Analyzing FiO_2 on Delivery Systems

Purpose

To standardize the practice of verification of FIO_2 on delivery systems without an integrated oxygen analyzer.

Scope

The Department of Respiratory Care Services verifies the oxygen concentration as delivered to patients by aerosol devices.

Audience

Licensed Respiratory Care Practitioner employed by Respiratory Care Services.

Equipment

- O_2 analyzer which has been calibrated per manufacturers procedure
- Analyzer adapter
- 5" flex hose
- Oxyhood, and Sensormedics Oscillator 3100A/B, EnVe transport ventiltor

Procedure

Note: The following oxygen delivery systems are to be analyzed continuously when in use: oxyhoods, High Frequency Oscillators, and EnVe transport ventilators. The analyzer should be calibrated a minimum of once per day (night shift).

Step	Action
1	Verify patient's FiO_2 order and patient ID.
2	Wash hands per hospital policy and follow any isolation procedure indicated.
3	Introduce yourself and identify the patient.
4	Briefly explain the procedure and purpose to the patient.
5	Prior to placing the analyzer inline, perform a 2-point calibration, according to manufacturer's instruction.
6	Place the O_2 analyzer in the appropriate place within the delivery system. Keep the analyzer probe positioned so that condensation will not collect on it.
7	Reading should be within + 2% of order FIO_2. • If analyzed FIO_2 is not the same as ordered FIO_2, adjust the device until the proper FIO_2 is reached.

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Procedure Continued

Step	Action
7	• If you are unable to reach the ordered FIO_2 by adjusting the device, remove the analyzer and re-calibrate it. • Document FiO2 in Epic as part of the respiratory assessment
8	Document in EPIC and Treatment Card as outlined in RCS Policies # 7.1.1 and # 7.1.2.

Infection Control

Follow procedures outlined in Healthcare Epidemiology Policies and Procedures #2.24; Respiratory Care Services.
http://www.utmb.edu/policy/hcepidem/search/02-24.pdf

References

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