Delirium: Screening, Assessment and Management

The term 'individual' will be used to represent client/resident/patient throughout the document.
The term 'family' will be used to represent family/friends/personal caregivers who are identified as providing support.

Site Applicability

VCH: Acute, Community, Residential (**Note:** Excludes Critical Care)

PHC: Residential Care only

PHSA: BC Cancer Vancouver Inpatient only

Practice Level

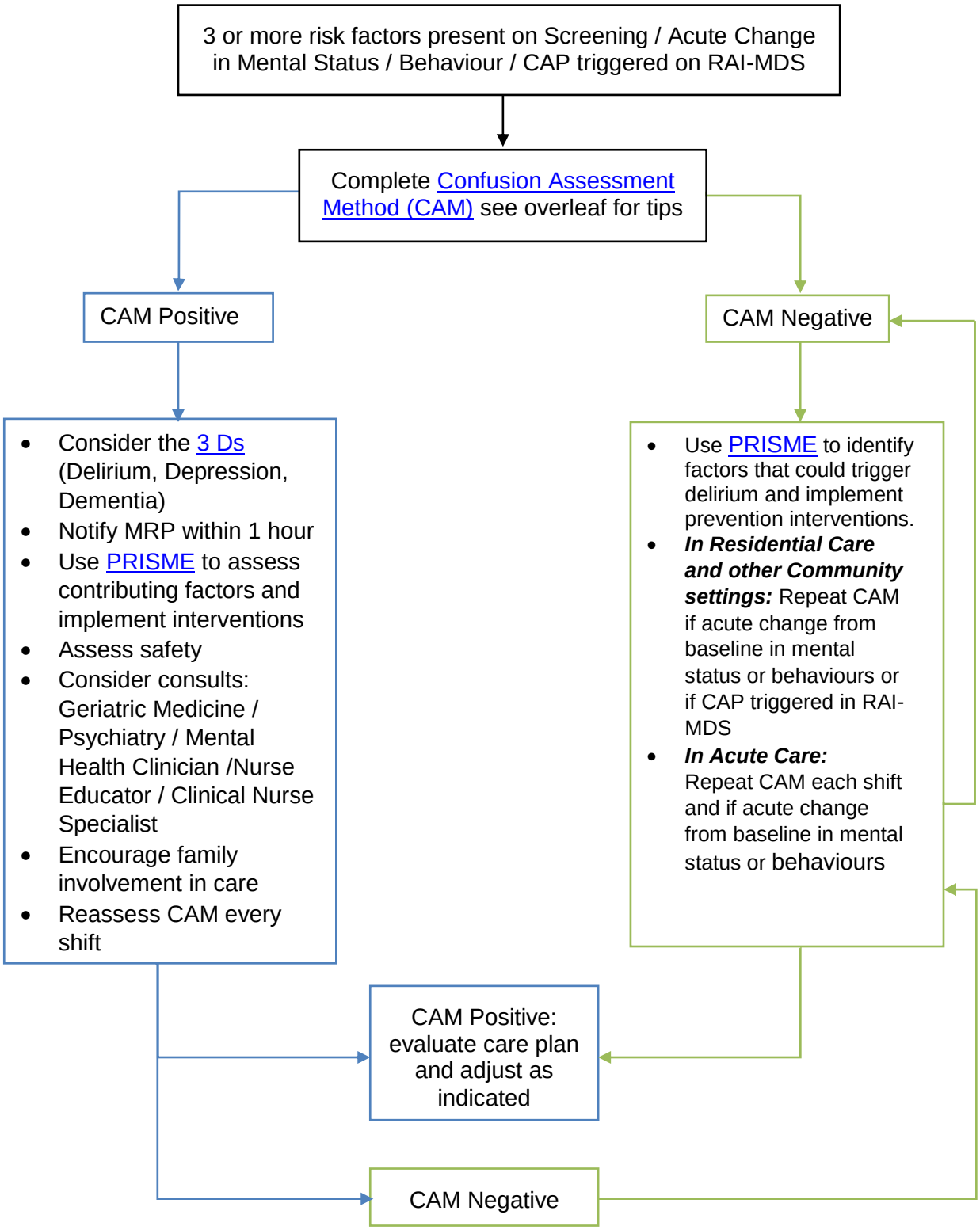
Basic skills for the following professions within their relative scopes of practice and job descriptions:

- RN, RPN, LPN
- SW
- OT
- PT
- RD
- and other disciplines providing direct care

Policy Statement

- Individuals are screened for delirium Risk Factors at all transitions of care e.g., on admission or transfer to acute/community care settings or on moving into residential care homes.
- For individuals with 3 or more risk factors: Initiate Confusion Assessment Method (CAM) and PRISME.
- For individuals with less than 3 risk factors monitor for changes in risk factors and initiate CAM as needed, where appropriate initiate PRISME interventions to mitigate risk.
- Individuals are also assessed for delirium using CAM when there is an acute change from baseline in mental status or behaviours or when a delirium Clinical Assessment Protocol (CAP) is triggered on Residential Assessment Instrument-Minimum Data Set (RAI–MDS).
- A care plan to manage and prevent episodes of delirium using PRISME is developed with:
  - all individuals experiencing an episode of delirium **AND**
  - all individuals identified as 'at risk' of delirium.

Identifying and Managing Delirium Algorithm



Need to Know

- Delirium is a medical emergency. Early recognition and management promotes recovery, dignity and well-being.
- Delirium is defined as an acute change in mental status characterized by disorganized thinking, inattention and alteration in level of consciousness that develops over a short period of time. It is associated with physiological changes or exacerbations of general medical conditions.

  There are 3 types of delirium:
  - **Hyperactive:** overly alert, restlessness, increased psychomotor activity, acutely responsive to the environment or irritable
  - **Hypoactive:** passive, low level of psychomotor activity, may appear drowsy, depressed or withdrawn
  - **Mixed:** fluctuating features of hyperactive and hypoactive delirium
- Risk factors for delirium include:
  - history of cognitive impairment/dementia
  - over 75 years of age
  - chronic illness/multiple co-morbidities
  - sensory deficits (hearing / vision)
  - alcohol / substance use
  - functional impairment
  - insomnia
  - polypharmacy (5+ medications) See Appendix B
- CAM is an international tool that is used to identify presence of delirium.
- PRISME is an acronym used to identify factors contributing to delirium, aid in care planning, to prevent onset and promote recovery from delirium.
- Assessing delirium in the context of dementia and depression can be challenging; however sudden changes in mental status and fluctuating severity of symptoms are indicative of delirium. Appendix E summarizes the distinguishing and overlapping features.
- Untreated, delirium leads to functional and cognitive decline, hospital admission, and early death.
- Delirium at end of life may not always be reversible, goals of care need to be considered during care planning. Refer to Palliative Care Guidelines and BCPC Clinical Best Practices for additional resources on management of terminal delirium.

Quick Links

- Appendix A: Delirium Screen - Confusion Assessment Method (CAM)
- Appendix B: Tips for Conducting CAM
- Appendix C: PRISME - Delirium Assessment Prevention and Management
- Appendix D: CAGE-AID
- Appendix E: Differentiating between the 3 Ds - Delirium, Depression and Dementia

Practice Guideline

When providing care for people with delirium consider P.I.E.C.E.S and Gentle Persuasive Approaches.

Screening and Assessment

1. Screen for Risk Factors. If 3 or more present assess for delirium using CAM (see Appendix B for tips on completing CAM). Document CAM result. CAM may be used as a template for documentation.
2. Assess for delirium when there is an acute change from baseline in mental status or behaviours. In addition, for residential care and home care, assess for delirium when a delirium CAP is triggered on RAI–MDS assessment.
3. Use PRISME to assess for specific causes of delirium and to identify potentially preventive triggers.
4. Consider the 3 Ds (Delirium, Depression, Dementia) see Appendix E for distinguishing and overlapping features).

5. Assess safety needs.
6. Assess impact of delirium on personal dignity.

Interventions

1. **If CAM positive:**
   a. Inform Most Responsible Provider (MRP) within **ONE** hour.
   b. Develop individualized care plan using PRISME in collaboration with individual, family and interdisciplinary team.
2. **If CAM negative and 3 or more risk factors are present:**
   a. Initiate PRISME to prevent episodes of delirium.
   b. In Acute Care, reassess CAM every shift **OR** when there is an acute change from baseline in mental status or behaviours.
   c. In Residential Care and other Community settings, reassess CAM when there is an acute change from baseline in mental status or behaviours or a delirium CAP is triggered on RAI-MDS assessment.
3. **During episodes of delirium:**
   a. Consider consultation with your available clinical resources such as Family Doctor, Nurse Practitioner, Geriatric Medicine, Psychiatry, Mental Health Clinician, Nurse Educator, Clinical Nurse Specialist.
   b. Encourage family involvement in care as much as possible (see Family Presence Guidance).
   c. Reassess CAM every shift /day/visit until delirium has cleared. **In acute care,** continue to reassess every shift until discharge.
4. **In community**, consider additional resources / family education / safety requirements needed to support individual in their own home where possible.

Expected Patient/Client/Resident Outcomes

- Individuals at risk of delirium are identified so that episodes of delirium can be prevented.
- Individuals experiencing delirium have their needs met and dignity maintained using PRISME as a guide.

Patient/Client/Resident Education

- Provide individual and family education on delirium, how to recognize symptoms and what they can do to help promote recovery and prevent episodes of delirium. Use the education pamphlet: Delirium, A Guide for Families (CA.900.D3791).
- Reassure family that cognitive and functional challenges are usually temporary and reversible with treatment and time. However, for some individuals, deficits may persist.

Staff Education

See LearningHub Modules and Courses:

- Delirium Basics (VCH - Online)
- PIECES Overview for Residential Care (online)
- Dementia Care: Fundamental Knowledge, Skills and Competencies for Providing Person-Centred Care (on-line)
- Gentle Persuasive Approach (GPA) in Residential Care (classroom)
- GPA: Gentle Persuasive Approaches for VGH Medicine Units and Willow Pavilion Staff (classroom)
- Gentle Persuasive Approaches (GPA) Basics - Parkview Older Adult Tertiary Mental Health Program (classroom)

Evaluation

Effectiveness of an individualized care plan is evaluated by re-assessing the individual's mental status, behaviours and sleep patterns over the previous 24 hours and adjusted accordingly until resolved.

Documentation

Document in individual's health record (electronic or paper) in accordance with organization and college standards. The template in Appendix A may be used to document daily care if appropriate. Documentation should include the following:

- Risk factors for delirium
- Specific assessment of signs and symptoms as identified using CAM, triggers and successful management strategies
- Episodes of delirium, time MRP informed, other referrals, response to interventions and treatments
- Individual / family education
- Supports arranged if individual is being cared for in their home

Related Documents

VCH:

- Delirium - VCH Community Palliative Care Clinical Practice Guidelines, 2007
- Least Restraint: Guideline for maximizing independence in Residential Care (D-00-07-30045)
- Restraints: Care of the Patient at Risk for or Requiring Restraints (R-030)
- Falls and Injury Prevention (Acute Care) (Community) (Residential)
- Identification of Agitated and Excessive Behaviours in residential care (D-00-07-30000)
- Violence & Aggression Alert – Acute Care Standard

PHC:

- Least Restraint: Guideline for maximizing independence in Residential Care (RCS6010)
- Falls and Injury Prevention in Residential Care (IDG1098)
- Pain Assessment and Management of the Older Adult in Residential Care (RCS6014)

Resources:

- BC Provincial Behavioural & Psychological Symptoms of Dementia (BPSD)
- Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care (2012)
- P.I.E.C.E.S – Putting the Pieces Together

References

BC Ministry of Health. (2012). *Best Practice Guideline for Accomodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care.* BCMOH.

BC Ministry of Health. (2016). *Provincial Guide to Dementia care in British Columbia.* BCMOH.

Brajtman, S. W. (2011). Developing Guidelines on the Assessment and Treatment of Delirum in Older Adults at the End of Life. *14*(2), 40-50.

Canadian Coalition for Senior's Mental Health. (2014). *National Guidelines for Seniour's Mental Health: The Assessment and Treatment of Delirium.* Canadian Coalition for Senior's Mental Health.

Flanagan, N. a. (2010). Delirium Superimposed on Dementia. *Journal of Gerontological Nursing, 36*(11), 19-21.

Gentle Persuasive Approaches (GPA) Advisory Committee (2014). GPA in Dementia Care: Supporting Persons with Responsive Behaviours Version 3. Advanced Gerontolgical Education (AGE) Inc

GeroPsychiatric Education Program. (2010). Intervention Strategies for Dementia and Delirium. Vancouver Coastal Health.

Guidelines and Protocols Advisory Committee. (2014). Delirium Screening and Assessment Tools – CAM and PRISME. Retrieved 2017, from www.BC guidelines.ca

Hendry, K. H. (2015). Single Screening Questions for Cognitive Impairment in Older People: A Systematic Review. *Age and Aging*, pp. 322-326.

Inouye, S., van Dyck, C., Alessi, C., et al. (1990) Clarifying confusion: The Confusion Assessment Method. *Annals of Internal Medicine*. 113:12; pp. 941-948

Marcantonio, E. N. (2014). 3D-CAM: Derivation and Validation of a 3-Minute Diagnositic Interview for CAM-Defined Delirium. *Annals of Internal Medicine, 161*, 554-556.

National Institute for Health and Care Excellence. (2010). *Delirium: Prevention Diagnosis and Management.* London: NICE.
Phillips, L. A. (2013). Delirium in Geriatric patients: Indentification and Prevention. *MedSurg Nursing, 22*(1), pp. 9-12.
Popeo, D. (2011). Delirium in Older Adults. *Mount Sinai Journal of Medicine, 78*, pp. 571-582.
Safer Health Care Now. (2013). *Prevention and Management of Delirium.* Canadian Patient Safety Insititute. Retrieved from www.saferhealthcarenow.ca
Sands, M. D. (2010). Single Question in D Single Question in Delirium (SQUiD): testing it's efficacy against psychiatrist interview, the Confusion Assessment Method and the Memrial Delirium Assessment Scale. *Palliative Medicine, 6*, pp. 561-565.
Scheffer, A. v. (2011). Assessing Severity of Delirium by the Delirium Screening Scale. *26*, 284-291.

Developed by

CPD Developer Lead: Clinical Practice Lead, Residential Practice Team, Vancouver Coastal Health
Other members:
Clinical Nurse Specialist, Medicine Program, Vancouver Acute
VCH Dementia C.A.R.E Team Lead, Vancouver Residential Practice Team
Clinical Nurse Specialist, Elder Care, Providence Health Care
Clinical Nurse Educator, Seniors Program, Coastal
Practice Initiatives Lead, Professional Practice, Vancouver Acute
Educator, Residential Care Minoru Residence, Richmond

Expert Reviewers:
Director, Professional Practice, Residential Care, VCH
Educator/Coordinator, Residential Practice Team, Vancouver
Clinical Nurse Educator, Seniors Program, Coastal
OT, Clinical Resource Therapist, Seniors Health, Professional Practice, VCH

Other Reviewers:
Educator/Coordinator, Residential Practice Team, Vancouver

Endorsed by

VCH: *(Regional SharePoint 2nd Reading)*
Health Authority Profession Specific Advisory Council Chairs (HAPSAC)
Health Authority & Area Specific Interprofessional Advisory Council Chairs (HAIAC)
Operations Directors
Professional Practice Directors
PHC: Residential Nursing Practice Council

Final Sign-off & Approval for Posting by

Vice President, Professional Practice and Chief Clinical Information Officer, VCH
Professional Practice Standards Committee, PHC

Date of Approval/Review/Revision

Approved: May 2, 2018
Posted: May 3, 2018
Revised : Feb 11, 2021 – Added PHSA Logo and BC Cancer Vancouver to Site Applicability

Appendix A: Delirium Screen – Confusion Assessment Method (CAM)

Assess Risk Factors (Check all that Apply)					
Individual/Environmental Risks		**Medical Risks**		**Medication Risks**	
☐ Age 75 or older	☐ Sleep Disturbance	☐ History of TIA / Stroke	☐ Unrelieved Pain	☐ Antipsychotics	☐ Cardiac Drugs
☐ Cognitive Impairment	☐ Vision/Hearing loss	☐ Surgery/Anesthesia	☐ Hypotension	☐ Benzodiazepines	☐ Receiving 5 or more meds
☐ Previous Delirium	☐ Functional Impairment	☐ Electrolyte Imbalance	☐ Infection	☐ Opioid Analgesics	
☐ History of Depression	☐ Relocation	☐ Hypoxia	☐ Multiple Co-morbidities		
☐ Alcohol/Drug/Tobacco use	☐ Use of Restraints	☐ Fever	☐ Advanced Illness		
			☐ Chronic Illness		
☐ Person has 3 or more risk factors: Initiate CAM screening every 12 hours and initiate PRISME. ☐ Person has less than 3 risk factors: DO NOT initiate CAM but continue to monitor for changes in risk factors and initiate as appropriate PRISME interventions to mitigate risk.					

Reassess CAM every 12 hours, tick if present (√) (CAM is only positive if 1**AND** 2 **PLUS** 3 **OR** 4 are present)																															
	Date																														
	Time																														
1	Acute onset & fluctuating Course																														
2	Inattention																														
3	Disorganized Thinking																														
4	Altered Level of Consciousness																														
Indicate CAM result with √ Inform MRP of CAM positive result	Positive																														
	Negative																														
	Initials																														

Appendix B: Tips for Conducting Confusion Assessment Method (CAM)

A diagnosis of delirium is suggested when the CAM is positive. For the CAM to be positive features 1 *and* 2 *PLUS* 3 *or* 4 should be present	
Feature	**Tips for identifying feature**
1. **Acute Onset and fluctuating Course** □ Sudden change from baseline in mental health status or behavior □ Fluctuation in severity of changes in mental status or behavior throughout a 24 hour period	• Individual, family, friends, staff report new or fluctuating ○ confusion ○ disorientation ○ hallucinations ○ incontinence ○ wandering ○ decline in functional ability ○ change in ability to participate in activities or follow instructions
2. **Inattention** □ Difficulty focusing attention, easily distracted, losing track of what is being said	• Attention span differs from level of alertness • Unable to count backwards or say days of week backwards • Needs repeated directions • Unable to shift conversational topics • Poor eye contact or staring into space • Wandering
3. **Disorganized Thinking** □ Incoherence, rambling, irrelevant conversation, unclear or illogical flow of ideas, unpredictable, switching from subject to subject	• Unable to recall year, day of week month, type of place • Repeats verbalizations • Rambling speech • Talks about past traumatic events out of context, e.g. war, poverty, abuse • Misinterprets familiar objects or events
4. **Altered Level of Consciousness** (any answer other than ALERT is a positive feature) Normal □ Alert Hyperactive Delirium □ Vigilant (hyperalert) Hypoactive Delirium □ Lethargic (drowsy easily aroused) □ Stupor (difficult to arouse) □ Comatose (unarousable) Mixed □ Alternates between hyper and hypo active delirium	• Hyperactive Delirium ○ Easily startled ○ Suspicious ('the look') ○ Restless / agitated ('Antsy') ○ Picking at clothing, tubes and wound dressings ○ Pacing ○ Sleeps all day awake at night • Hypoactive Delirium: ○ Restless, drowsy then restless again ○ Excessively drowsy or sluggish, difficult to rouse

Appendix C: PRISME - Delirium Assessment, Prevention and Management

(Adapted from PRISME developed by Maureen Shaw VCH 2008)

PRISME Interventions		
P	Pain Psychosocial	• Refer to pain care plan /flow sheet, consider non pharmacological pain management. • Provide regular analgesia: evaluate effectiveness / side effects/ toxicity. • Assess for underlying dementia, stress, ability to cope. • Provide emotional support to individual and family. • Assess for agitation and manage with lowest dose of medication. Re-assess every shift and taper as soon as able.
R	Retention Restraint	• Bladder scan. Perform intermittent catheterization as needed - Refer to CAUTI. Regular toileting • Determine Last Bowel Movement. • Initiate Bowel Protocol and record bowel movements. • Use Gentle Persuasive Approaches (GPA) / De-escalation strategies. Behavioural & Psychological Symptoms of Dementia (BPSD). • Refer to Least Restraint Policy - avoid use of physical/chemical restraints. • Consider increased supervision by staff/family member.
I	Infection Intake	• Monitor Vital Signs. Assess for source / resolution / worsening of infection. • Monitor Intake & Output, Labs, Blood Glucose as indicated. • Ensure adequate hydration, assist as needed and allow adequate time for meals. • Consider Swallow Screen and/or Feeding, Eating and Swallowing assessment by OT/SLP. Ensure dentures fit and are used.
S	Sleep Sensory Social Isolation	• Promote normal sleep pattern. Ensure 4 hour sleep periods at night. Consider daytime rest period. • Ensure glasses, hearing aids and other aids are used, work and fit correctly. • Encourage family participation, provide support and education. Provide 'Delirium, A Guide for Families' pamphlet (CA.900.D3791). • Use familiar items to re-orient, e.g. pictures, objects, clocks and calendars.
M	Medication Mobility	• Review Medication changes and monitor for effectiveness / side effects / toxicity. Avoid benzodiazepines, codeine, and opioids. • Screen for alcohol and drug use using CAGE-AID. Consider withdrawal management. • Consider Nicotine Replacement Therapy. • Encourage ambulation, up for meals and toileting. • Monitor pressure areas each shift. Assist with re-positioning 2 hourly. • Complete Braden Scale and address risks for pressure injury.
E	Environment	• Use calm approach. • Provide low stimulation and quiet environment. • Avoid room changes. • Provide schedule of daily activities. • Hypoactive Delirium: increase stimuli as tolerated. • Hyperactive Delirium: Keep stimuli to a minimum especially at night.
	Other Interventions	• _____ • _____ • _____ • _____

Appendix D: CAGE-AID Questionnaire

Name: _____

PHN: _____

MRN: _____

DOB: _____

MRP: _____

If yes to any of the questions further assessment / referral may be required.

Tell me about your use of alcohol, medication and or drugs:	
1. Have you ever felt you ought to cut down on your use of alcohol, medications or drugs?	☐ Yes ☐ No
2. Have people ever annoyed or angered you by criticizing your use of alcohol, medications or drugs?	☐ Yes ☐ No
3. Have you ever felt guilty about your use of alcohol, medications or drugs?	☐ Yes ☐ No
4. Have you ever used alcohol, medications or drugs to get your day started or to ‘’steady your nerves”?	☐ Yes ☐ No
Comments:	

Completed by:_____ Signed_____

Date: _____

Appendix E: Differentiating between the 3 Ds – Delirium, Depression and Dementia

Feature	Delirium	Depression	Dementia
Definitions	Delirium is a medical emergency which is characterized by an acute and fluctuating onset of confusion, disturbances in attention, disorganized thinking and/or decline in level of consciousness. Delirium cannot be accounted for by a preexisting dementia; however, can co-exist with dementia.	Depression is a term used when a cluster of depressive symptoms are present on most days, for most of the time, for at least 2 weeks and when the symptoms are of such intensity that they are out of the ordinary for that individual. Depression is a biologically based illness that affects a person's thoughts, feelings, behaviour, and even physical health.	Dementia is a gradual and progressive decline in mental processing ability that affects short-term memory, communication, language, judgment, reasoning and abstract thinking. Dementia eventually affects long-term memory and the ability to perform familiar tasks. Sometimes there are changes in mood and behaviour.
Onset	Sudden Onset: Hours to days.	Recent unexplained changes in mood that persist for at least 2 weeks.	Gradual deterioration over months to years.
Course	Often reversible with treatment. Fluctuates over 24 hour period and often worse at night.	Usually reversible with treatment. Often worse in the morning.	Slow, chronic progression and irreversible.
Thinking	Fluctuations in alertness, cognition, perceptions, thinking.	Reduced memory, concentration and thinking, low self-esteem.	Cognitive decline with problems in memory plus one or more of the following: aphasia, apraxia, agnosia, and/or executive functioning.
Psychotic Feature	Misperceptions and illusions.	Poverty of speech/thought, delusions of guilt, somatic symptoms.	Signs may include delusions of theft/persecution and/or hallucinations depending on type of dementia.
Sleep	Disturbed but with no set pattern. Differs night to night.	Disturbed: early morning awakening or hypersomnia.	May be disturbed with an individual pattern occurring most nights.
Mood	Fluctuations in emotions – outbursts, anger, crying, fearful.	Depressed mood, diminished interest or pleasure. Changes in appetite (over or under eating). Possible suicidal ideation/plan; hopelessness.	Depressed mood especially in early dementia. Prevalence of depression may increase in dementia; however, apathy is a more common symptom and may be confused with depression.
Psychomotor	Hyperactive delirium: agitation, restlessness, hallucinations Hypoactive delirium: unarousable, very sleepy. Mixed delirium: combination of hyperactive and hypoactive manifestations.	Hyperactive: agitated depression. Hypoactive: withdrawn, decreased motivation/interest.	Wandering/exit seeking or Agitated or Withdrawn (may be related to coexisting depression).

Adapted from: Ontario Psychogeriatric Association (OPGA) (2005). Basics of the 3Ds.