

	RESPIRATORY SERVICES	DATE CREATED: August 2016 DATE REVIEWED/REVISED:
PROCEDURE	TITLE: <u>CRITICAL CARE</u> – Forehead oximetry Sensor; Masimo (Respiratory Therapy) NUMBER: B-00-12-12085	RELATED DOCUMENTS:

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SITE APPLICABILITY:

ST. PAUL'S HOSPITAL

GENERAL INFORMATION:

The use of forehead oximetry sensors should be limited to ICU, CSICU and CICU where RNs have received appropriate training on the application of this product and troubleshooting. It may also be used for walking oximetry tests on select patients (i.e. scleroderma) in Pulmonary Diagnostics when a finger sensor is shown to be inaccurate or ineffective.

The Masimo disposable transreflectance forehead oximetry sensor (model M-LNCS TFA-1) is indicated for use when continuous noninvasive arterial oxygen saturation and pulse rate monitoring is required.

The Masimo forehead sensor may be more responsive than digit sensors when patients are poorly perfused or hypothermic. It also maintains stronger signal integrity than ear sensors.

The sensor is intended for single-patient use only, although it can be reused on the same patient. The sensor may also be used on the same site (just above the left or right eyebrow) for a maximum of 12 hours, provided the site is inspected regularly to ensure skin integrity, correct positioning, and adhesion of the sensor. Included in the sensor packaging are three adhesives that can be applied to the sensor when the stickiness of the adhesive covering the sensor is no longer effective.

INDICATIONS:

Forehead sensors may be considered for use in the following situations:

1. Poor or absent peripheral circulation
2. Hypothermia or Cooling Protocol
3. Inability to obtain oximetry measurement via conventional sensors

CONTRAINDICATIONS:

The Masimo forehead oximetry sensor is contraindicated for patients who exhibit allergic reactions to the adhesive pad, and for patients who perspire profusely. The sensor cannot be used in an MRI environment.

CAUTIONS:

In patients with very low perfusion, it is recommended that the site of sensor placement be examined more frequently due to increased risk of skin erosion.

SPECIAL CONSIDERATIONS:

The Masimo forehead oximetry sensor is compatible with the Philips monitors in ICU, CSICU and CICU as well as with any monitor equipped with Masimo oximetry technology.

REQUIRED SUPPLIES & EQUIPMENT:

- M-LNCS TFA-1 disposable transreflectance forehead oximetry sensor, spare adhesive pads, and head band
- Oximetry cable
- Monitor equipped with Masimo oximetry technology

PROCEDURE TO APPLY SENSOR:

1. Ensure the patient's skin is clean, dry and free of debris and oil.
2. Remove the sensor from the release liner.
3. Place the sensor onto a flat, hairless portion of the patient's forehead just above the left or right eyebrow with the center lines in line with the center of the pupil. If the patient is lying on their side, place the sensor above the eye on the side of the patient's head not in contact with the bed. To apply press the sensor firmly in place for 10 seconds, ensuring that the entire surface area of the adhesive pad makes contact with the skin.
4. Attach the sensor to the patient cable.

NOTE: If the sensor does not track the pulse reliably, it may be incorrectly positioned, or the sensor site may be excessively wrinkled or too deeply pigmented to permit appropriate light transmission. If any of these situations occurs, reposition the sensor or choose an alternate sensor for use on a different site.

PROCEDURE TO APPLY HEADBAND:

1. Place the headband behind the patient's head such that the felt side is positioned away from the patient's head.
2. Pull one end of the headband over the patient's forehead ensuring that the sensor is completely covered.
3. Pull the other end of the headband over the patient's forehead and secure the Velcro tab to the felt.
4. Adjust within minimum or maximum tension for optimum patient comfort and oximetry performance.

NOTE: Applying the headband too loose or too tight can cause inaccurate readings. The sensor must be completely covered by the headband.

PROCEDURE TO APPLY NEW ADEHSIVE PAD:

1. Remove one of the adhesive pads from the strip.
2. Place the adhesive pad over the sensor making sure not to cover the emitter or detector located in the centre of the sensor.
3. Remove the protective paper that covers the pad.
4. Apply sensor to the skin.

REFERENCES:

1. Masimo LNCS and M-LNCS TFA-1 SpO2 Disposable Transreflectance Forehead Sensor Directions for Use

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