


<b>Name of Policy:</b> <u>Pulse Oximetry</u> <b>Policy Number:</b> 3364-136-08-02 <b>Department:</b> Respiratory Care <b>Approving Officer:</b> Chief Nursing Officer  <b>Responsible Agent:</b> Director, Respiratory Care  <b>Scope:</b> The University of Toledo Medical Center Respiratory Care Department	  <b>Effective Date: April 8, 2019</b> Initial Effective Date: July 1, 1987
<input type="checkbox"/> New policy proposal <input checked="" type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Major revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy	

**(A) Policy Statement**

The Respiratory Care Department will initiate and maintain non-invasive monitoring of pulse oximetry as ordered by the physician in the intensive and non-intensive care units. Pulse oximetry provides estimates of arterial oxyhemoglobin saturation by utilizing selected wavelengths of light to non-invasively determine the functional saturation of oxyhemoglobin. It is used to assess the effects of therapeutic interventions that may influence cardiorespiratory function.

**(B) Purpose of Policy**

To provide clinical indications for the use of continuous and intermittent non-invasive pulse oximetry monitoring.

**(C) Procedure**

After receiving an appropriate order (to include frequency and/or duration) for pulse oximetry, the Respiratory Care staff will initiate monitoring:

1. Suggested clinical indications for continuous pulse oximetry in the intensive care unit, step-down units or floors:
  - a) During sedation, including Patient Controlled Analgesia (PCA). End tidal CO2 monitoring is mandatory with all PCA pumps, but occasionally pulse oximetry is used also.
  - b) During bronchoscopy / intubation
  - c) For patients without arterial lines, to be used after initiation of mechanical ventilation, until acceptable blood gases are maintained
  - d) During/after extubation until acceptable FiO2 has been titrated
  - e) Patients not intubated and who require an FiO2 of >.50
  - f) During Helium therapy
  
2. Examples of conditions to be considered for intermittent (spot check) pulse oximetry:
  - a) Spot checking of arterial oxygenation status in patients with respiratory or cardiac symptoms
  - b) Evaluation of the effects of a respiratory therapy treatment
  - c) Following changes in FiO2
  - d) For titration of low flow and/or low FiO2 in patients with COPD
  
3. Continuous pulse oximetry provided by the free standing units should be discontinued by respiratory care if the patient's oxygen saturation has remained constant (plus or minus 2%) over a 24

hour period while on the same FiO2 or room air. The physician will be made aware verbally or by written communication.

4. Nocturnal pulse oximetry trends will be completed with a physician order. The data is downloaded, copied and placed in the patient's chart.

<p><b>Approved by:</b></p> <p>_____  /s/  Michael Taylor  Director, Respiratory Care  Date</p> <p>_____  /s/  Monecca Smith  Chief Nursing Officer  Date</p> <p><i>Review/Revision Completed By:  Director, Respiratory Care</i></p>	<p><b>Review/Revision Date:</b></p> <p>5/20/1992            1/23/2009  5/17/1993            3/6/2012  9/17/1996            8/16/2012  8/31/1999            3/1/2016  9/26/2001            4/8/2019  12/14/2004  8/29/2007</p> <p><b>Next Review Date:</b> April 8, 2022</p>
<p><b>Policies Superseded by This Policy:</b></p>	

*It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.*