152 800 1187 1192"> <tbody> <tr> <td data-bbox="152 800 228 867"></td> <td data-bbox="228 800 1187 867">No active alarms, no silenced alarms.</td> </tr> <tr> <td data-bbox="152 867 228 934"></td> <td data-bbox="228 867 1187 934">No active alarms, at least one alarm has been and remains silenced.</td> </tr> <tr> <td data-bbox="152 934 228 1001"></td> <td data-bbox="228 934 1187 1001">High priority. At least one active alarm and <b>NOT</b> silenced.</td> </tr> <tr> <td data-bbox="152 1001 228 1068"></td> <td data-bbox="228 1001 1187 1068">High priority Alarm - silenced.</td> </tr> <tr> <td data-bbox="152 1068 228 1136"></td> <td data-bbox="228 1068 1187 1136">Medium priority. At least one active alarm and <b>NOT</b> silenced.</td> </tr> <tr> <td data-bbox="152 1136 228 1203"></td> <td data-bbox="228 1136 1187 1203">Medium priority Alarm - silenced.</td> </tr> </tbody> </table>		No active alarms, no silenced alarms.		No active alarms, at least one alarm has been and remains silenced.		High priority. At least one active alarm and <b>NOT</b> silenced.		High priority Alarm - silenced.		Medium priority. At least one active alarm and <b>NOT</b> silenced.		Medium priority Alarm - silenced.		
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<p><b>16. Explain the role of the Ontario Ventilator Equipment Pool as it pertains to:</b></p> <ul style="list-style-type: none"> <li>• Supplies (sensors): <ul style="list-style-type: none"> <li>◦ <b>Sensors should last approximately 2 weeks or more with proper care</b></li> <li>◦ It is recommended a spare sensor be available. Clients are encouraged to order sensors prior to opening the last remaining sensor</li> </ul> </li> <li>• Alarm settings are prescribed by the physician and should only be changed on the order of the physician</li> <li>• Troubleshooting equipment if required</li> <li>• Return of equipment to the VEP when no longer required or no longer meets the eligibility criteria</li> <li>• Client must return equipment to VEP should monitoring be discontinued by the prescribing physician/care team.</li> <li>• Client must participate in recalls and upgrades, as required</li> </ul>														

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<b>17. Inform the VEP of any changes to continued eligibility for equipment from VEP</b> <ul style="list-style-type: none"> <li>• Oximeters are no longer funded by the Assistive Devices Program once a client reaches the age of 19 years</li> <li>• If monitoring is still deemed required by the physician, an alternate device can be arranged through a vendor</li> </ul>		
<b>18. Inform the VEP of any changes to contact information including address and telephone number</b>		
<b>19. List names and phone numbers of persons to contact for:</b> <ul style="list-style-type: none"> <li>• Medical emergencies (hospital, 911)</li> <li>• Equipment troubleshooting (VEP)</li> <li>• Power emergencies</li> </ul>		
<b>20. List the name and phone number of the prescribing doctor/care team</b>		

#### References

1. Masimo®. (2020). *Rad-G® Pulse Oximeter Operators Manual*

#### Disclaimer

This information is provided to you for educational purposes only and should not at any time be considered a substitute for professional advice from your physician or other qualified health care professional. The VEP does not assume any responsibility for application of the content of this document or for any information that may be present in the documents or websites cited as a reference. These references are provided for informational purposes only and do not represent VEP endorsement of any company or product. Always consult your physician and/or a qualified health care professional to learn more about recommendations specific to your health needs.

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