



# London Health Sciences Centre

Critical Care / Intensive Care

## SEDATION IN CRITICALLY ILL ADULT PATIENTS PREPRINTED ORDER

KEY: R - REQUISITIONED P - PROCESSED (KARDEX)

**THIS SECTION MUST BE COMPLETED AND SIGNED BEFORE MEDICATIONS ARE DISPENSED.**

**NO KNOWN ALLERGIES**

ALLERGY (drug, food, tape, dyes, latex, other)	REACTION
1.	
2.	
3.	

NON-MEDICATION ORDERS	R	P	MEDICATION ORDERS	P
<p><b>Reason for Exam / Clinical History and Contact # required for all Radiology / Nuclear Medicine orders.</b></p> <p><input type="checkbox"/> Perform pain assessment and document at the start of each shift, q 4h (between 0700 and 2200) and p.r.n. with each intermittent bolus or change in sedation (see reverse).</p> <p><input type="checkbox"/> Assess and document VAMASS at the start of each shift, q 4h (between 0700 and 2200) and p.r.n. (see reverse).</p> <ul style="list-style-type: none"> <li>• If patient is anxious or agitated, consider non-medication or environmental strategies to assist with management.</li> <li>• If patient becomes more confused and/or disoriented with the use of analgesia, assess for delirium.</li> <li>• Notify physician if unable to maintain target VAMASS at maximum dose.</li> <li>• During daily morning rounds, reassess target VAMASS and appropriateness for sedation weaning.</li> </ul>			<p>VAMASS Target: _____ (required)</p> <p><input type="checkbox"/> Duration of sedation anticipated to be:</p> <ul style="list-style-type: none"> <li>• &lt; 48 hours; and</li> <li>• rapid awakening for neurological assessment not required</li> </ul> <p><b>P.R.N. dose / Loading dose</b></p> <p>Midazolam _____mg I.V. q 10 minutes p.r.n. to maintain target VAMASS (recommended dose 2 - 4 mg).</p> <p><input type="checkbox"/> <b>If continuous sedation is required:</b></p> <p>Midazolam infusion 100 mg/50 mL 0.9% sodium chloride at _____mg/h (recommended dose 2 - 10 mg/hr). Titrate infusion to maintain target VAMASS. Maximum dose _____mg/hr.</p> <p><input type="checkbox"/> Duration of sedation anticipated to be:</p> <ul style="list-style-type: none"> <li>• &gt; 48 hours; and</li> <li>• rapid awakening for neurological assessment not required</li> </ul> <p><b>P.R.N. dose / Loading dose:</b></p> <p>Lorazepam _____mg I.V. q 10 minutes p.r.n. until target VAMASS is achieved (recommended dose 1 - 2 mg).</p> <p><input type="checkbox"/> If continuous sedation is required add:</p> <p><b>Maintenance Dose:</b></p> <p>Once initial VAMASS goal is achieved:</p> <p>Lorazepam _____mg I.V. q 4h to maintain target VAMASS (recommended dose 1 - 2 mg).</p> <p>Caution: Maximum total I.V. dose should not exceed 240 mg per 24 hours.</p> <p><input type="checkbox"/> Rapid awakening required for neurological assessment: Use preprinted order for propofol.</p> <p><input type="checkbox"/> <b>Dangerous agitation</b> (use only if imminent danger to self or others):</p> <p>Midazolam _____mg I.V. q 5 min p.r.n. to a maximum of 3 doses (recommended dose 5 mg). Notify physician if sedation goal is not achieved.</p>	
<p><b>DAILY SEDATION WEANING</b> (if deemed appropriate during rounds):</p> <p><input type="checkbox"/> Attempt daily reduction of sedation providing that:</p> <ul style="list-style-type: none"> <li>• VAMASS score is <math>\leq</math> target</li> <li>• patient is not receiving neuromuscular blocking agent</li> <li>• patient is hemodynamically stable</li> <li>• patient is stable on the ventilator</li> <li>• sedation is not being used to treat delirium</li> </ul> <p><b>See reverse side of form for Weaning Protocol.</b></p>				

PRESCRIBER'S PRINTED NAME / SIGNATURE / CONTACT #:			DATE (YYYY/MM/DD):	TIME:
PROCESSOR INITIALS:	DATE (YYYY/MM/DD):	TIME:	RN INITIALS:	DATE (YYYY/MM/DD):
				TIME:

## CRITICAL CARE PAIN ASSESSMENT

A: Patient Unable to Communicate	B: Patient Able to Communicate
<ul style="list-style-type: none"> <li><input type="checkbox"/> Autonomic Response:                             <ul style="list-style-type: none"> <li>• HR, RR, BP responses</li> <li>• Diaphoresis</li> </ul> </li> <li><input type="checkbox"/> Non-Verbal:                             <ul style="list-style-type: none"> <li>• Grimacing</li> <li>• Frowning</li> <li>• Facial expressions</li> </ul> </li> <li><input type="checkbox"/> Physical Findings:                             <ul style="list-style-type: none"> <li>• Rigidity</li> <li>• Guarding</li> <li>• Resisting</li> </ul> </li> </ul>	<p>Responses to the following areas of assessment:</p> <p><input type="checkbox"/> <b>PQRST</b></p> <p><b>Pain:</b></p> <ul style="list-style-type: none"> <li>• Location of pain</li> <li>• Aggravating and/or alleviating factors</li> </ul> <p><b>Quality:</b></p> <ul style="list-style-type: none"> <li>• Description of pain (e.g., dull, sharp, throbbing, burning, pins and needles)</li> </ul> <p><b>Radiation or Referral</b></p> <ul style="list-style-type: none"> <li>• Area of radiation</li> <li>• Associated symptoms (nausea, vomiting, shortness of breath)</li> </ul> <p><b>Severity:</b></p> <ul style="list-style-type: none"> <li>• Patient's rating of pain on a scale of 0 - 10 (verbally or demonstrated using a visual analog)</li> </ul> <p><b>Timing:</b></p> <ul style="list-style-type: none"> <li>• Duration</li> <li>• Intermittent/constant</li> <li>• At rest or activity</li> </ul>

### VENTILATOR ADJUSTED MOTOR ASSESSMENT SCORING SCALE (VAMASS)

VAMASS	Description	V-Score	Ventilation Status
0	Unresponsive to pain.	A	Minimal coughing; few alarms; tolerates movement.
1	Opens eyes and / or moves to pain only.	B	Coughing, frequent alarms when stimulated; settles with voice or removal of stimulus.
2	Opens eyes and / or moves to voice.	C	Distressed, frequent coughing or alarms; high RR with normal / low PaCO <sub>2</sub> .
3	Calm and cooperative.	D	Unable to control ventilation; difficulty delivering volumes; prolonged coughing.
4	Restless but cooperative; follows commands.		
5	Agitated; attempts to get out of bed; may stop behaviour when requested but reverts back.		
6	Dangerously agitated; pulling at tubes or lines, thrashing about; doesn't obey commands.		

### WEANING PROTOCOL

CONTINUOUS MIDAZOLAM INFUSION	REGULAR LORAZEPAM DOSING
<ul style="list-style-type: none"> <li>• if midazolam infusion <math>\leq</math> 4 mg/hr, reduce infusion by 50% and reassess for further weaning in 6 hours</li> <li>• if midazolam infusion <math>&gt;</math> 4 mg/hr, reduce infusion by 25% and reassess for further weaning in 6 hrs</li> <li>• discontinue infusion if dose <math>&lt;</math> 1 mg/hr</li> <li>• if VAMASS <math>&gt;</math> target or patient becomes agitated during weaning, administer midazolam bolus and return to previous infusion rate</li> </ul>	<ul style="list-style-type: none"> <li>• if lorazepam dose is <math>\leq</math> 2 mg q 4h, reduce dose by 50% and reassess for further weaning in 12 hours</li> <li>• if lorazepam dose <math>&gt;</math> 2 mg q 4h, reduce dose by 25% and reassess for further weaning in 12 hours</li> <li>• discontinue regular lorazepam if dose <math>\leq</math> 0.5 mg q 4 hours</li> <li>• if VAMASS <math>&gt;</math> target or patient becomes agitated during weaning, administer lorazepam bolus and return to previous dose</li> </ul>