ACCOUNT NO.
MED. REC. NO.
NAME
BIRTHDATE

*Patient Identification*

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**Allergies:**_____ **Weight:** _____kg

**Diagnosis:**_____

**Service:**_____ **Attending:**_____

## DELIRIUM (ACUTE ENCEPHALOPATHY): ACUTE CARE UNIT

Based on your clinical judgement and prior diagnostics, use this order set if the patient has delirium (inattentiveness) + (acute/fluctuating course) + (disorganized thought +/or altered consciousness).

Confusion Assessment Method (CAM), gold standard for delirium screening:
http://ozone.ohsu.edu/healthsystem/HIS/po1654_CAM.pdf

Common Drugs Linked to Confusion/Delirium:
http://ozone.ohsu.edu/healthsystem/HIS/po7289_drugs_linked_to_delirium.pdf

## WORK UP CAUSE OF DELIRIUM

Evaluate for dehydration, metabolic derangement, constipation, urinary retention, primary CNS event, infection, prescribed / illegal / OTC drug toxicity.

### Labs (if no current labs)

- ❑ Basic Metabolic Set (Na, K, Cl, TCO2, BUN, Cr, Glu, Ca) — ONCE
- ❑ Complete Metabolic Set (Na, K, Cl, CO2, BUN, Creat, Gluc, Ca, AST, ALT, Bili Total, Alk Phos, Alb, Prot Total) — ONCE
- ❑ CBC, with Differential — ONCE
- ❑ Blood Gases, Arterial - Lab — COLLECT NOW, X1
- ❑ Vitamin B-12 — ONCE
- ❑ Drug Screen, Urine; No Confirm — COLLECT NOW, X1
- ❑ Digoxin, Plasma — ONCE
- ❑ Magnesium, Plasma (monitoring for haloperidol) — ONCE

### Diagnostic Studies

- ❑ X-Ray Portable Chest 1 View — Routine, ONCE
  Reason for Exam/Referral Diagnosis? Assess for infection
- ❑ CT Head WO Contrast — Routine, ONCE
  Reason for Exam/Referral Diagnosis? Delirium

**Signature:**_____ **Date:**_____ **Time:**_____
**Print Name:**_____ **Pager:**_____

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## MEDICATION OPTIMIZATION

**Review all current medications and taper/discontinue those that are high risk for delirium or are unnecessary**

Evaluate risk-benefits of discontinuing centrally acting medications (benzodiazepines, anticholinergics, antispasmodics, opiates, muscle relaxants, etc.)

**Preferred treatment options:**

| Avoid | Alternatively, Use: |
|---|---|
| promethazine (PHENERGAN), prochlorperazine (COMPAZINE) | ondansetron (ZOFRAN) |
| famotidine (PEPCID) | omeprazole (PRILOSEC) |
| diphenhydramine (BENADRYL), hydroxyzine (VISTARIL) | fexofenadine (ALLEGRA) |
| zolpidem (Ambien) | melatonin |
| digoxin >125 mcg daily if over 65 | |

Titrate down medications based on patient condition (opioids, benzodiazepines, SSRIs)

Calculate creatinine clearance using Cockgroft Gault; renally dose all medications:
http://www.mdcalc.com/creatinine-clearance-cockcroft-gault-equation/

More Common Drugs Linked to Confusion/Delirium:
http://ozone.ohsu.edu/healthsystem/HIS/po7289_drugs_linked_to_delirium.pdf

❑ IP Consult to Clinical Pharmacist — Routine, CONTINUOUS
Reason for Consult: Deliriogenic medication review

## NON-PHARMACOLOGIC MANAGEMENT OF DELIRIUM

**Discontinue all tethers as able:**

- In Orders Manager, discontinue all orders for tethers as able, including Foley catheter, intravenous catheters, SCDs, telemetry, NG tubes.

**Environmental management:**

- Move to room with window as soon as available (private room preferred).
- Encourage family to be at bedside as often as able.
- Provide as much OOB mobility as tolerated, ideally to chair TID for meals.

### Nursing

❑ Do not check Vital Signs 10pm-6am to allow for sleep — Routine, CONTINUOUS

❑ Move to room with window as soon as available — Routine, CONTINUOUS
Private room preferred.

❑ Encourage family to be at bedside as often as able — Routine, CONTINUOUS

❑ Check Orthostatic Blood Pressure — Routine, ONCE

**Signature:**_____ **Date:**_____ **Time:**_____
**Print Name:**_____ **Pager:**_____

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- ❑ Measure Post Void Residual — Routine, ONCE
- ❑ Notify MD — Routine, CONTINUOUS
  Oxygen Saturation < 92%;
  Post-void residual > 400 mL;
  No BM in 48 hours

**PHARMACOLOGIC MANAGEMENT OF DELIRIUM**

**Pain**

- ❑ acetaminophen (TYLENOL) tablet 1,000 mg, oral, THREE TIMES DAILY
- ❑ oxyCODONE (immediate release) (ROXICODONE) tablet 2.5-5 mg, oral, EVERY 4 HOURS AS NEEDED for moderate pain
- ❑ HYDROmorphone (DILAUDID) injection 0.2 mg, intravenous, EVERY 2 HOURS AS NEEDED for severe pain or pain unresponsive to oral medications
  Chart pain score. Administer slowly over 2 to 3 minutes.

**Bowel Care** *(Single Response)*

- ❑ Patient taking PO
  - ☑ senna-docusate (SENOKOT S) 8.6-50 mg 2 Tabs, Oral, TWICE DAILY
    Hold for >2 BM per day
  - ☑ polyethylene glycol (MIRALAX) powder 17g, Oral, DAILY
    To administer 17 grams, dissolve 1 packet in 240 mL of water. Hold for > 2 BM per day
  - ☑ polyethylene glycol (MIRALAX) powder 34g, Oral, THREE TIMES DAILY AS NEEDED for no BM for 2 days.
    To administer 34 grams, dissolve 2 packet in 480 mL of water.
  - ☑ bisacodyl (DULCOLAX) PR 10 mg, Rectal, DAILY AS NEEDED if no BM in past 2 days
  - ☑ Notify provider:
    Notify provider if no BM over 72 hours. . Notify provider to discontinue bowel care orders if > 2 BM per day x 2 days. Notify provider if scheduled doses are not given for 2 days.
- ❑ Patient on feeding tube
  - ☑ senna (SENOKOT) liquid 10 mL, Feeding Tube, TWICE DAILY
    Hold for >2 BM per day
  - ☑ docusate sodium liquid 100 mg 100 mg, Feeding Tube, TWICE DAILY
    Hold for >2 BM per day
  - ☑ polyethylene glycol (MIRALAX) powder 17g, Feeding Tube, DAILY
    To administer 17 grams, dissolve 1 packet in 240 mL of water. Hold for > 2 BM per day

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- ☑ polyethylene glycol (MIRALAX) powder 34g, Feeding Tube, THREE TIMES DAILY AS NEEDED for no BM for 2 days.
  To administer 34 grams, dissolve 2 packet in 480 mL of water.
- ☑ bisacodyl (DULCOLAX) PR 10 mg, Rectal, DAILY AS NEEDED for no BM in past 2 days
- ☑ Notify provider:
  Notify provider if no BM over 72 hours. . Notify provider to discontinue bowel care orders if > 2 BM per day x 2 days. Notify provider if scheduled doses are not given for 2 days.

**Sleep**

- ❑ melatonin tablet 1 mg, oral, AT BEDTIME

**Circumstances Requiring Alternate Management (Consults)**

For alcohol withdrawal, see GEN: ALCOHOL WITHDRAWAL (PO-1712).
Sedative-hypnotic or other drug overdose - Call the Poison Control Center at x4-8689

- ❑ IP Consult to Geriatric Medicine Routine, ONCE
  Indication for Consult: Patient aged 80 years or more with delirium
  Ordering/Responsible Provider: Pager:
- ❑ IP Consult to Neurology Routine, ONCE
  Reason for Consult: Primary CNS event
- ❑ IP Consult to Neurological Surgery Routine, ONCE
  Reason for Consult: Head trauma
- ❑ IP Consult to Psychiatry Routine, ONCE
  Reason for Consult: Primary psychiatric disorder or agitated behaviors unmitigated after pharmacologic interventions fail
- ❑ IP Consult to Palliative Care Routine, ONCE
  Reason for Consult: Management of terminal delirium
- ❑ IP OT - Eval and Treat Adult
- ❑ IP Speech - Eval and Treat Adult
- ❑ IP Consult to Nutrition Routine, ONCE
  Reason for Consult:

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## PHARMACOLOGIC MANAGEMENT OF DANGEROUS BEHAVIORS / HALLUCINATIONS (HYPERACTIVE DELIRIUM)

For patients whose symptoms of **hyperactive delirium** threaten their own safety or the safety of others (paranoid, combative, misperception of environment), or result in the interruption of essential therapy and non-pharmacologic measures have failed.

**Acute Management ( < 72 hours, reversible cause) - Haloperidol** *(Single Response)*

Haloperidol (recommended first-line agent for most patients)

- AVOID haloperidol in patients with Parkinson's Disease, Lewy Body Dementia (consider QUEtiapine)
- Use haloperidol with caution in patients at risk for seizure
- Avoid high doses or combinations of antipsychotics in patients with prolonged QT interval (see orders below)
- Single doses greater than 2 mg or doses greater than 10 mg/day (oral and/or IV/IM) require daily EKG
- Usual dose is 2-5 mg PO/IV/IM every 2 hours; maximum 30mg/day
- For patients > age 65, start 0.5 mg; maximum 10 mg/day

❑ Haloperidol **[Patient < 65 years old]**

haloperidol (HALDOL) tablet 2-5 mg, oral, EVERY 30 MINUTES AS NEEDED for dangerous behaviors (threat to self or others). May repeat dose every 30 minutes until patient is calm but not sedate

Notify provider if GREATER THAN 1 administration in 12 hours

Or

haloperidol lactate (HALDOL) IV 2-5 mg, intravenous, EVERY 30 MINUTES AS NEEDED for dangerous behaviors (threat to self or others). If unable to take oral. May repeat dose every 30 minutes until patient is calm but not sedate.

Notify provider if GREATER THAN 1 administration in 12 hours

Or

haloperidol lactate (HALDOL) injection 2-5 mg, intramuscular, EVERY 30 MINUTES AS NEEDED for dangerous behaviors (threat to self or others). If unable to take oral or IV. May repeat dose every 30 minutes until patient is calm but not sedate.

Notify provider if GREATER THAN 1 administration in 12 hours

❑ Haloperidol **[Patient 65 years old or greater]**

haloperidol (HALDOL) tablet 0.5-1 mg, oral, EVERY 2 HOURS AS NEEDED for dangerous behaviors (threat to self or others). May repeat every 2 hours until patient is calm but not sedate.

Notify provider if GREATER THAN 1 administration in 12 hours. Do NOT exceed 10 mg/day

Or

haloperidol lactate (HALDOL) IV 0.5-1 mg, intravenous, EVERY 2 HOURS AS NEEDED for dangerous behaviors (threat to self or others). If unable to take oral. May repeat every 2 hours until patient is calm but not sedate.

Notify provider if GREATER THAN 1 administration in 12 hours. Do NOT exceed 10 mg/day

Or

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**ALL ORDERS MUST BE MARKED IN INK WITH A CHECKMARK ( ✓ ) TO BE ACTIVE.**

haloperidol lactate (HALDOL) injection 0.5-1 mg, intramuscular, EVERY 2 HOURS AS NEEDED for dangerous behaviors (threat to self or others). If unable to take oral or IV. May repeat every 2 hours until patient is calm but not sedate.

Notify provider if GREATER THAN 1 administration in 12 hours. Do NOT exceed 10 mg/day

**QUETtiapine** *(Single Response)*

Caution in patients with constipation, urinary retention, hypotension

- ❑ [Patient < 65 years old] QUEtiapine (SEROQUEL) tablet 25 mg, oral, AT BEDTIME
- ❑ [Patient 65 years old or greater] QUEtiapine (SEROQUEL) tablet 12.5 mg, oral, AT BEDTIME

**Monitoring**

For new therapy of haloperidol (IV, IM, PO) >2 mg per dose, or ≥10 mg total daily dose, patients should receive:

- Baseline 12 lead ECG for QTc evaluation and monitor vital signs as soon as possible. Treatment may be initiated without baseline ECG or assessment of HR if agitation is sufficient to pose a danger to the patient or others.
- Baseline K and Mg levels drawn, repletion and monitoring as indicated to maintain K of > 4 mEq/L and Mg > 2 mEq/L

- ❑ 12 Lead ECG- QT monitoring — Routine, ONCE
  Indications:
  Evaluate QT Interval for any patient receiving Haloperidol
- ❑ Potassium, Plasma — ONCE
- ❑ Magnesium, Plasma — ONCE

**Non-Emergent New IV Therapy**

- Baseline 12 lead ECG for QTc evaluation within 24 hours of the first dose or as soon as medically safe
- When there is an increase in dose, consider serial ECGs to monitor QTc until a stable dose is achieved
- Baseline K and Mg levels drawn, repletion and monitoring as indicated to maintain K of > 4 mEq/L and Mg > 2 mEq/L
- Consider discontinuation of haloperidol if QTc > 500 msec or QTc interval increases 60 msec from baseline