Memorial Medical Center
Waveform Capnography Protocol

Equipment Needed
- Capnography or CO₂ monitor with power cord and SpO₂ extension cable
- Filterline Nasal Cannula
- Pulse Oximetry Finger Probe

How to Operate
1. Attach filterline into CO₂ port and apply to patient.
2. If patient requires oxygen, attach tubing to O₂ source. The filterline has a maximum flow rate of 5L/min.
3. Plug SpO₂ finger probe in the SpO₂ port and attach to patient.
4. Turn on machine.
5. Designate if the patient is a new patient or not using the turn knob.

Patient Education
Provides education to the patient and family about the purpose of capnography. Remember to instruct the patient that the alarm is intentionally loud to prompt them to wake up and take a deep breath. Capnography patient education cards are available for your unit. If your unit runs out of them, please use job number 002–0658 to order reprints. Remember to document the education you provide to patient and family under the Respiratory Education section.

Return Instructions
Respiratory Therapy manages the capnography machines, and they are in charge of storing and releasing the capnography machines. Once the order for capnography monitoring has been discontinued, Respiratory Therapy will be electronically notified to come pick up the machine. Please clean the machine and place at the nursing station/reception for Respiratory Therapy pick-up.

Cleaning Instructions
Equipment must be cleaned after each use. To clean the monitor’s surfaces and cords, use the preferred PDI Sani-Cloth or if necessary the 1:10 Bleach Wipes. To clean the screen, use a damp lint-free cloth prior to returning it to Respiratory Therapy. NO parts of the monitor are disposable. The tubing the patient wears is disposable.

Questions?
4E RNs and 2G RNs are the expert resources for this procedure. Please contact their Charge Nurse if you have any questions.
Capnography Screening Tool Score

Preoperative patients are to be screened using the capnography screening tool. The screening tool can be accessed in the adhoc, perioperative forms, preprocedure surgical prep list or clindoc flowsheet, frequent documentation band, vital signs section. If the capnography screening tool score is ≥ 5, then postoperative capnography is indicated for your patient and needs to be ordered.

<table>
<thead>
<tr>
<th>High Risk Criteria</th>
<th>Point Value</th>
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<tbody>
<tr>
<td>Obesity or morbid obesity BMI &gt; 30</td>
<td>2</td>
</tr>
<tr>
<td>To calculate BMI: Weight (kg)/height (meters)</td>
<td></td>
</tr>
<tr>
<td>History of Obstructive Sleep Apnea or suspected OSA</td>
<td>3</td>
</tr>
<tr>
<td>History of hypertension</td>
<td>1</td>
</tr>
<tr>
<td>Anesthesia history of respiratory depression, oversedation (patient or immediate family member)</td>
<td>1</td>
</tr>
<tr>
<td>History of moderate to severe respiratory disease (COPD, asthma, cystic fibrosis, pulmonary HTN or current lung pathology)</td>
<td>1</td>
</tr>
<tr>
<td>Age &gt; 65 years AND opioid naïve</td>
<td>1</td>
</tr>
<tr>
<td>Major renal (creatinine baseline &gt; 1.4) or hepatic disease</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL POSSIBLE POINTS</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Notes

- After the first 12 hours, the monitor can be temporarily removed while the patient is awake.
- Notify physician if patient shows trends of elevated etCO$_2$ and/or shows symptoms of respiratory depression.
- If the patient uses CPAP at home, use capnography with CPAP anytime the patient is sleeping (Call Respiratory Therapy with questions—788–3385).

Documentation Requirements

- PACU will document etCO$_2$ levels every ten minutes during Phase I monitoring on the surgiNet flowsheet, pre-post frequent band, vitals section
- Document baseline etCO$_2$ and respiratory rate and subsequent readings on the frequent documentation band, vitals section. Readings will be documented q 1h X 12hrs, then q 2h X 12hrs, then q 4h X 24hrs.