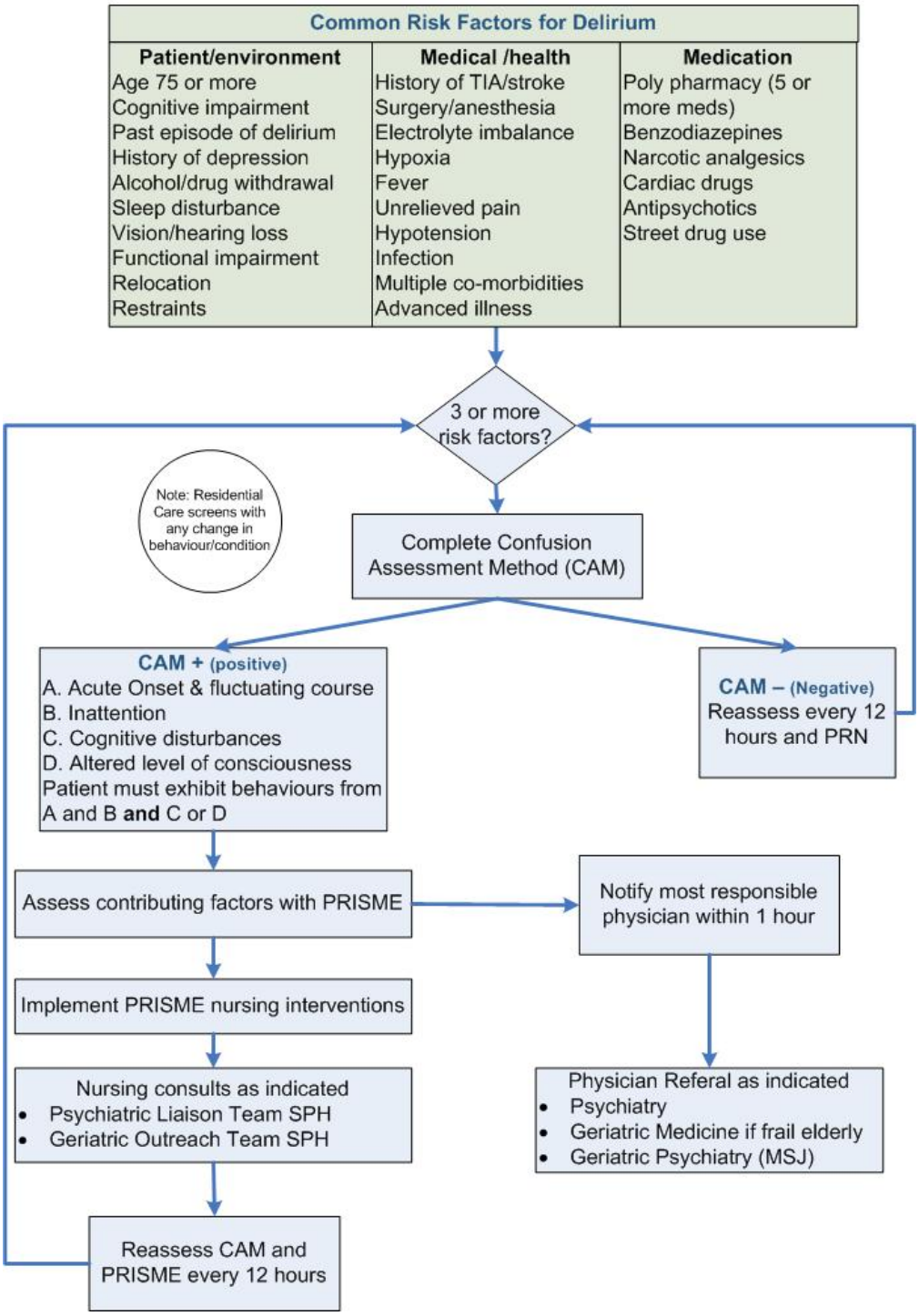
## Delirium Assessment and Care, protocol

### Delirium Identification, Prevention and Treatment



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## Related Documents and Resources:

1. B-00-13-10059 – Managing Unsettled Challenging Behaviours: Least Restraint Approach/PHC Non Residential Sites
2. B-00-13-10013- Alcohol Withdrawal protocol
3. B-00-11-10110 - Corporate Policy – Consent
4. Hartford Institute for Geriatric Nursing Best Practice, Try this Series
    a. Issue 13 – Confusion Assessment Method (CAM)
    b. Issue D7 – Communication Difficulties: Assessment and Interventions
    c. Issue D8: Assessing and managing delirium in persons with dementia

**Skill Level: Basic**: RN, RPN or LPN

## Need to Know

Delirium is characterized by a disturbance of consciousness and a change in cognition that develops over a short period of time. There is evidence from the history, physical exam, or laboratory findings that the disturbance is caused by direct physiological consequences of a general medical condition.

1. **Delirium is a medical emergency**.
2. Delirium results in higher incidence of in hospital mortality, increased hospital costs, longer length of stay, post discharge mortality, functional decline leading to institutionalization and dementia
3. Delirium is common in hospitalized patients (10%-85%)
4. Delirium is frequently unrecognized or misdiagnosed (70%)
5. Delirium can be predicted by identifying risk factors (**See Algorithm)**
6. Delirium can be accurately identified using the CAM Screening Tool (Confusion Assessment Method **Appendix A**)
7. Delirium can be prevented and the symptom severity reduced using non-pharmacological interventions (PRISME **Appendix B** )
8. Delirium can be treated with medications (referral to Psychiatry or Geriatric Medicine)
9. There are three different types of delirium
    a. **Hyperactive delirium**: overly alert, increased psychomotor activity, acutely responsive to the environment
    b. **Hypoactive delirium**: low level of psychomotor activity, may appear sedated or depressed
    c. **Mixed delirium**: fluctuation of hyperactive and hypoactive symptoms over brief or long periods

## PRACTICE GUIDELINE

### Assessment & Interventions

**All adults admitted to PHC facilities with 3 or more risk factors are screened for delirium using CAM.**

- Notify the most responsible physician within 1 hour of a positive CAM screen
- All adults who screen positive for delirium should be further assessed by the nurse using the PRISME framework. Use the PRISME Framework to guide nursing interventions until delirium clears
- The most responsible physician will make a decision about treatment and if required will refer to Psychiatry or to Geriatric Medicine for the frail elderly.
- Use the CAM to screen for delirium every 12 hours as long as there are 3 or more risk factors present.

**Note:** Residential Care: screen if behaviour or condition change.

- Refer to B-00-13-10059 for managing unsettled behaviour

## Patient/Family Education & Resources:

- Delirium in older adults: a guide for seniors and their families Canadian Coalition for Seniors Mental Health available at: http://www.ccsmh.ca/en/booklet/index.cfm
- Delirium (Acute Confusion). Alberta Caregiver College. Available at http://www.caregivercollege.org/scoa/?Delirium(AcuteConfusion).html
- Seniors and Delirium. Canadian Mental Health Association Ontario. Available at: http://www.ontario.cmha.ca/seniors.asp?cID=5803
- VCH/PHC Patient Health Education Materials Catalogue:
  a) Clearing the confusion: Information for Families (CA.900.C55)
  b) Delirium: What it is and how you can help (CA.900.D379)
  c) A Troubled Mind: Delirium: A Guide for families and Friends of Delirious Patients (CA.900.T756)

## Documentation:

1. Document presence of positive risk factors, CAM results and PRISME interventions on Delirium Screening and Care Plan (PHC NF351(T)) or other site specific tool
2. After the initial first CAM + screen document the following information on the progress notes:
   - CAM + and identify the specific descriptors for 3 and or 4. (These are the bolded identifiers in sections 3 and /or 4 on the CAM screening tool **Appendix A**.).
   - Specific PRISME factors that are abnormal and may be contributing to delirium.(**Appendix B**)
   - Document **time** most responsible physician was notified
   - Document plan in terms of referral or interventions
   - Document nursing action(s) taken
3. Evaluation
   - Document patient response to the intervention strategies in terms of hyperactive/hypoactive behaviors and changes in cognition
   - Reassess patient for risk factors +/- CAM if indicated.

## References:

1. Campbell, N., Boustani, M., Ayub, A., Fox, G., Munger,S .,Ott, C., Guzman, O., Farber,M., Ademuyiwa,A., & Singh, R. (2009). Pharmacological management of delirium in hospitalized adults- A systematic evidence review. Journal of General Internal Medicine 24 (7):848-853.
2. Canadian Coalition for Seniors Mental Health (2006). National guidelines for senior's mental health: The assessment and treatment of delirium [online], Available: www.ccsmh.ca.
3. www.careforelders.ca
4. Cole, C., Williams, E. & Williams, R. (2006). Assessment and discharge planning for hospitalized older adults with delirium. MedSurg Nursing, April, 15(2), 71-75.
5. Duppils, G & Wikblad, K. (2007). Patients' experiences of being delirious. Journal of Clinical Nursing, 16, 810-818.
6. Inouye, S.; van Dyck, C., Alessi, C., Balkin, C., Seigel, A. & Horowitz, R. (1990). Clarifying confusion: The confusion assessment method – a new method for detecting delirium. Annals of Internal Medicine, 113(12), 941-948.

7. Lundstrom, M., Edlund, A., Karlson,S., Brannstrom, B., Bucht, G. & Gustafson, Y. (2005). A multifactoral intervention program reduces the duration of delirium, length of hospitalization, and mortality in delirious patients. Journal of American Geriatric Society 53:622-628.
8. Maldonaldo, J. (2008). Delirium in the acute care setting: Characteristics, diagnosis and treatment. Critical Care Clinics 24, 657-722.
9. McLafferty, E. (2007). Delirium part one: Clinical features, risk factors and assessment. Nursing Standard, Jan, 21(29), 35-40.
10. McLafferty, E. (2007). Delirium part two: Nursing management. Nursing Standard, Feb, 21(30), 42-47.
11. Millisen, K., Lemiengre, J. Braes, T. & Foreman, M. (2005). Multicomponent intervention strategies for managing delirium in hospitalized older people: systematic review. Journal of Advanced Nursing 52 (1), 79-90.
12. Registered Nurses Association of Ontario (2010). Nursing best practice guidelines: Screening for delirium, dementia and depression in older adults; Caregiving strategies for older adults with delirium, dementia and depression [online], Available: http://rnao.ca/
13. Shaw, Maureen Unpublished. PRISME. Vancouver General Hospital.
14. Smith, P., Attix, D., Weldon, B., Greene, N. & Momk, T. (2009). Executive function and depression as independent risk factors for post operative delirium. Anesthesiology 110(4):781-787.
15. Tabet, N. & Howard, R. (2009). Non-pharmacological interventions in the prevention of delirium. Age and Aging. 38(4), 374-379.
16. Witlox,J., Eurelings,L. Jonghe,J. Kalisvaart,K. Eikelenboom,P. & van Gool, W. (2010). Delirium in elderly patients and the risk of post discharge mortality, institutionalization and dementia, American Medical Association, 304 (4), 433-451.

## Persons/Groups Consulted:

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## Approved/Review/Revision:

February 2004

Revised: February 2005
March 2010
September 2011
January 2012
July 2012 (minor update)

## Appendices (Acute Care tools)

Appendix A: - Confusion Assessment Method (CAM Screen)

Appendix B – PRISME Assessment and Interventions

Appendix C – Delirium Screening and Care Plan (PHC-NF351 (T))

## Appendix A: Confusion Assessment Method (CAM)

A positive screen **requires both 1 and 2 and at least one of 3 or 4**. If 1 or 2 is negative, the screen is negative. If in doubt, consider the screen positive and proceed according to the Delirium Algorithm

| | |
|---|---|
| **1.** | **ACUTE ONSET + FLUCTUATING COURSE**<br>**Consider:**<br>• Has the patient mental status changed from baseline (reported by nurse, patient or family)?<br>• Has behavior changed through the shift (or course of observation)? |
| **PLUS** | |
| **2.** | **INATTENTION**<br>**Consider:**<br>• Does patient demonstrate difficulty focusing attention, following conversation or difficulty following instructions?<br>• Is patient easily distracted, attention wander, make poor eye contact or stare into space? |

**AND AT LEAST ONE OF "3" OR "4"**

| | | | |
|---|---|---|---|
| **3.** | **COGNITIVE DISTURBANCES**<br>**Disorganized Thinking**<br>**Consider:**<br>• Disorganized thinking or incoherence?<br>• Ramble?<br>• Switch subject of conversation unpredictably?<br>• Illogical/unclear ideas?<br>**Disorientation**<br>**Consider:**<br>• Orientation to person, place and time?<br>**Memory Impairment**<br>**Consider:**<br>• Inability to recall events?<br>• Inability to follow instruction?<br>**Perceptual Disturbances**<br>**Consider:**<br>• Visual or auditory hallucinations? Misinterpreting objects or events? | **4.** | **ALTERED LEVEL OF CONSCIOUSNESS**<br>**Increase or Decrease in Level of Consciousness**<br>**Consider:**<br>• Hypervigilance or hyperalertness?<br>• Lethargy, stupor, or coma?<br>**Psychomotor Agitation/ Retardation**<br>**Consider:**<br>• Appearing antsy, picking or pulling at surroundings, restless, sluggish, or pacing?<br>**Altered Sleep/Wake Cycle**<br>**Consider:**<br>• Awake for extended periods during the night and asleep during day?<br>• Excessive sleeping? |



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## Appendix B

| PRISME Nursing Interventions | | | | | |
|---|---|---|---|---|---|
| **P** | **R** | **I** | **S** | **M** | **E** |
| Pain<br>Assess pain level hourly or PRN<br>Implement and assess effectiveness of pain management strategies<br>Narcotic<br>Non-narcotic<br>Local or regional block<br>Non-pharmacological<br>Psychosocial<br>Determine baseline cognition ( MMSE &/or MOCA)<br>Acknowledge emotions<br>Encourage verbal expression<br>Use clear , short ,simple instructions & explanations<br>Avoid confrontations<br>Involve family & friends to:<br>determine baseline cognitive function<br>identify past and current cognitive conditions like stroke, TIA's, brain trauma, depression and dementia<br>determine ability to cope with stress/stimuli<br>See B-00-13-10059 for de-escalation strategies | Retention<br>Determine baseline bladder routine<br>Use a bladder scan to determine retention and post void residuals<br>Offer toileting hourly<br>D/C Foley catheter if medically appropriate<br>Follow Urinary Catheter Management Protocol<br><br>Restraint<br>Use least restrictive measures to prevent self harm<br>Create a hazard free environment<br>Increase supervision<br>Consider patient family member /companion /close or constant care for surveillance and safety | Infection<br>Assess for UTI, pneumonia, C. Diff, purulent wound.<br>Monitor VS<br>Monitor WBC<br>Impaction<br>Determine time of last BM. Palpate & auscultate abdomen.<br>Rectal check PRN<br>Maintain normal elimination pattern<br>Implement appropriate bowel protocol i.e. Elder Care Bowel Protocol<br>Intake<br>Dehydration record 24 hour intake and output<br>Offer fluids hourly (minimum 1500mL/day unless contraindicated )<br>Screen for dysphagia and consult with OT/dietician PRN<br>Offer snacks between meals if indicated in nutrition consult<br>Monitor chemistry, electrolytes, glucose | Sleep<br>Promote normal sleep wake cycle<br>Short day naps<br>Periods of 4 hours uninterrupted sleep at night<br><br>Sensory<br>Assess hearing and vision<br>Hearing aid<br>Wear glasses<br><br>Social Isolation<br>Promote "family" involvement<br>Determine ability to contact by phone | Medication<br>Review recent med changes, drug levels, interactions-Pharmacy consult<br>Screen for drug/ alcohol intake<br>Monitor effects of PRN's<br>Avoid medications contributing to delirium (demerol, codeine, benzodiazepines)<br>Mobility<br>Serial functional measurements (2 weeks before acute event and at admission)<br>Early mobilization promote self-care, toileting<br>Daily pressure sore risk assessment<br>Metabolic<br>Hypoxia: O2 Sats at 92% unless medically contraindicated<br>VS cardiovascular stability<br>Monitor Hgb, Blood Glucose | Environment<br>Convey attitude of warmth, calmness, and firm kindness<br>Provide information, re-orientate and support in the context of a safe environment<br>Provide watch, clock, calendar, familiar objects/pictures from home, calming music as appropriate<br>Provide schedule of day's events<br>Avoid room changes<br>Room should be quiet with adequate lighting<br>Reduce shadows at night<br>If Hyperactive – reduce stimuli,<br>Evaluate the use of radios and TV<br>If Hypoactive – increase stimuli as tolerated.<br>Activate and ambulate<br><br>Purposeful hourly rounding |

## Appendix C – Acute Care

### DELIRIUM SCREENING AND CARE PLAN

**1. Risk Factors** (Check all that apply)

**Patient/Environmental Risks:**
- ☐ Age 75 or older
- ☐ Cognitive Impairment
- ☐ Previous Delirium
- ☐ History of Depression
- ☐ Alcohol/Drug Withdrawal
- ☐ Sleep Disturbance
- ☐ Vision/Hearing loss
- ☐ Functional Impairment
- ☐ Relocation
- ☐ Use of Restraints

**Medical Risks:**
- ☐ History of TIA or CVA
- ☐ Surgery/Anesthesia
- ☐ Electrolyte Imbalance
- ☐ Hypoxia
- ☐ Fever
- ☐ Unrelieved Pain
- ☐ Hypotension
- ☐ Infection
- ☐ Multiple Co-morbidities
- ☐ Advanced Illness

**Medication Risks:**
- ☐ Receiving 5 or more meds
- ☐ Benzodiazepines
- ☐ Narcotic Analgesics
- ☐ Cardiac Drugs
- ☐ Antipsychotics
- ☐ Street Drug Use

**Based on above:**
- ☐ Patient has 3 or more risk factors, initiate CAM screening every 12 hours and initiate PRISME
- ☐ If patient has less than 3 risk factors, do NOT initiate CAM but continue to monitor for changes in risk factors and initiate appropriate PRISME interventions to mitigate risk.

Screened by: _____ **Date:** _____ **Time:** _____

**2. CAM Screening Documentation:** For CAM + (positive) result, patient must exhibit behaviour from both **1 and 2** and either 3 or 4

| Reassess CAM every shift | | | Date: | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Shift | D | N | D | N | D | N | D | N | D | N | D | N | D | N |
| | | | Time | | | | | | | | | | | | | | |
| 1 | Acute onset and fluctuating course | Behavior fluctuates during shift | | | | | | | | | | | | | | | |
| | | Differs from baseline | | | | | | | | | | | | | | | |
| 2 | Inattention | Difficulty focusing attention | | | | | | | | | | | | | | | |
| | | Easily distracted | | | | | | | | | | | | | | | |
| | | Trouble following conversation | | | | | | | | | | | | | | | |
| 3 | Cognitive Disturbances | Disorganized thinking (incoherent, rambling) | | | | | | | | | | | | | | | |
| | | Disorientation | | | | | | | | | | | | | | | |
| | | Memory impairment | | | | | | | | | | | | | | | |
| | | Perceptual disturbances | | | | | | | | | | | | | | | |
| 4 | Altered Level of Consciousness (LOC) | Increased LOC (vigilant) | | | | | | | | | | | | | | | |
| | | Decreased LOC (lethargic, stupor, coma) | | | | | | | | | | | | | | | |
| | | Psychomotor agitation | | | | | | | | | | | | | | | |
| | | Psychomotor retardation | | | | | | | | | | | | | | | |
| | | Altered sleep / wake cycle | | | | | | | | | | | | | | | |
| Indicate + (positive) or – (negative) **CAM Result:** | | | | | | | | | | | | | | | | | |
| **Initials:** | | | | | | | | | | | | | | | | | |



**3. PRISME Nursing Interventions** (Check all that apply)

| | | |
|---|---|---|
| **P** | Pain | ☐ Use 24 hour Pain Management Flow Sheet (PHC-NF219) ☐ Provide regular analgesia (narcotic & non-narcotic) ☐ Use non-pharmacological pain management strategies (comfort measures) |
| | Psychosocial | ☐ Assess for underlying dementia, stress, ability to cope ☐ Provide emotional support to patient & family |
| **R** | Retention | ☐ Bladder scan PRN. I & O catheter if required ☐ Remove indwelling catheter ASAP ☐ Regular toileting Q2H |
| | Restraint | ☐ Implement Managing Unsettled/Challenging Behaviours: Least Restraint Approach/PHC non-residential sites |
| **I** | Infection | ☐ Assess for UTI, Pneumonia, wound infection ☐ Monitor VS every _____ h |
| | Impaction | ☐ Determine last BM ☐ Implement bowel protocol |
| | Intake | ☐ Dysphagia screen ☐ Feed patient PRN ☐ Allow adequate time for meals |
| **S** | Sleep | ☐ Ensure 4-hour sleep periods ☐ Daytime rest period |
| | Sensory | ☐ Ensure glasses, hearing aids & dentures fit well and work |
| | Social isolation | ☐ Encourage family participation. |
| **M** | Medication | ☐ Review recent med changes ☐ Alcohol/ drug screen ☐ Avoid at risk meds |
| | Metabolic | ☐ Monitor I & O, labs, $O_2$ Sat. blood sugar ☐ Ensure agitation is treated |
| | Mobility | ☐ Encourage self-care, toileting, early ambulation, up for meals ☐ Braden Scale for predicting Sore Risk (PHC-EL029) |
| **E** | Environment | ☐ Provide quiet, supportive environment (decrease noise, light, people) ☐ Provide schedule of daily activities ☐ Avoid room changes ☐ **Hypoactive** – increase stimuli as tolerated. Activate & ambulate ☐ **Hyperactive** – Reduce stimuli, especially at night |

***If you initial this form, you must complete the Interdisciplinary Signature Sheet at the front of the patient chart.***

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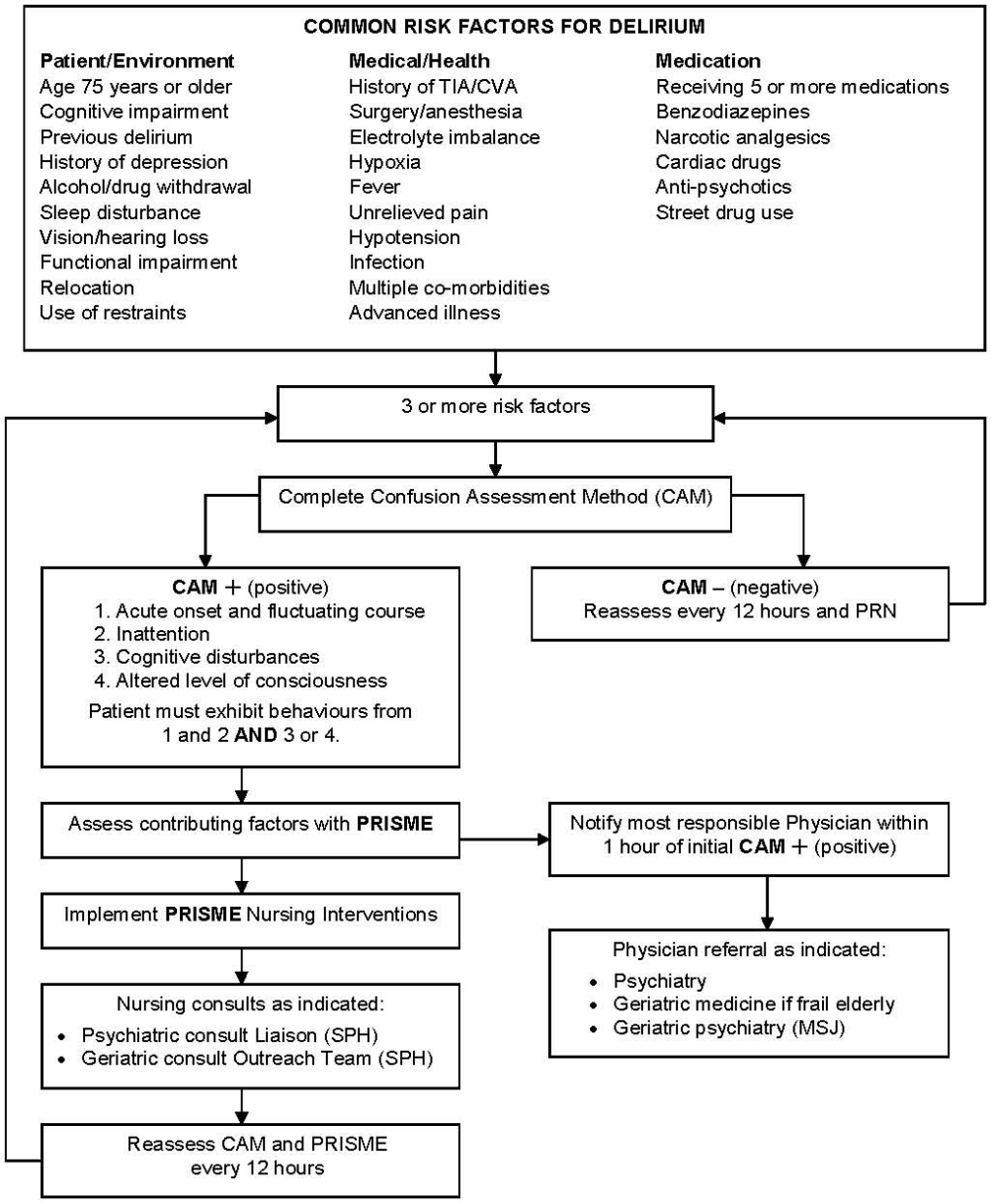
DELIRIUM SCREENING AND CARE PLAN

Delirium Identification, Prevention and Treatment – Algorithm

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