

**OLIVE VIEW-UCLA MEDICAL CENTER
RESPIRATORY CARE SERVICES – SLEEP MEDICINE
POLICY & PROCEDURE**

**NUMBER: 11435
VERSION: 1**

SUBJECT/TITLE: END TIDAL CARBON DIOXIDE MONITORING

POLICY:

To monitor **adult patients** EtC02 who are receiving a sleep study who are suspected of or at risk for nocturnal hypoventilation. Pediatric patients should be routinely monitored for hypoventilation by EtCO2. Monitoring hypoventilation during PAP titration is optional.

PURPOSE:

For the management of patients with possible hypoventilation who are receiving End Tidal Carbon Dioxide (EtC02) monitoring while undergoing a sleep study test for nocturnal hypoventilation.

DEPARTMENTS: RESPIRATORY CARE SERVICES

PROCEDURE:

After the patient has the EEG electrodes and all the respiratory and emg leads attached for the Polysomnogram according protocol then the technician will attach a dual nasal cannula for reading both the PTAF and the EtC02 at the same time.

- 1.0** The Nonin Sleep Sense EtC02 monitor is turned on and, (the first time used it will have to be calibrated to the Somnostar program), the technician will choose either “< 30 Kg’s/66 lbs or >30 Kg’s/66 lbs”.

The meter will start and the technician will set the parameters for the alarms.

- 2.0** The normal EtC02 is 35-45mmHg, if the EtC02 increases more than 10mmHg, >55mmHg, along with decrease in inspiration amplitude, or a flattening of the wave form, and or desaturation then the patient is hypoventilating

3.0 Clinical judgment is essential when assessing the accuracy of end-tidal CO2 readings. The values should not be assumed to be accurate surrogates of the arterial PCO2 when values do not fit the clinical picture.

.0 The endtidal CO2 often malfunctions or provides falsely low values in patients who have marked nasal obstruction, profuse nasal secretion, are obligate mouth breathers, or who are receiving supplemental oxygen. It is crucial to obtain a plateau in the end-tidal wave form for the signal to be considered valid.
problem.

- A.** After the study the cannula, moisture chamber and the filter will be discarded the EtC02 monitor wiped down with a damp cloth and it can be wiped around the filter opening with a sani-cloth.

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B. The Nonin Sleep Sense EtC02 monitor should be calibrated every year for accuracy.

References:	
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