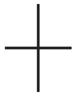
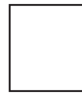

STAT/NOW

1. Titrate sedation to obtain Riker Sedation/Agitation Score of:
☐ 4-Calm and cooperative ☐ 3- Sedated ☐ 2- Very Sedated ☐ 1- Unarousable
(see reverse for score description and indications)

2. Reduce all continuous sedation between 08:00 AM and noon to ½ rate and continue to titrate per protocol.
If patient on neuromuscular blockade, titrate according to BIS monitor.

3. Implement the Sedation Protocol and appropriate Pain Management Protocol

4. Bowel regimen: ☐ Docusate 100 mg PO TID ☐ MOM 30 mL PO q HS PRN
☐ Senna (Senokot) 1 tab PO BID if no BM in 48 hr HOLD REGIMEN FOR DIARRHEA

5. **SEDATION**

SHORT TERM THERAPY (<48 HRS)

MIDAZOLAM
☐ Initiation: Midazolam 2 mg IV Q 5 minutes until sedated, then:
☐ IV infusion: Midazolam 2 mg/hr IV, adjust infusion by 1 mg Q 20 minutes to sedation goal.
☐ PRN Dose: Midazolam **(circle one)** 1 mg 2 mg IV Q 1 hr PRN to reach sedation goal

☐ Propofol: Per ICU propofol infusion protocol

☐ Dexmedetomidine: Per ICU dexmedetomidine continuous infusion protocol

LONG TERM THERAPY (>48 HRS)

LORAZEPAM
☐ Lorazepam 2 mg IV Q 10 minutes until sedated, then:
☐ Intermittent injection: Lorazepam _____ mg Q _____ hr
☐ IV infusion: Lorazepam 1 mg/hr IV, adjust infusion by 1 mg Q 20 minutes to sedation goal.
☐ PRN Dose: Lorazepam **(circle one)** 1 mg 2 mg 3 mg 4 mg IV Q 1 hr PRN to reach sedation goal

6. **DELIRIUM**

HALOPERIDOL
☐ Initiation: Haloperidol 5 mg IV Q 10 minutes until sedated (dose not to exceed 40 mg), then:
☐ Intermittent injection: Haloperidol ____ mg IV Q ____ h
☐ IV infusion: Haloperidol _____ mg/hr IV ☐ Order daily EKG.
☐ PRN Dose: Haloperidol **(circle one)** 2 mg 3 mg 5 mg IV Q 1 hr PRN to reach sedation goal

7. **ANALGESIA** Source of pain: ☐ Post surgical ☐ Other: ______________________

FENTANYL
☐ Initiation: Fentanyl 50 mcg IV Q 5 minutes until target reached, then:
☐ IV infusion: Fentanyl 50 mcg/hr IV, adjust 25 mcg/hr Q 20 minutes prn to MAXIMUM of 300 mcg/hr
☐ PRN Dose: Fentanyl **(circle one)** 25 mcg 50 mcg 100 mcg IV Q 1 hr PRN to reach sedation goal

8. Neuromuscular blockade: **PATIENT MUST BE ON SEDATION TO ORDER NMB**
☐ Rocuronium 50 mg IV, may repeat X 4, if further muscle relaxant needed, then:
☐ Cisatracurium infusion 3 mcg/kg/min titrate per ICU NMB protocol

9. ☐ Place BIS monitor for all patients with target sedation of unarousable and with neuromuscular blockade, and sedate to score of 40 - 60

NURSE SIGNATURE Date: ______________ Time: ____________	**Pharmacy Scan Time:** ________________	Name Stamp Signature STAMP/PHYSICIAN SIGNATURE/BEEPER # ↓ *Required for countersignature on telephone/verbal orders* Date: ______________ Time: ____________

Patient Label

THE GEORGE WASHINGTON UNIVERSITY HOSPITAL

ICU SEDATION ORDERS

73-125 (2/10)

ICU SEDATION PROTOCOL

Check all that apply

☐ **Propofol Continuous Infusion protocol**

1. Propofol injection containing 10mg/mL of Propofol in 10% lipid emulsion.
2. Start infusion at 5-10 mcg/kg/min.
3. Titrate infusion to goal SAS score , increasing or decreasing the infusion rate to 5-10mcg/kg/min Q5 minutes.
4. NURSES MAY NOT ADMINISTER BOLUSES.
5. Monitor BP, pulse, respirations, Sao2 and SAS:
   a. Q5min minutes with each dosage change then
   b. Q1hr until desired SAS achieved
6. Call House Officer (HO) for:
   a. Hypotension or hemodynamic instability (may require IV fluids or pressors)
   b. Uncontrolled agitation (may require additional analgesic or further intervention) SAS greater than or equal to 5
   c. Dose requirements greater than 50mcg/kg/min

☐ **Dexmedetomidine Continuous Infusion Protocol**

1. Before initiating, pt should not have the following contraindications
   a. High grade 2 or 3 Heart Block(HB) (non-pacer protected HB)
   b. Presence of septic syndrome
   c. Severe hypovolemia
   d. Hypotension
   e. Bradycardia
2. **Initiation dose:** infuse 1mcg/kg over 30 minutes. Assess for bronchospasm and respiratory depression during this initiation time. Immediately discontinue and call HO if bronchospasm , respiratory depression ,severe hypotension or bradycardia develops.
3. **Infusion:** start at 0.5mcg/kg/hr and increase or decrease rate by 0.1mcg/kg/hr Q15min until desired SAS level is achieved. DO NOT ADMINISTER ADDITIONAL BOLUSES.
4. Monitor BP, HR, respiration rate, SaO2 and SAS:
   a. Q5min with each dose adjustment then
   b. Q1hr until desired level of sedation is achieved.
5. Promptly discontinue and call HO for SBP<80 mmHg, new onset of heart blocks, bronchospasm and HR<45.

☐ **Pain Management Protocol**

Titrate analgesic dosing to maintain pain score = 3.

1. **Fentanyl Infusion:** start Fentanyl at 50mcg/hr and adjust 25mcg/hr Q20 min prn to MAXIMUM of 300mcg/hr.

☐ **Daily Sedation Reduction Protocol**

Applies to all patients on continuous infusions.

1. Daily sedation reduction should be initiated between 0800-noon at the discretion of the nurse.
2. Reduce sedation infusion rate to ½ current dose.
3. Assess SAS and pain level every four hours and with drip changes.
4. If agitation, increased pain level,and/or SAS greater than 5, titrate the infusion back to reach sedation/pain goal.

☐ **Neuromuscular Blockade Protocol**

All patients must be given sedation in conjunction with a neuromuscular blocking agent (NMBA).

1. To be implemented in the use of continuous neuromuscular blockade agents.
2. Initiate cisatracurium (Nimbex) infusion per ICU Sedation Orders.
3. Place peripheral twitch monitor on ulnar or facial nerve. Note: ulnar placement may be less sensitive than facial placement if there is significant peripheral edema.
4. **Initiation Dose:** give bolus 0.1mg/kg IV push x1
5. **Infusion:**
   - Begin infusion within 45-60 min of bolus.
   - Start infusion at 3mcg/kg/min.
   - Titrate infusion to maintain 2 twitches in TOF.
   - To titrate up, may give additional bolus of 0.03mg/kg q 40-60 min.
   - To titrate down, hold infusion until 2 twitches on TOF or patient movement, and restart at 50% previous dose.
6. Place BIS monitor and titrate sedation to maintain BIS index 40-60.

RIKER Sedation/Agitation Scale		
Sedation Agitation Level	Description	Typical scenarios
7	Dangerous agitation Pulls at endotracheal tube (ET); Tries to remove catheters	Not applicable
6	Very agitated Does not calm, despite frequent verbal reminding of limits; Requires physical constraints; Bites ET tube	Not applicable
5	Agitated Anxious or mildly sedated; Attempts to sit up; Calms down to verbal instructions	Mild agitation associated with confusion at night with elderly patients; Mild symptoms of alcohol withdrawal
4	Calm and cooperative Calms, awakens easily; Follows commands	Intubated patients who have shown no inclination to pull on the endotracheal tube; Alcohol withdrawal patients who protect airway and can be positioned in aspiration precautions
3	Sedated Difficult to arouse; Awakens to verbal stimuli or gentle shaking but drifts off again; Follows simple commands	Intubated patients who pull catheters or endotracheal tube when aroused
2	Very Sedated Arouses to physical stimuli but does not communicate or follow commands; May move spontaneously	Intubated, severe cardiac or pulmonary compromise which deteriorates off sedation.
1	Unarousable Minimal or no response to noxious stimuli; does not communicate or follow commands	For severe immediately life threatening pulmonary failure, open abdomen; Increased intracranial pressure.