I. Purpose
Establish practices and standards that will insure delivery of quality monitoring of patients.

II. Policy
A. Acceptable criteria for pulse oximetry monitoring are:
   1. When the patient has a medical condition requiring ongoing and prolonged monitoring
   2. To obtain an estimate of saturation instead of a direct measurement
   3. When the PaO2 and acid/base status is not a requirement
   4. During and emergency
B. Objectives for pulse oximetry are to:
   1. Monitor arterial saturation
   2. Monitor the effectiveness of therapeutic intervention
   3. Satisfy medically mandated regulations
C. Policy
   1. Saturation documentation should include:
      a. FiO2
      b. Date
      c. Time
      d. Saturation
      e. and if warranted, the patient’s body position, activity level, probe site, stability of reading, clinical appearance, positive correlation between pulse rate on monitor and palpation of the heart rate.

III. Procedure
A. The clinical skill procedure for pulse oximetry can be found in Appendix A.
B. Saturation results may be limited by, but not exclusive to
   1. Use of intravascular dyes
   2. Low perfusion states
   3. Exposure of probe to light
   4. Skin pigmentation
   5. Nail polish
   6. Saturations of 83% and below are not read with the same accuracy of higher saturations
   7. Proper placement
C. Oximetry provides an estimate of arterial oxyhemoglobin saturation by using wavelengths in a noninvasive manner.
D. Oximetry is contraindicated if there is a need for pH, pCO₂, total hemoglobin, and abnormal hemoglobin measurements.
E. Hazards and complications because of device limitations include false-negative hypoxemia and false-positive normoxemia lead to inappropriate intervention.
F. Results should not be reported when a discrepancy exists between the sPO₂ and SaO₂ but should be explored and corrected.
G. Expected outcomes of sPO₂ should reflect the patient’s condition and should be documented.
H. Saturation monitoring should be done in conjunction with a total assessment of vital signs.
I. Continuous monitoring versus spot-checking should be considered when evaluating the need for sPO₂.
J. Universal precautions are recommended when using and cleaning monitors. Permanent probes and monitors should be cleaned when in the patient’s room for long periods of time, soiled, and in contact with transmittable organisms.