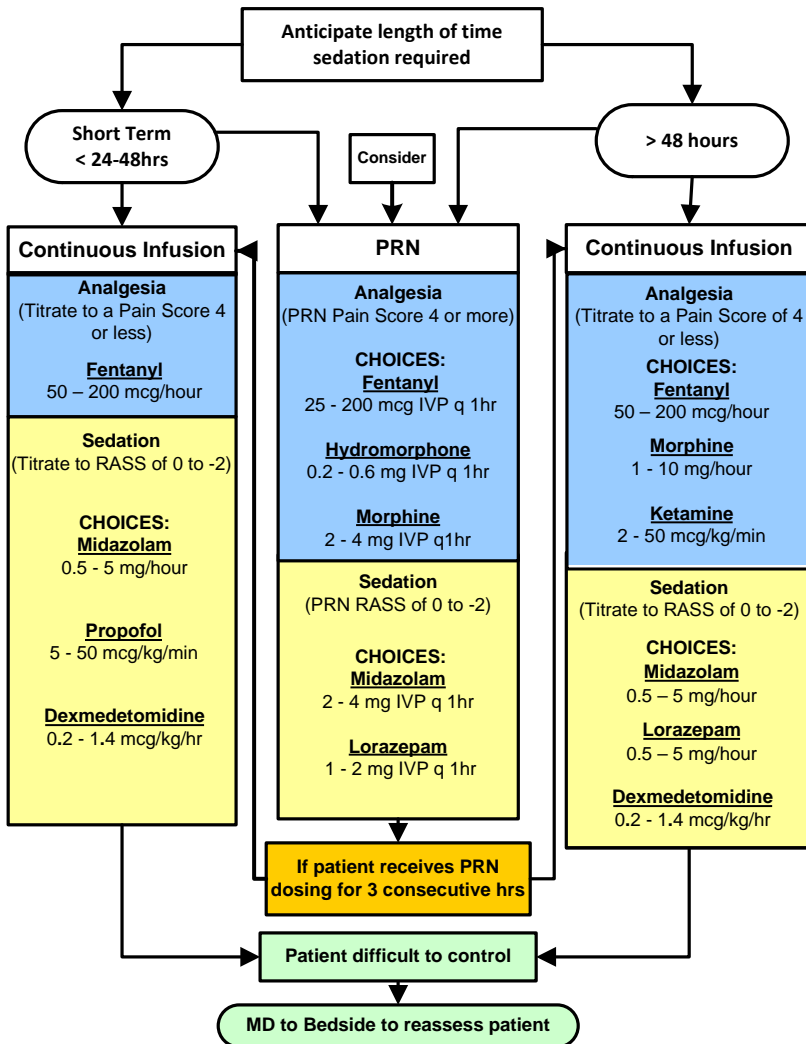


# STICU Non-Weight-Based Dosing Analgesia & Sedation Protocol for the Mechanically Ventilated Patient



University Health System



| Richmond Agitation-Sedation Scale (RASS) |  |
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| +4                                       | <b>Combative</b> Combative, violent, immediate danger to staff                                     |
| +3                                       | <b>Very Agitated</b> Pulls to remove tubes or catheters, aggressive                                |
| +2                                       | <b>Agitated</b> Frequent non-purposeful movement, fights ventilator                                |
| +1                                       | <b>Restless</b> Anxious, apprehensive, movements not aggressive                                    |
| 0  | <b>Alert &amp; Calm</b> Spontaneously pays attention to caregiver                                  |
| -1                                       | <b>Drowsy</b> Not fully alert but has sustained awakening to voice (eye opening & contact >10 sec) |
| -2                                       | <b>Light Sedation</b> Briefly awakens to voice (eyes open & contact <10sec)                        |
| -3                                       | <b>Moderate Sedation</b> Movement or eye opening to voice (no eye contact)                         |
| -4                                       | <b>Deep Sedation</b> No response to voice, but movement or eye opening to physical stimulation     |
| -5                                       | <b>Unarouseable</b> No response to voice or physical stimulation                                   |

|  |   |
|--|---|
| <b>A<br/>N<br/>A<br/>L<br/>G<br/>E<br/>S<br/>I<br/>A</b> | <b>FENTANYL TITRATION</b><br>Increase infusion rate by 25 mcg/hour every 5 minutes.<br>BOLUS: May bolus 25 mcg every 5 minutes until desired level<br>Call provider for rate > 200 mcg/hr |
|  | <b>MORPHINE TITRATION</b><br>Increase infusion rate by 1 mg/hour every 5 minutes.<br>BOLUS: May bolus 2 mg every 10 minutes until desired level<br>Call provider for rate > 10 mg/hour    |
|  | <b>KETAMINE TITRATION</b><br>Increase infusion rate by 5 mcg/kg/min q 10min<br>BOLUS: May bolus 0.5 mg/kg every 10 minutes<br>Call provider for rate > 50 mcg/kg/min                      |

**Adult Pain Rating Scale**  
Intervention Required for Pain Scores between 4 – 10  
Use Verbal or Non-Verbal scales as appropriate.

|  |  |   |
|--|--|---|
| <b>S<br/>E<br/>D<br/>A<br/>T<br/>I<br/>O<br/>N</b> | <b>PROPOFOL TITRATION</b><br>Increase infusion rate by 5 mcg/kg/min every 10 minutes<br>BOLUS: May bolus up to 0.5 mg/kg until desired level every 5 minutes<br>Call provider for rate > 50 mcg/kg/min<br><b>DO NOT EXCEED 70 mcg/kg/min</b><br>Obtain baseline triglyceride level, and a level every 3 days. if infusion rate is 40mL/hr or greater obtain a level daily. Call provider for level greater than 450 mg/dL. | <b>MIDAZOLAM TITRATION</b><br>Increase infusion rate by 1 mg/hour every 5 minutes.<br>BOLUS: May bolus 1 mg every 5 minutes until desired level<br>Call provider for rate > 10 mg/hour<br><b>***Use Midazolam with caution in: Asians, Renal &amp; Liver failure, Elderly&gt;65</b> |
|  | <b>DEXMEDETOMIDINE TITRATION</b><br>Increase infusion rate by 0.1 mcg/kg/hr every 15 minutes<br>Call provider for rate > 1.4 mcg/kg/hr<br><b>Hold and call provider for significant bradycardia, do not titrate if HR&lt;60 or SBP&lt;90</b>   | <b>LORAZEPAM TITRATION</b><br>Increase infusion rate by 1 mg/hour every 15 minutes.<br>BOLUS: May bolus 1 mg every 15 minutes until desired level<br>Call provider for rate > 5mg/hour  |

## DAILY SEDATION INTERRUPTION

- Hold both the sedative and analgesic infusions every morning to allow for an accurate neurological assessment.  
\* Do not interrupt the analgesic infusion in patients who currently follow commands, but reduce the dose by ½.
- Provider should be immediately called to the bedside to evaluate the patient once there is a change in clinical status including but not limited to agitation, fighting the ventilator, O2 desaturation, or awake and able to follow commands.
- After the physician or the nurse has evaluated the patient, the infusion(s) THAT ARE NECESSARY for adequate patient sedation and/or analgesia is (are) re-started at ½ the previous dose(s) and then titrated up as necessary to the minimal effective dose(s).
- A spontaneous breathing trial should be done in conjunction with the daily sedation holiday. Please refer to Spontaneous Breathing Trial Protocol for exceptions

### CONTRAINDICATIONS TO SEDATION INTERRUPTION:

Undergoing active treatment for elevated ICP - Status Epilepticus - Receiving neuromuscular blocking agents Hypoxemia PEEP > 18 or FiO2 > 80% - ARDS  
**\*\* Patients identified at increased risk of self-extubation should not be turned during the sedation interruption.\*\***