DELIRIUM: The Response of the Nurse Matters!

NICHE Conference
April 11, 2013

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Objectives:

☐ Review the changes made on an Orthopedic Unit that reduced incidence of delirium in patients with fractured hips

☐ Understand the importance of nursing interventions in preventing and treating delirium

Delirium a Medical Emergency!

☐ Patients with delirium are more likely to experience adverse medication reactions, acquire hospital infections, suffer from falls and injury, and develop pressure ulcers

☐ After hip surgery, incidence of delirium is from 43-63%

References:
- Foreman, Mion, Tryostad, & Fletcher, 1999
- Capezuti, Swicker, Mezey, Fulmer, 2008
Delirium a Medical Emergency!

- An estimated 25-33% of patients who develop delirium while hospitalized will die within 6 months
  (Cole, McCusker, Ciampi, & Belzile, 2008) & (Inouye SK et al., American Journal of Medicine, May 1999)
- As many as 28% of older hip fracture patients die within one year of fracture
  (International Osteoporosis Foundation, 2012)

Orthopedic Unit Project

- Our hospital is the #1 provider for fractured hips in King County, Washington State
  (2008 Healthgrade Data: 410 cases as compared to the national average of 222)
  - Healthgrade score was ‘1’ in 2008
    (1 being the lowest score, 4 being the highest)
  - High incidence of delirium
  - Most difficult patients for staff to manage

Orthopedic Unit Fractured Hip Delirium Reduction Project

- Project initiated by the need to improve patient outcomes specifically related to fractured hip patients and the rate of delirium
- Improve Healthgrade Score (secured administrative support)
Initial Objectives of Project:

- Initiate standard interdisciplinary approach for all patients with fractured hips from admit to discharge
- Assess for delirium in all fractured hip patients using the *Confusion Assessment Method (CAM) tool*
- Recognize and implement appropriate interventions for the prevention and treatment of delirium

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Goal:

- To have an awake but manageable patient
  - Perform essential medical therapies
  - Maximize mobility (return to baseline)
  - Increase independence in ADL’s (return to baseline functional status)
  - Return to baseline cognition

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Steps Taken...

- Unit Based Quality Committee (QC)
  - 2 Staff RN co-leaders; had attended NICHE Conference; were GRN’s
  - Review of Literature/CNS consultation
  - Developed CAM Flow Sheet (handout provided)
  - Developed Fracture Hip Plan of Care
  - Education blitz by QC staff nurses

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Education Blitz...

- Pre - Education (Packet review)
  - Review of Delirium prevention articles and CAM assessment
  - Pre-test
  - Review the Fractured Hip Orders and Pathway
- Attend 45 minute mandatory in-service (administrative support in paying the staff)
- Post-test
- Poster developed for reference

Steps taken to measure...

- Meeting with Documentation Compliance RN to agree on common language and identification of delirium fall out cases
- All CAM flow sheets turned into Unit Manager for review
- 100% chart review of all Delirium cases
- Case review of Delirium cases with individual nurses and at each monthly staff meeting if not following protocol

Steps Taken, Collaboration...

- Interdepartmental collaboration with Project Team RNS’s, ED, Pharmacy, PACU, & Orthopedic Surgeons
- Changes in pre-admit and post-op standing orders with principles from the *BEERS Criteria* (order handouts provided)
- Teamed with Pharmacist (Clinical Manager) & attended Orthopedic Surgical Section Meetings (3 times)
Nursing Care Practice Changes - Assessment of behavior changes:

- Infection Or Sepsis
  - UTI? Atelectasis?
- Immobilization frustration
  - Out of bed!
    - “I move, therefore I am”
    - Physical Therapy
    - Meals in chair
    - Urinary Catheter removed POD 1
    - Use of commode
    - Up at night if wanting oob

Non-pharmacological Interventions:

- Sensory enhancement
- Orientation – startle & frighten (lab draws at night)
- Toileting plan
- Music / warm blanket / warm drink

Nursing Care Practice Changes - Non-pharmacological Interventions:

- Sleep/Rest Considerations
  - Rests in daytime, sleep at night
  - Control light to delineate day/night
  - Control noise
  - Eliminate Caffeine from trays
  - Toileting Plan
  - Provide/plan for uninterrupted sleep
  - Music, Aroma Therapy
Nursing Care Practice Changes – Medication Management...

- PCA’s NOT used
- Scheduled Acetaminophen resulted in lower doses of opioids administered (increased function & mobility) & opioid use decreased
- Anticholinergic Meds stopped
  - No muscle relaxants
  - Ondansetron for nausea
- Sleeping pill dosage lowered and rarely used
- Elimination of use of benzodiazepines

Nursing Care Practice Changes - The Family

- Family understanding / participation
- Teaching Materials (handout provided)
- Art of ‘distraction’ by knowing who the person is (Dementia Box)

Outcomes of Project:

- To measure effectiveness of the program, we compared the number of positive cases for delirium over similar 6 month time periods (fractured hip population):
  - 2008 = 8 CAM positive (Healthgrade – 1)
  - 2009 = 6 CAM positive
  - 2010 = 3 CAM positive
  - 2011 = 4 CAM positive (Healthgrade – 3)
- 2011, 3 years later, Health Grade score increased from ‘1’ to ‘3’
Outcomes of Project continued:

- Decreased LOS for fractured hip population
  - 2008: Average LOS 5.69
  - 2011: Average LOS 4.31
- If delirium develops, much sooner recognized and length of delirium lessened
- Mobility and preserving patient function improved
- Antipsychotic medications rarely used because of effectiveness of nursing management interventions
- Decreased use of special staffing
- Greatly increased expertise of RN’s & collaboration with Surgeon’s and Hospitalists preventing, assessing for, recognizing and managing delirium

Organizational Practice Changes as result of the project...

- Emergency Department
  - All fractured hip patients admitted to Orthopedic Unit from ED prior to OR to establish baseline cognition
  - Better transfer technique established (i.e. use of Hovermat)
  - Better pain management (lower dosing, fewer meds)
  - Minimize or eliminate use of inappropriate medications (i.e. anticholinergic, antipsychotics, benzodiazepines, large doses opioids)
- Hospitalist assigned for ‘medical management’ of all fractured hip patients
- PACU & ED incorporation of principles in BEERS criteria into their practice
- Collaboration with Physical Therapy on standards for mobilization

Organizational Ongoing and Future Projects:

- CAM assessment expanded to being used with all patients on Orthopedic Unit – flow sheet built into EPIC go-live in May 2013 for Med/Surg units
- With Critical Care Unit, who started *CAM-ICU, collaborated to developed a Delirium Assessment, Prevention and Management Policy to be used house wide
- In collaboration with 2 groups of Hospitalists, Psychiatry, and Pharmacy, developed Acute Delirium Order set (handout available)
In Conclusion

- Nursing awareness & care interventions make all the difference
- Nursing responding to acute change in behavior & assessing for pathophysiology rather than medicating behavior
- Trusting the CAM assessment and when +, treating as a medical emergency
- Nursing interventions implemented changing the course for the patient – resulted in their work easier and more enjoyable!

Goal

- To have an awake, alert, patient returning to baseline cognition and function!

Questions...

Behavior has meaning....
- Find out the cause of the behavior.
- Treat the cause, manage the behavior!
Delirium is the rapid onset of acute and fluctuating confusion. Use the abbreviated CAM tool to assess patient for delirium. A new score of greater than or equal to 3 is considered a positive indicator of delirium and needs to be called to MD (hospitalist if available).

<table>
<thead>
<tr>
<th>1 &amp; 2 both must be positive for dx of delirium</th>
<th>1. Acute onset and fluctuating course of confusion</th>
<th>Score 1 if any example is positive</th>
<th>No = 0</th>
<th>Yes = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Does the patient/family report change in mental status?</td>
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<tr>
<td></td>
<td>• Does the patient’s mental status change intermittently, at intervals of the day?</td>
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<td></td>
<td>• Is there evidence of change in mental status</td>
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<tr>
<td></td>
<td>2. Inattention</td>
<td>Score 1 if any example is positive</td>
<td>No = 0</td>
<td>Yes = 1</td>
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<tr>
<td></td>
<td>• Is it difficult for the patient to respond to their name?</td>
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<td></td>
<td>• Is the patient drifting off topic?</td>
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<td></td>
<td>• Is the patient distracted?</td>
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<tr>
<td>And 3 and/or 4 must be positive for dx of delirium</td>
<td>3. Disorganized thinking</td>
<td>Score 1 if any example is positive</td>
<td>No = 0</td>
<td>Yes = 1</td>
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<td></td>
<td>• Is the patient asking for illogical requests?</td>
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<td></td>
<td>• Is the patient unable to answer questions about themselves they would normally know?</td>
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<tr>
<td></td>
<td>• Is the patient unable to answer questions and rambles unclearly?</td>
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<td></td>
<td>4. Altered Level of consciousness</td>
<td>Score 1 if any example is positive</td>
<td>No = 0</td>
<td>Yes = 1</td>
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<tr>
<td></td>
<td>Average the current level of consciousness</td>
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<tr>
<td></td>
<td>Alert = normal</td>
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<tr>
<td></td>
<td>Lethargic = abnormal</td>
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<td></td>
<td>Asleep &amp; arouses easily = normal</td>
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<tr>
<td></td>
<td>Vigilant = abnormal</td>
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</tbody>
</table>

MD notified of CAM score greater than or equal to 3

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Conf.</th>
<th>Inattent</th>
<th>Disorg.</th>
<th>Think</th>
<th>Altered</th>
<th>LOC</th>
<th>CAM Score</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Interventions: (see back of sheet)

Write letter of intervention under appropriate number

Nurse Follow-up

Initials

<table>
<thead>
<tr>
<th>Initials</th>
<th>Signature</th>
<th>Initials</th>
<th>Signature</th>
<th>Initials</th>
<th>Signature</th>
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</table>
### Delirium Prevention and Treatment Careplan

<table>
<thead>
<tr>
<th>Category</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communication</td>
<td>A. Keep patients awake by frequent interactions during daytime hours.</td>
</tr>
<tr>
<td></td>
<td>B. Offer reminiscence, life review, &amp; conversation. Or use distraction.</td>
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<td></td>
<td>C. Interpret behavior (looks painful?, getting out of bed to toilet?)</td>
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<td></td>
<td>D. Update whiteboard with personal data to help care for patient.</td>
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<tr>
<td></td>
<td>E. Use hearing aids, pocket talkers, glasses if appropriate</td>
</tr>
<tr>
<td>2. Relaxation</td>
<td>A. Address symptoms of anxiety, depression, pain &amp; insomnia</td>
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<tr>
<td></td>
<td>B. Quiet room.</td>
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<td></td>
<td>C. Offer warm blanket.</td>
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<td></td>
<td>D. Offer healing touch and pet therapy from volunteer services</td>
</tr>
<tr>
<td>3. Recreation</td>
<td>A. Encourage simple exercises to preserve physical function.</td>
</tr>
<tr>
<td></td>
<td>B. Encourage mentally stimulating therapeutic activities to preserve mental function. (playing cards, crosswords, puzzles)</td>
</tr>
<tr>
<td></td>
<td>B. Offer po fluids every 2hr while awake</td>
</tr>
<tr>
<td></td>
<td>C. Limit distractions at mealtimes (TV off)</td>
</tr>
<tr>
<td>5. Spirituality</td>
<td>A. Provide comfort with presence, touch, &amp; soothing voice.</td>
</tr>
<tr>
<td></td>
<td>B. Supply religious objects &amp; reading materials, if appropriate</td>
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<td></td>
<td>C. Consult hospital Chaplain</td>
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<tr>
<td>6. Activity</td>
<td>A. Ambulate TID whenever patient able.</td>
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<tr>
<td></td>
<td>B. Out of bed to chair for all meals.</td>
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<td></td>
<td>C. Toilet patient every 2 hrs while awake, q4hrs at night.</td>
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<tr>
<td></td>
<td>D. One task at a time.</td>
</tr>
<tr>
<td>Other</td>
<td>A.</td>
</tr>
<tr>
<td></td>
<td>B.</td>
</tr>
<tr>
<td></td>
<td>C.</td>
</tr>
<tr>
<td></td>
<td>D.</td>
</tr>
<tr>
<td></td>
<td>E.</td>
</tr>
</tbody>
</table>
Allergies: □ NKDA

Diagnosis: Fractured Hip □ Right □ Left
Status: □ Inpatient □ SDC □ Observation Admit to: __________

NURSING INTERVENTIONS: (Check box/ fill in to activate. Line through to cancel pre-checked orders)
- Neurovascular checks every 4 hours
- Insert indwelling urinary catheter
- If respiratory rate less than 10 per min or sedation level of 1, monitor respirations every 15 – 30 min until 2 per min or greater
- O2 at 0 - 3 L PRN sats less than or equal to 92% or new onset of confusion. Notify physician if greater than 3 L used.
- Buck’s traction □ Right □ Left __________ lbs □ Trapeze □ SCDs
- Evening prior to surgery: Sign consent to read __________
- Bedrest Other: __________________

DIETARY: (Check box/ fill in to activate)
□ NPO after midnight Other: __________________

IV THERAPY: (Line through to cancel orders)
- Lactated Ringers to infuse at 100 mL/ hour. If renal failure on dialysis, change to Normal Saline to infuse at 10 mL/ hour

LABORATORY/ DIAGNOSTICS: (Check box/ fill in to activate. Line through to cancel pre-checked orders)
- Chemstick if diabetic □ PT/ INR □ CBC □ ECG □ Comprehensive Metabolic Panel
- Basic Metabolic Panel □ Urinalysis (culture if indicated) □ Pregnancy test, urine
- Chest X-Ray PA & lateral Reason: __________

BLOOD: □ Type and Screen (determines Hemosafe eligibility). If not Hemosafe-eligible, then order 2 units RBC or: ________ units
(Hemosafe-ineligible means history of antibodies, so pre-ordering RBCs ensures blood is available on site. Hemosafe-eligible means blood is immediately available when transfusion is ordered)

CONSULTS: (Line through to cancel order)
- Care Management for discharge planning

VTE Risk Assessment: (Check appropriate box)
- Pulmonary Embolism = PE
  1 □ Standard PE & Standard major bleeding risks 3 □ ELEVATED PE & Standard major bleeding risks
  2 □ Standard PE & ELEVATED major bleeding risks 4 □ ELEVATED PE & ELEVATED major bleeding risks

MEDICATIONS: (Check box to activate. Line through to cancel pre-checked orders)
- ceFAZolin (ANCEF) 1 g IV X 1 preop. If 80 kg or greater, increase to 2 g. If allergic, change to clindamycin 900 mg IV X 1
  Antibiotic must be given within 60 minutes prior to incision
- HYDROMorphone (DILAUDID) 0.5 – 1 mg IV every 2 hours PRN. If pain unrelieved in 2 hours, notify physician
- oxyCODONE 5 - 15 mg PO every 3 hours PRN
- HYDROMorphone (DILAUDID) 0.25 – 0.5 mg IV every 2 hrs PRN. If pain unrelieved in 4 hrs, notify physician
- oxyCODONE 2.5 - 5 mg PO every 3 hours PRN
- acetaminophen (TYLENOL) 325 - 650 mg PO/ PR every 4 hours PRN. Not to exceed 3000 mg/ 24 hours
- zolpidem (AMBIEN) 2.5 mg PO HS PRN. May repeat X 1
- ondansetron (ZOFRAN) 4 mg IV every 6 hours PRN
- lidocaine 2% jelly (URO-JET) apply PRN

Physician Signature Date Time

PHYSICIAN ORDER

OVERLAKEN Hospital Medical Center
Medical excellence everyday™

FRACTURED HIP ADMISSION & PREOP ORDERS
P0144D (Rev 0811) White – Chart/ Scan to Pharmacy
Assessment of elevated risk (greater than standard risk) of PULMONARY EMBOLISM (PE):
- Previous history of cancer, thromboembolism
- Hypercoagulable states (i.e., polycythemia, spinal cord injury, multi-trauma patients)
- Previous documented pulmonary embolism
- Genetic predisposition for developing pulmonary embolism

Assessment of elevated risk (above standard risk) of MAJOR BLEEDING:
- Previous history of uncontrolled bleeding
- Known coagulation factor deficiency
- Recent history of GI bleeding
- Recent hemorrhagic stroke

For patients with:
1. Standard risk of PE and standard risk of major bleeding; use either Aspirin, LMWH, Fondaparinux or Warfarin
2. Standard risk of PE and ELEVATED risk of major bleeding; use either Aspirin, Warfarin or none
3. ELEVATED risk of PE and standard risk of major bleeding; use either LMWH, Fondaparinux or Warfarin
4. ELEVATED risk of PE and ELEVATED risk of major bleeding; use either Aspirin, Warfarin or none

Adapted from AAOS Clinical Practice Guideline on Prevention of Pulmonary Embolism in Patients Undergoing Total Hip or Knee Arthroplasty (published May 2007)
FRACTURED HIP POSTOP ORDERS  

NURSING INTERVENTIONS:
- If respiratory rate less than 10 per minute or sedation level of 1, then monitor respirations every 15 – 30 minutes until 12 per minute or greater
- O₂ via nasal cannula at 0 - 3 L PRN O₂ sat less than or equal to 92% or new onset of confusion
- Notify physician if greater than 3 L used
- Incentive spirometry every 1 - 2 hours while awake starting day of surgery
- Vital signs: in 15 minutes X 1, then in 30 minutes X 1, then every 1 hour X 2, then every 4 hours X 24 hours, then every 8 hours
- Neuro-vascular checks: every 15 minutes X 1, every 1 hour X 2, every 4 hours X 12 hours, then every 8 hours and PRN
- Ice bag to operative area X 48 hours then PRN
- Endoprosthesis: Abduction wedge at all times except when ambulating. Send wedge home with patient
- If Indwelling Urinary Catheter (IUC) placed in OR, remove in AM POD # 2 then follow Indwelling Urinary Catheter Protocol
- If no IUC, straight cath for BUS residual greater than 300 mL or patient uncomfortable. If 2nd straight cath needed, insert IUC.
- Discontinue within 24 hours then follow Indwelling Urinary Catheter Protocol
- Remove drain(s) POD # 2 or
- Dressing change POD # 2 or __________, then daily and PRN
- I & O
- Up in chair for meals
- SCD’s
- Send TED hose home with patient

Notify physician if:
- Hematocrit less than 27
- Drainage greater than 500 mL in 4 hours
- Greater than 3 L O₂ used to maintain minimum of 92% saturation
- Respiratory rate less than 10 per minute or sedation level of 1
- For known or suspected blunt trauma to the head initiate neuro checks with GCS each shift unless otherwise noted (use GCS documentation tool)

DIETARY:
- Diet as tolerated
- Other: _______________________________

IV THERAPY:
- IV Fluid: ___________________________ to infuse at __________ mL/ hour
- TKO. Saline lock when PO fluids adequate. Discontinue saline lock POD # 3

LABORATORY / DIAGNOSTICS:
- PT/ INR daily if on warfarin
- Hematocrit POD # 1
- Hematocrit POD # 2
- Other: _______________________________
- Stat X-Ray in PACU for prosthesis position of: Right Hip

BLOOD: Type and Screen (determines Hemosafe eligibility). If not Hemosafe-eligible, then order 2 units RBC or: __________ units
(Not Hemosafe-eligible means history of antibodies, so pre-ordering RBCs ensures blood is available on site. Hemosafe-eligible means blood is immediately available when transfusion is ordered.)

Physician Signature                      Date               Time

OVERLAKE MEDICAL CENTER

FRACTURED HIP POSTOP ORDERS  Page 1 of 3

P0143I (Rev 1212) White – Chart/ Scan to Pharmacy
CONSULTS:
- Home PT/OT if indicated. Home care equipment to be ordered by PT/OT POD #2. Rehab consult by PT/OT if needed
- SNF
- Home Physical Therapy _______ times per week for _______ weeks
- Home Health Nurse/Physical Therapist to draw PT/INR _______ times per week for _______ weeks
- Staple removal on day _______

Rehab services:
- Physical therapy twice daily
- Weight bearing status:
  - FWB
  - WBAT
  - TTWB
  - NWB
  - PWB 25%
  - PWB 50%
  - PWB _____% BW - or - ______LBS
- Endoprosthesis:
  - Approach: anterior posterior anterolateral
  - Fixation: cemented uncemented
- Precautions: Hip Flexion ___________ Hip Extension ___________ IR _______ ER
  - Adduction ___________ Passive Abduction ___________ Active Abduction ___________
- Length of time precautions are in effect: ______________________________
- OT consult on POD #1
- ORIF - OT consult on POD #2 if appropriate

VTE Risk Assessment: Pulmonary Embolism = PE
- Standard PE & Standard major bleeding risks
- ELEVATED PE & Standard major bleeding risks
- Standard PE & ELEVATED major bleeding risks
- ELEVATED PE & ELEVATED major bleeding risks

MEDICATIONS: Pharmacist may adjust doses for age or renal function

1. **STANDARD PE & STANDARD BLEEDING RISKS:**
   - warfarin (COUMADIN) dosing per pharmacy, goal INR: 1.8 – 2.3, start postop evening
   - dalteparin (FRAGMIN) 5000 units subcutaneously once daily, start _______ (date & time)
   - enteric coated aspirin 325 mg PO twice daily

2. **STANDARD PE & ELEVATED BLEEDING RISKS:**

3. **ELEVATED PE & STANDARD BLEEDING RISKS:**
   - warfarin (COUMADIN) dosing per pharmacy, goal INR: 1.8 – 2.3, start postop evening
   - dalteparin (FRAGMIN) 5000 units subcutaneously once daily, start ___________ (date & time)

4. **ELEVATED PE & ELEVATED BLEEDING RISKS:**
   - warfarin (COUMADIN) dosing per pharmacy, goal INR: 1.8 – 2.3, start postop evening
   - enteric coated aspirin 325 mg PO twice daily
   - No medication

__________________________
Physician Signature

__________________________
Date

__________________________
Time

PHYSICIAN ORDER
### MEDICATIONS:

<table>
<thead>
<tr>
<th>Medication/Condition</th>
<th>Dosage/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>CeFAZolin (ANCEF)</td>
<td>1 g IV every 8 hours X 2 postop doses. If 80 kg or greater, increase CeFAZolin to 2 g.</td>
</tr>
<tr>
<td>If allergic, change to clindamycin 900 mg IV every 8 hours X 2 postop doses</td>
<td>(Prophylaxis, Antibiotics)</td>
</tr>
<tr>
<td>Give 1st post-op dose at next standard administration time, regardless of when preop dose was given</td>
<td>(E.B)</td>
</tr>
<tr>
<td>HydroMorphine (DILAUDID)</td>
<td>0.25 – 1 mg IV every 1 hour PRN</td>
</tr>
<tr>
<td>OxyCODONE 5 - 10 mg PO every 4 hours PRN</td>
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</tr>
<tr>
<td>OxyCODONE 2.5 - 5 mg PO every 4 hours PRN</td>
<td></td>
</tr>
<tr>
<td>Acetaminophen (TYLENOL)</td>
<td>325 - 650 mg PO every 4 hours PRN</td>
</tr>
<tr>
<td>HydroMorphine (DILAUDID)</td>
<td></td>
</tr>
<tr>
<td>Lidocaine 2% jelly (URO-JET)</td>
<td>apply PRN</td>
</tr>
<tr>
<td>HydroMorphine (DILAUDID)</td>
<td></td>
</tr>
<tr>
<td>Chlorpheniramine (CHLOR-TRAN)</td>
<td>15 mg PO daily PRN</td>
</tr>
<tr>
<td>Zolpidem (AMBIEN)</td>
<td>2.5 mg PO HS PRN</td>
</tr>
<tr>
<td>Magnesium hydroxide/ aluminum hydroxide/ simethicone (MAALOX)</td>
<td>15 mL PO QID PRN</td>
</tr>
<tr>
<td>Multivitamin 1 tablet PO daily</td>
<td></td>
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<tr>
<td>Ondansetron (ZOFRAN)</td>
<td>8 mg PO every 6 hours PRN</td>
</tr>
<tr>
<td>Ondansetron (ZOFRAN)</td>
<td>4 mg IV every 6 hours PRN</td>
</tr>
<tr>
<td>Docusate (COLACE)</td>
<td>250 mg PO BID</td>
</tr>
<tr>
<td>Magnesium hydroxide/ aluminum hydroxide/ simethicone (MAALOX)</td>
<td>15 mL PO QID PRN</td>
</tr>
<tr>
<td>Polyethylene glycol (MIRALAX)</td>
<td>17 g PO daily PRN</td>
</tr>
<tr>
<td>Bisacodyl (DULCOLAX)</td>
<td>0.5 mg PO every 6 hours PRN</td>
</tr>
<tr>
<td>If no BM in 48 hours, bisacodyl (DULCOLAX) suppository PR X 1</td>
<td>If no results, FLEETS or warm tap water enema PRN</td>
</tr>
<tr>
<td>Lidocaine 2% jelly (URO-JET)</td>
<td>apply PRN</td>
</tr>
</tbody>
</table>

**Other:**

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**Physician Signature**

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**Date**

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**Time**

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**OVERLAKE MEDICAL CENTER**

**FRACTURED HIP POSTOP ORDERS** Page 3 of 3

P0143I (Rev 1212) White – Chart/ Scan to Pharmacy
Assessment of elevated risk (greater than standard risk) of PULMONARY EMBOLISM (PE):
- Previous history of cancer, thromboembolism
- Hypercoagulable states (i.e., polycythemia, spinal cord injury, multi-trauma patients)
- Previous documented pulmonary embolism
- Genetic predisposition for developing pulmonary embolism

Assessment of elevated risk (above standard risk) of MAJOR BLEEDING:
- Previous history of uncontrolled bleeding
- Known coagulation factor deficiency
- Recent history of GI bleeding
- Recent hemorrhagic stroke

For patients with:
1. Standard risk of PE and standard risk of major bleeding; use either Aspirin, LMWH, Fondaparinux or Warfarin
2. Standard risk of PE and ELEVATED risk of major bleeding; use either Aspirin, Warfarin or none
3. ELEVATED risk of PE and standard risk of major bleeding; use either LMWH, Fondaparinux or Warfarin
4. ELEVATED risk of PE and ELEVATED risk of major bleeding; use either Aspirin, Warfarin or none

Adapted from AAOS Clinical Practice Guideline on Prevention of Pulmonary Embolism in Patients Undergoing Total Hip or Knee Arthroplasty (published May 2007)
(Check boxes/ fill in to activate. Line through to cancel pre-checked orders)

Allergies: ☐ NKDA

NURSING INTERVENTIONS:
☒ Follow Delirium Prevention Assessment and Management Policy

LABORATORY/ DIAGNOSTICS:
☒ ECG
☒ Urinalysis (culture if indicated)
☒ CBC with Diff
☒ Basic Metabolic Panel
☒ Chest X-Ray PA & Lateral, STAT (transport via stretcher) → Reason: Altered Consciousness, Altered Mental Status
☒ X-Ray Portable Chest, STAT → Reason: Altered Consciousness, Altered Mental Status
☒ Head CT

CONSULTS:
☐ Hospitalist for ongoing delirium management
☐ Psychiatry for severe delirium management
☐ Physical Therapy; evaluate and treat
☐ Occupational Therapy; evaluate and treat

MEDICATIONS:
☒ Discontinue all previous haloperidol (HALDOL) orders

Goal of medication therapy is to have patients awake, but manageable & calm

Do not administer haloperidol to patients with:
HISTORY OF PARKINSON’S DISEASE -or-
IF QTc IS GREATER THAN 450 ms FOR MALES or GREATER THAN 470 ms FOR FEMALES

☒ haloperidol (HALDOL) 0.25 mg PO/ IV/ IM every _______ hours X _____ doses
☒ haloperidol (HALDOL) 0.5 mg PO/ IV/ IM every _______ hours X _____ doses
☒ haloperidol (HALDOL) 1 mg PO/ IV/ IM every _______ hours X _____ doses

Discontinue above haloperidol (HALDOL) orders in 24 hours

If age 65 or older, do not exceed 3 mg in 24 hours

☒ quetiapine (SEROQUEL) 6.25 mg PO ☒ every 8 hours ☒ every 12 hours ☒ every bedtime
☒ quetiapine (SEROQUEL) 12.5 mg PO ☒ every 8 hours ☒ every 12 hours ☒ every bedtime
☒ quetiapine (SEROQUEL) 25 mg PO ☒ every 8 hours ☒ every 12 hours ☒ every bedtime

Acute Delirium

Delirium for Parkinson’s, Lewy Body Dementia

Physician Signature __________________________ Date ____________ Time ____________

PHYSICIAN ORDER
<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Examples</th>
<th>Alternative Strategies for Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticholinergics &amp; drugs with high anticholinergic potential</td>
<td>amantadine (SYMMENTREL) benz tropine (COGENTIN) diphenhydramine (BENADRYL) dipyridamole (PERSANTINE) furosemide (LASIX) hydrOXYzine (VISTARIL, ATARAX) meclizine (BONINE) metoclopramide (REGLAN) oxybutinin (DITROPAN) prochlorperazine (COMPAZINE) theophylline tricyclic antidepressants (e.g. AMITRIPTYLINE, IMIPRAME)</td>
<td>Risk is increased with cumulative anticholinergic effect of several of these medications in combination. Minimize the use as clinically appropriate.</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>alprazolam (XANAX) chlordiazepoxide (LIBRIUM) diazepam (VALIUM) midazolam (VERSED)</td>
<td>Use low-dose LORazepam (ATIVAN) if benzodiazepine absolutely necessary. For insomnia, consider zolpidem (AMBIEN). CAUTION: Abrupt discontinuation of chronic benzodiazepines may precipitate withdrawal. Consider using a tapering schedule.</td>
</tr>
<tr>
<td>Opioids</td>
<td>fentaNYL HYDROmorphine (DILAUDID) meperidine (DEMEROL) methadone morphine</td>
<td>Try opioid-sparing methods such as using NSAIDs and acetaminophen to minimize the amount of opioid required. When opioids are needed, shorter-acting agents are preferable.</td>
</tr>
<tr>
<td>Antihistamines</td>
<td>diphenhydramine (BENADRYL) hydrOXYzine (VISTARIL, ATARAX)</td>
<td>Use a non-sedating antihistamine such as loratadine (CLARITIN).</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>dexamethasone prednisone prednisolone</td>
<td>Hasten taper, if medically appropriate. Consult with psychiatry about the use of neuroleptics or mood stabilizer if patient has psychotic or manic symptoms.</td>
</tr>
<tr>
<td>Hypnotics</td>
<td>benzo diazepines chloral hydrate diphenhydramine (BENADRYL) trazodone (DESYREL) tricyclic antidepressants (e.g. AMITRIPTYLINE, IMIPRAME)</td>
<td>For insomnia associated with confusion, consider using haloperidol (HALDOL), olanzapine (ZYPREXA) or quetiapine (SEROQUEL). These are relatively sedating antipsychotic medications and are intended for shortterm use. Do not use these antipsychotics if QTc is prolonged on ECG. Consult clinicai pharmacist for prescribing recommendations.</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>mirtazapine (REMERON) tricyclic antidepressants (e.g. AMITRIPTYLINE, IMIPRAME)</td>
<td>Consider using selective serotonin re-uptake inhibitors (SSRIs: e.g., citalopram, sertraline) or taper and hold antidepressants until delirium clears. Consider psychiatric consultation for severe depression or suicidal ideation.</td>
</tr>
<tr>
<td>Digoxin Anticonvulsants Immunosuppressants (Cyclosporine, Tacrolimus)</td>
<td></td>
<td>Check drug levels and consult with medicine, neurology, or psychiatry</td>
</tr>
<tr>
<td>Muscle Relaxants/ Antispasmodics</td>
<td>baclofen (LIORESAL) carisoprodol (SOMA) cyclobenzaprine (FLEXERIL)</td>
<td>methocarbamol (ROBAXIN)</td>
</tr>
</tbody>
</table>
OVERLAKE Hospital Medical Center
Medical excellence every day™

UNDERSTANDING DELIRIUM:
A Guide for Families and Friends

Overlake Hospital Medical Center is dedicated to quality care and safety for each patient. When symptoms of delirium are exhibited in your family member, it can be concerning and frightening. This guide is to help you understand delirium and what you can do to help.

What is Delirium?
Delirium is not a syndrome. It is characterized by:
- Disordered thinking
- Short term memory loss
- Fluctuating confusion
- Reduced ability to focus
- Illusions or hallucinations

Delirium often caused changes in mood, including:
- Anxiety
- Agitation
- Apathy
- Aggression

What causes Delirium?
It is usually caused by a treatable mental or physical illness. It can affect anyone, but the elderly are at high risk. Finding a specific cause can be difficult. Many factors contribute to its development, such as:
- Sudden or severe illness
- Dehydration
- Fever
- After surgery
- Lack of sleep or mixing up of day and night
- Chemical imbalances (i.e. low sodium or low blood sugar)
- Infection (i.e. urinary tract infection or pneumonia)
- Medications, including but not limited to those used to treat:
  - Pain
  - Respiratory disorders
  - Gastrointestinal and urinary disorders
  - Parkinson’s disease

Patients are more prone to developing delirium in the hospital if they have a history of such things as:
- Pre-existing dementia
- Stroke
- Impairment of vision and/or hearing
- Other brain injuries
- Withdrawal from alcohol or tranquilizers
How long does delirium last?
Delirium can last from hours to weeks.

How is delirium treated?
Finding and treating the root cause or causes of delirium is our goal. During recovery, we will do such things as:
- Frequently re-orient the patient to time and place
- Use the patient’s glasses and/or hearing aids
- Provide and encourage intake of good nutrition
- Maintain proper noise and light levels
- Optimize rest and sleep cycles
- Work to return the patient to normal mobility and self-care status as soon as possible
- Medications may be needed to treat the delirium. Certain kinds of medications can help calm the patient with severe agitation that may make him/her a danger to themselves or to others.

What can you do to help?
Patients with delirium usually find the greatest comfort from family and friends. Family and friends are often most effective in easing fears and anxiety.
- Your presence helps the patient by being someone familiar, while they are in the hospital.
- Bring in personal items from their home, such as photos or a favorite blanket or pillow, when you come to visit.
- You may be asked to stay with the patient if possible.

Be sure to discuss your concerns and questions with the physician and nurse so that the best care can be provided for your family member.

You can also help us better communicate with the patient by answering the questions on the next page and then giving the page to the nurse. The nurse will put the answers with the patient’s Plan of Care so that we can personalize the care that we are providing which can help improve the delirium.
(To the family member - Please print)

Personalized care for (patient’s name): ________________________________
(What patient likes to be called)

If married, name of wife or husband: ________________________________

How many children:__________, and their names:_____________________
_____________________________________________________________
_____________________________________________________________

How many grandchildren:_______, names that might be helpful:________
_____________________________________________________________
_____________________________________________________________

Favorite hobbies or pastimes:______________________________________
_____________________________________________________________

Favorite movies, TV shows, actors, actresses, books:___________________
_____________________________________________________________

Past Job or Profession:___________________________________________

Any religious or spiritual affiliations that are meaningful:_______________
_____________________________________________________________

Is there anything else you would like to share that would help improve our
communication with your family member, friend:_____________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________

_________________  ___________________________________________
(Date)                                          (Name/Relationship of person(s) filling out this page)

Thank you very much!

[To the Staff - Keep with the Kardex/Plan of Care]