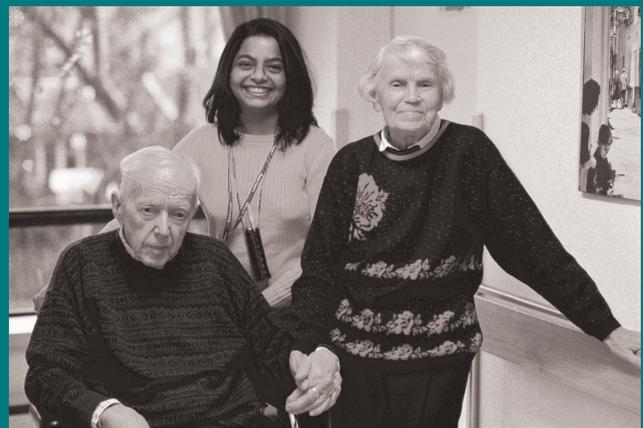


Delirium, Dementia, and Depression in Older Adults: Assessment and Care



Long-Term Care Case Study and Discussion Guide



RNAO

Registered Nurses' Association of Ontario
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Speaking out for nursing. Speaking out for health.

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Delirium, Dementia, and Depression in Older Adults: Assessment and Care

Long-Term Care Case Study and Discussion Guide

Delirium, Dementia, and Depression in Older Adults: Assessment and Care Long-Term Care Case Study and Discussion Guide

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Introduction

The Registered Nurses' Association of Ontario's (RNAO) *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* Best Practice Guideline (BPG) outlines recommendations that guide best practices for nurses and health-care providers. The BPG can be used across different health-care settings, including long-term care. The BPG was developed using a rigorous process, including a systematic literature review and the development of recommendations with experts in the field, including health-care providers from the long-term care sector.

The Case Study (see Appendix A in this guide, pg. 24) and its accompanying Discussion Guide were developed for educational purposes in long-term care homes to promote use of the RNAO *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* BPG. Long-term care staff are asked to read the Case Study – Mr. Y's Story, and participate in a learning session through a facilitated discussion with other participants who work in the long-term care setting.

The facilitator of the discussion should be a member in the long-term care setting who is responsible for the education of the long-term care staff. Possible facilitators could be the nurse educator, nurse manager, or charge nurse at the long-term care setting. The Discussion Guide is used by the facilitator to elicit topics for discussion and to cover key points from the RNAO *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* BPG. Education should focus not only on increasing content knowledge, but also foster attitudes and practices conducive to the care of people with delirium, dementia, and depression.

Overall goals of the Case Study and Discussion Guide are to:

- Actively engage participants in discussions about delirium, dementia, and depression
- Help long-term care staff identify the differences between delirium, dementia, and depression
- Help long-term care staff become familiar with key resources they can use at the point-of-care to support identification of delirium, dementia, and depression
- Reinforce best practices for the care of delirium, dementia, depression in older adults

Detailed information and references in this Discussion Guide can be found in the RNAO *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* BPG unless otherwise stated.

The RNAO *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* BPG can be found online at RNAO.ca/bpg

How to Use this Discussion Guide

In preparation, the facilitator should be familiar with the following:

- Registered Nurses' Association of Ontario *Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition* Best Practice Guideline (2016)
- Case Study – Mr. Y's Story (Facilitator's Version) (see Appendix B in this guide, pg. 27)
- Discussion Guide content
 - Background on Delirium, Dementia, and Depression
 - Section A: Questions about Differentiating Delirium, Dementia, and Depression
 - Section B: Questions about Delirium and Care Strategies
 - Section C: Questions about Dementia and Care Strategies
 - Section D: Questions about Depression and Care Strategies

Depending on the time available for the learning session, the facilitator may choose to focus on one or more of the sections in the Discussion Guide. For example, Section A could be focused on in a 30-45-minute learning session. There is no recommended order of sequence in which sections should be delivered. The section selection for the learning session is up to the facilitator and the learning needs of the long-term care participants. Each section includes:

- Aims of the section
- Relevant BPG recommendations to consider
- BPG resources to be provided as handouts
- Suggested discussion questions
- Possible answers
- Facilitator tips
- Key points to cover

Facilitator Tip: Create a safe learning environment. Participants will be work colleagues with various work, education, and life experiences. Participants will hold different employment positions at the long-term care setting. The facilitator should inform participants that the learning session will be a safe, confidential, non-judgmental learning environment in order to encourage discussion, participation and to learn with each other.

The ideal seating arrangement is a circle or half-circle to promote sense of community/team and encourages participation by involving everyone in the group. Participants are unobstructed from speaking directly to each other. There is no designated leader position; this creates a sense of equality among the group.

Background on Delirium, Dementia, and Depression

This section gives a brief description of delirium, dementia, depression, and the importance of being able to differentiate the three conditions. This section can be used by the facilitator to review the conditions with the long-term care staff at the start of a learning session.

Delirium

Delirium is a complex condition and can be thought of as acute brain failure.¹ It is a medical emergency and needs to be addressed quickly because delirium can permanently affect the brain. Unfortunately, delirium is common in long-term care settings,² and often leads to hospital transfers.³

Delirium develops because of a combination of conditions that make an older adult vulnerable to different risk factors.⁴ Risk factors can be found in the BPG's *Appendix G: Delirium Risk Factors and Interventions* (pg. 31 of this guide).

Delirium comes on quickly and typically lasts less than a month.⁵ It causes changes in someone's level of attention, orientation, alertness, memory, thinking, perception, physical function, and social behaviour. Important changes to know can be found in the BPG's *Table 1: Changes That May Indicate Delirium* (pg. 33 of this guide).

There are three main types of delirium.⁶ Older adults with **hyperactive delirium** present with restlessness, agitation, delusions, and/or aggressive behaviour. Older adults with **hypoactive delirium** are lethargic, sleepier, have less spontaneous movements, slowed movements, disinterested behaviour. Older adults with **mixed delirium** have phases of hyperactive and hypoactive delirium. Hypoactive delirium accounts for 65 percent of delirium cases;⁷ it is the most common type of delirium.

Prevention of delirium is important. Actions to prevent delirium can reduce the incidence of delirium by approximately 30 percent.⁸

Dementia

Dementia is an umbrella term for a number of diseases that create irreversible changes in the brain that affect learning, memory, mood and behaviour.⁹ A summary of the main types of dementia, including Alzheimer's disease and vascular dementia, can be found in the BPG's *Appendix E: Types of Dementia* (pg. 34 of this guide).

¹ Inouye et al., 2014

² American Medical Directors Association, 2008

³ Clegg et al., 2014

⁴ Holroyd-Leduc, Khandwala & Sink, 2010; Martinez et al., 2015

⁵ Flaherty et al., 2011; American Medical Directors Association, 2008

⁶ National Institute for Health and Care Excellence, 2010

⁷ Khurana, Gambhir, & Kishore 2011

⁸ Martinez et al., 2015

⁹ Alzheimer Society of Ontario, 2012

Dementia develops gradually with early warning signs of a decline in memory, thinking, and orientation. Other signs that can be used to signal when someone should be assessed for dementia can be found in the BPG's *Table 8: Early Warning Signs Suggesting Cognitive Challenges* (pg. 37 of this guide).

Eighty percent of older adults with dementia present **behavioural and psychological symptoms of dementia (BPSD)**. BPSD is a term used to describe the way a person expresses their needs and presents symptoms of dementia (changes in mood, agitation, wandering, calling out, repetitive questioning, etc.)¹⁰ RNAO uses the term BPSD because of its widespread use. Some people feel that the term BPSD is too medical. However, the term BPSD is used to provide an alternative to negative labels (e.g. aggression). It focuses on the person's symptoms as a result of the disease and unmet needs. Other terms that have been used to describe these symptoms are: **responsive behaviours, expressive behaviours, needs-driven behaviours, behavioural and emotional symptoms**. More information regarding the use of the term "BPSD" can be found in the BPG, on page 7.

Facilitator Tip: Language is powerful. Use terminology that is appropriate for the specific long-term care setting. Be thoughtful of your choice of words used to describe a person with dementia. Emphasize that whichever term is used, it should focus on behaviours as a result of the disease and unmet needs.

Depression

Depression is a complex mood disorder that presents with negative changes in emotion, thinking, behaviour, and physical health.¹¹ It has a large impact on quality of life and in extreme cases, can lead to death by suicide.¹²

Depression can be a reaction to events that are common in older adults (e.g. losing a loved one, developing an illness, being admitted to long-term care¹³). Approximately 35 percent of people living in long-term care have depression.¹⁴ Although depression is common in older adults, it is not a normal part of aging.¹⁵

Treatments for depression are available. Recovery is more likely when the depression is quickly identified and the person receives adequate support during treatments. Unfortunately, depression often goes unrecognized by health-care providers.¹⁶ Health-care providers must know signs, symptoms, and risk factors of depression. The BPG's *Table 4: Risk Factors and Signs of Depression* (pg. 38 of this guide) is a useful resource.

Why is it important to differentiate delirium, dementia, and depression?

Delirium, dementia, and depression are related in different ways. It is important for health-care providers to be aware of these relationships.

¹⁰ Moniz Cook et al., 2012

¹¹ American Medical Directors Association, 2011

¹² O'Connor et al., 2009; Samad et al., 2011

¹³ O'Connor, Whitlock, Gaynes, & Beil, 2009

¹⁴ American Medical Directors Association, 2011

¹⁵ Trangle et al., 2016

¹⁶ O'Connor et al., 2009

Although these three conditions are different, **they can occur at the same time.**¹⁷ For example, a person who has delirium may also have underlying dementia and depression, or a person with dementia may also be depressed with an underlying delirium. Depression is also a common symptom of dementia.¹⁸

Another relationship between the three conditions is that **they share common features with overlapping symptoms.**¹⁹ For example, hypoactive delirium can be mistaken for depression. Hyperactive delirium can be mistaken for BPSD. Dementia can be mistaken for depression, or depression can be mistaken for dementia.

Having one of the three conditions can increase the risk of a person developing one of the other conditions. For example, delirium can increase a person's risk of developing dementia.²⁰ One condition can also complicate another existing condition. For example, delirium may worsen the progression of an existing dementia.²¹ As well, **a condition can be a result of another condition.** For example, depression can contribute to some behavioural symptoms in a person with dementia.²²

Health-care providers must be able to differentiate the three conditions in order to refer to appropriate clinicians, teams, or services for further assessment and diagnosis. A useful tool to differentiate the conditions is the BPG's *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide). A list of screening and assessment tools identified during the development of the BPG can be found in the BPG's *Appendix H: Screening and Assessment Tools* (pg. 40 of this guide).

Facilitator Tip: The facilitator should be aware of any tools used by their specific long-term care setting. The RNAO does not endorse specific screening and assessment tools but recommends that organizations determine which screening and assessment tools should be used in their clinical setting. See the BPG's *Appendix H: Screening and Assessment Tools* (pg. 40 of this guide) for descriptions of various screening and assessment tools. It is important to use a tool that is appropriate for the setting and suitable for the health care provider's scope of practice.

¹⁷ Regan & Varanelli, 2013

¹⁸ Brodaty & Arasaratnam, 2012; Enmarker, Olsen, & Hellzen, 2011; Ueda, Suzukamo, Sato, & Izumi, 2013

¹⁹ Development Group of the Clinical Practice Guideline on the Comprehensive Care of People with Alzheimer's Disease and Other Dementias, 2010; RNAO, 2010b

²⁰ Hshieh et al., 2015; Khan et al., 2012; National Institute for Health and Care Excellence, 2010

²¹ Clegg, Siddiqi, Heaven, young, & Holt, 2014

²² Enmaker et al., 2011

Section A: Questions about Differentiating Delirium, Dementia, and Depression

Aims:

- Help long-term care staff identify the differences between delirium, dementia, and depression
- Help long-term care staff become familiar with key resources that they can use at the point-of-care to support identification of delirium, dementia, and depression
- Help long-term care staff understand what they can do when they suspect delirium, dementia, or depression

Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition BPG
Recommendations to consider for Section A:

Recommendation 1.1: Establish therapeutic relationships and provide culturally sensitive person- and family-centred care when caring for and providing education to people with delirium, dementia, and depression and their families and care partners.

Recommendation 1.2: Identify and differentiate among signs and symptoms of delirium, dementia, and/or depression during assessments, observations, and interactions with older persons, paying close attention to concerns about changes expressed by the person, his/her family/care partners, and the interprofessional team.

Recommendation 1.3: Refer older adults suspected of delirium, dementia, and/or depression to the appropriate clinicians, teams, or services for further assessment, diagnosis, and/or follow-up care.

Suggested approach:

Review the three conditions with the participants (refer to Discussion Guide’s *Background on Delirium, Dementia, and Depression*). Read the Case Study with the participants. Either allow time for participants to read, or the facilitator can read out-loud as participants follow along. Have participants highlight or note Mr. Y’s significant changes in his second week in long-term care. The questions listed here are suggestions to initiate and prompt the discussion. This set of questions will focus signs and symptoms that Mr. Y presents throughout the Case Study. Participants are not in the role to diagnose, but to be able to identify significant changes and differentiate the three conditions.

The following are resources from the BPG that are recommended handouts for the participants:

- *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide)
- *Table 1: Changes That May Indicate Delirium* (pg. 33 of this guide)
- *Table 4: Risk Factors and Signs of Depression* (pg. 38 of this guide)

Facilitator Tip: After reading the Case Study (Appendix A on pg. 24 of this guide), ask participants to share the changes they noted and whether it is a sign or symptom of either the three conditions, or an overlap of the conditions. The facilitator may use an enlarged Venn Diagram (see Appendix C on pg. 30 of this guide) and have participants write a significant change they see in Mr. Y during his second week in long-term care on a sticky note, and identify where they think it belongs by placing it on the Venn Diagram. If a Venn Diagram is not feasible, the facilitator may ask participants to list their stickers under similar titled categories along the wall or on the table. The activity and results can be discussed.

Encourage participants to relate the Case Study to their own experiences when caring for older adults in long-term care. The facilitator may refer to a specific case in the current long-term care setting for participants to further relate to. This should be carried out while maintaining confidentiality and respecting residents' rights around privacy.

Suggested discussion questions:

1. Based on Mr. Y's first two weeks in long-term care, what are your initial thoughts about what might be happening with him?

Possible answers:

- He is becoming depressed.
- His dementia is worsening.
- He is developing delirium.

Facilitator Tip: Explore participants' answers and reasoning. Refer to *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide), and where Mr. Y's signs and symptoms align in the comparison chart. Mr. Y has dementia, and he appears to be developing delirium (see suggested discussion question 8).

2. What are some of the significant changes you are seeing in Mr. Y? Prompt: Compare his behaviours from when he was still at home before long-term care, his first week in long-term care, and his second week in long-term care.

Possible answers:

- During his first week in long-term care: wandering, asking repetitive questions, requiring lots of reminders and reorientation, not eating a lot, kicking, scratching, grabbing, raising voice at staff
- During his second week in long-term care:
 - During the day: napping, not easy to arouse, disoriented, slow movements, withdrawal, unfocused, inattentive, not eating or drinking, falling asleep during exercise/social programs
 - During the night: sleep disturbance, hallucinations, increasing disorientation

3. Looking at Table 1: Changes That May Indicate Delirium (pg. 33 of this guide), do you see any of these changes in Mr. Y?

Possible answers:

- Cognitive function changes: decreased concentration, slow responses, memory impairment, disorientation, reduced level of consciousness, shifting attention
- Perception change: visual/auditory hallucinations

- Physical function changes: reduced mobility, reduced movement, motor restlessness, agitation, changes in appetite, sleep disturbance
- Social behaviour changes: lack of cooperation with reasonable request, withdrawal, alterations in communication

4. Looking at *Table 4: Risk Factors and Signs of Depression* (pg. 38 of this guide), do you think Mr. Y may be showing signs and symptoms of depression?

Possible answers:

- Yes, sleep disorder, interest deficit, energy deficit, concentration deficit, decreased appetite

5. Is Mr. Y presenting behavioural and psychological symptoms of dementia (BPSD)?

Possible answers:

- Delusions at nighttime
- Apathy, lack of interest during meals, social and exercise programs
- Agitation during personal care events
- Wandering
- Repetitive questioning

Facilitator Tip: Challenge the participants to see the common signs and symptoms of the three conditions and to use *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide) to investigate which condition is likely.

6. Would you consider this a quick or gradual onset?

Possible answers:

- Quick onset. He has changed a lot in the two weeks he has been in long-term care.

7. What would be an immediate care intervention for Mr. Y?

Possible answers:

- Refer to the appropriate health-care provider for further assessment, diagnosis, and care
- Meet Mr. Y's immediate needs to make him comfortable

Facilitator Tip: Remind participants of the importance of monitoring, reporting of observations, and accurate documentation. Emphasize the important role of personal support workers as they are the front-line staff working closely with the long-term care residents. Their observations and documentation are very important when identifying changes related to delirium, dementia, and depression.

8. Mr. Y appears to have delirium. Do you think the delirium symptoms could be mistaken for either depression or dementia?

Possible answers:

- His hyperactive delirium states can resemble BPSD
- His hypoactive delirium states can resemble depression

Facilitator Tip: The facilitator should be aware of any tools used by their specific long-term care setting. The RNAO does not endorse specific screening and assessment tools but recommends that organizations determine which screening and assessment tools should be used in their clinical setting. See the BPG's *Appendix H: Screening and Assessment Tools* (pg. 40 of this guide) for descriptions of various screening and assessment tools. It is important to use a tool that is appropriate for the setting and suitable for the health care provider's scope of practice.

Key points:

- Acknowledge that it is a challenge to differentiate the three conditions because of overlapping clinical features
- Emphasize the importance of being able to identify significant changes
- Emphasize the importance of paying close attention to people that know the person well who say they have noticed a change

Section B: Questions about Delirium and Care Strategies

Aims:

- Help long-term care staff identify risk factors of delirium
- Help long-term care staff identify interventions to prevent and treat delirium
- Help long-term care staff become familiar with key resources they can use at the point-of-care to support assessment and care of older adults with delirium

Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition BPG
Recommendations to consider for Section B:

Recommendation 2.1: Assess older adults for delirium risk factors on initial contact and if there is a change in the person's condition.

Recommendation 3.1: Develop a tailored, non-pharmacological, multi-component delirium prevention plan for persons at risk for delirium in collaboration with the person, his/her family/care partners, and the interprofessional team.

Recommendation 4.1: Implement the delirium prevention plan in collaboration with the person, his/her family/care partners, and the interprofessional team.

Recommendation 4.4: For older adults whose assessments indicate delirium, identify the underlying causes and contributing factors using clinical assessments and collaboration with the interprofessional team.

Recommendation 4.5: Implement tailored, multi-component interventions to actively manage the person's delirium, in collaboration with the person, the person's family/care partners, and the interprofessional team. These interventions should include: treatment of the underlying causes, non-pharmacological interventions, appropriate use of medications to alleviate the symptoms of delirium, and/or manage pain.

Suggested approach:

Read the Case Study with the participants. Either allow time for participants to read, or the facilitator can read out-loud as participants follow along. Have participants highlight or note Mr. Y's significant changes that they think may indicate delirium. As well, participants should look out for possible risk factors for delirium while reading the Case Study. The questions listed here are suggestions to initiate and prompt the discussion. This set of questions will focus on Mr. Y's delirium, his risk factors, and care strategies to prevent and address delirium. It is recommended that the BPG's *Flow Chart For Delirium* is used as a framework for the learning session.

The following are resources from the BPG that are recommended handouts for participants:

- *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide)

- *Table 1: Changes That May Indicate Delirium* (pg. 33 of this guide)
- *Appendix G: Delirium Risk Factors and Interventions* (pg. 31 of this guide)

Facilitator Tip: Use the participants' answers to direct the discussion. Encourage them to relate the Case Study to their own experiences when caring for older adults in long-term care with risk of delirium or active delirium. The facilitator may refer to a specific case in the current long-term care setting for participants to further relate to. This should be carried out while maintaining confidentiality and respecting residents' rights around privacy.

Suggested discussion questions:

1. There are 3 main types of delirium (see Discussion Guide's *Background on Delirium, Dementia, and Depression*). Which kind of delirium do you think Mr. Y is most likely presenting with? Explain.

Possible answers:

- It is most likely mixed delirium because he has alternating hyperactive and hypoactive delirium symptoms. At night, he is wandering, restless, agitation, has delusions. During the day, he is sleepy, has slowed movements and responses, and displays disinterested behaviour

2. Why do you think Mr. Y is experiencing delirium? Looking at *Appendix G: Delirium Risk Factors and Interventions* (pg. 31 of this guide), what are Mr. Y's risk factors?

Possible answers:

- His advanced age is a risk factor for delirium
- Cognitive impairment, dementia, disorientation
- Sensory deprivation, isolation
- Sensory impairment
- Dehydration and/or constipation
- Poor nutrition
- Inadequately controlled pain
- Sleep deprivation or disturbance

3. What other risk factors do you think are common in long-term care?

Possible answers:

- Infection, fever
- Presence of urinary catheter
- Electrolyte abnormalities
- Anemia
- Hypoxia
- Immobilization or limited mobility (use of restraints, prolonged bed rest or sedation)
- Poor functional status/functional impairment
- Polypharmacy and use of high-risk medications (e.g. psychoactive medications, sedative-hypnotics, benzodiazepines, anticholinergics, antihistamines, meperidine)

4. When a resident is identified as being at risk for delirium, we develop a tailored delirium prevention plan that targets their risk factors and includes a range of non-pharmacological strategies. What are some strategies we can do in long-term care to prevent delirium?

Possible answers:

- Provide therapeutic and stimulating activities that meets their preferences
- Provide orientation verbally and with environmental aids (e.g. signage, clock, calendar)
- Ensuring their hearing and vision is not impaired (use appropriate aids)
- Look for and treat infection
- Ensure proper nutrition
- Assess for and treat pain
- Promote high-quality sleep
- Talk to the prescribing practitioner about whether or not the number of medications can be reduced or if high-risk medications can be altered or discontinued (e.g. psychoactive medications, sedatives, etc.)

5. What care strategies might be useful specifically for Mr. Y, who appears to have active delirium? How can we tailor these strategies to Mr. Y's needs and preferences?

Possible answers:

- Notify the physician or nurse practitioner immediately
- Help with the assessment to try to figure out what is contributing to the delirium, and address the possible causes:
 - To address disorientation: ensure his orientation through clear communication, environmental aids, that he has adequate hearing and vision
 - To address sensory deprivation, isolation: provide therapeutic and stimulating activities
 - To address sensory impairment: ensure his vision and hearing is assessed and optimize function by providing glasses, adequate lighting, etc.
 - To address dehydration and/or constipation: provide favourite drinks, reassess diet if applicable
 - To address poor nutrition: provide favourite foods, reassess diet to optimize nutrients, consider dining atmosphere
 - To address inadequately controlled pain: ensure pain is regularly assessed and effectively managed
 - To address sleep deprivation or disturbance: promote high quality sleep with a routine, calming atmosphere
- Delirium can be scary, educating the family about delirium can decrease fears and increase understanding
- Involving the family in tailoring care strategies to Mr. Y's preferences

6. Who, in long-term care, can be involved in preventing delirium and caring for a person with delirium? What can they do?

Possible answers:

- Registered Practical Nurse and Registered Nurse: assessing for delirium and underlying causes; pain assessment; collaborating with health-care team and family to develop a prevention care plan and initiate interventions; educate family
- Personal Support Worker: reporting changes; use of effective communication skills; accurate monitoring and reporting of nutrition, hydration, bladder/bowel function
- Family: visit often; assist with meals; collaborate with health-care team to inform them of Mr. Y's preferences

- Nurse Practitioner/Physician: ordering tests and/or medications to address the causes of Mr. Y's delirium; review and revise medications
- Recreational Therapist and Recreational Assistants: therapeutic and cognitively stimulating activities that are person-centred
- Physiotherapist and Physiotherapy Assistants: encourage mobilization through exercises; assessing for pain
- Occupational Therapist: assess for functional ability; assess for appropriate mobility aids
- Registered Dietitian: assess the diet to ensure optimal nutrition; assess Mr. Y's functional ability to eat (e.g. texture order)
- Dietary staff: provide favourite foods
- Pharmacist: review medications; address polypharmacy and reduce high-risk medications
- Housekeeping: maintain consistent and clean environment
- Management: ensure resources are available

Facilitator Tip: The facilitator can prepare a flip chart with different long-term care team member roles labeled. Ask participants to brainstorm how each role can contribute to Mr. Y's plan of care. Note the importance of communication across long-term care health teams, sharing how their own role can contribute to a resident's care, and learning about how other roles can help too.

Key Points:

- Alert that **delirium is a medical emergency** and needs to be assessed and referred for treatment immediately
- Prevention is the key
- Promote person-centred care when developing a tailored, non-pharmacological delirium prevention plan
- Preventing and managing delirium requires collaboration among the team
- Health-care providers should provide reassurance and educate the family

Section C: Questions about Dementia and Care Strategies

Aims:

- Help long-term care staff understand behavioural and psychological symptoms of dementia (BPSD) as expressions of unmet needs
- Help long-term care staff explore underlying causes of BPSD
- Help long-term care staff identify care strategies and communication techniques to optimize quality of life for older adults with dementia
- Help long-term care staff become familiar with key resources that they can use at the point-of-care to support assessment and care of older adults with dementia

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Recommendations to consider for Section C:

Recommendation 6.3: Systematically explore the underlying causes of any behavioural and psychological symptoms of dementia that are present, including identifying the person’s unmet needs and potential “triggers.” Use an appropriate tool and collaborate with the person, his/her family/care partners, and the interprofessional team.

Recommendation 7.1: Develop an individualized plan of care that addresses the behavioural and psychological symptoms of dementia (BPSD) and/or the person’s personal care needs. Incorporate a range of non-pharmacological approaches, selected according to: the person’s preferences; the assessment of the BPSD; the stage of the dementia; the person’s needs during personal care and bathing; consultations with the person’s family/care partners and the interprofessional team; and ongoing observations of the person.

Recommendation 8.2: Monitor older adults with dementia for pain, and implement pain-reduction measures to help measure behavioural and psychological symptoms of dementia.

Recommendation 8.3: Employ communication strategies and techniques that demonstrate compassion, validate emotions, support dignity, and promote comprehension when caring for people with dementia.

Recommendation 8.4: Promote strategies for people living with dementia that will preserve their abilities and optimize their quality of life, including but not limited to: exercise; interventions that support cognitive function; advanced care planning; other strategies to support living well with dementia.

Suggested approach:

Read the Case Study with the participants. Either allow time for participants to read, or the facilitator can read out-loud as participants follow along. Have participants highlight or note Mr. Y’s BPSD. As well,

participants should look out for underlying causes of BPSD while reading the Case Study. The questions listed here are suggestions to initiate and prompt the discussion. This set of questions will focus on exploring underlying causes of BPSD, and strategies to enhance quality of life for the older adult with dementia. It is recommended that the BPG's *Flow Chart For Dementia* is used as a framework for the learning session.

The following are resources from the BPG that are recommended handouts for participants:

- *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide)
- *Table 2: Non-pharmacological Approaches to Management of the Behavioural and Psychological Symptoms of Dementia (BPSD)* (pg. 50 of this guide)
- *Appendix K: Attitudes, Skills, and Knowledge That Are Beneficial for Communication in Dementia Care* (pg. 51 of this guide)

Facilitator Tip: Use the participants' answers to direct the discussion. Encourage them to relate the Case Study to their own experiences when caring for older adults in long-term care with dementia and/or exhibiting BPSD. The facilitator may refer to a specific case in the current long-term care setting for participants to further relate to. This should be carried out while maintaining confidentiality and respecting residents' rights around privacy.

Suggested discussion questions:

1. Behavioural and psychological symptoms of dementia (BPSD) is a term used to describe the way a person with dementia expresses their unmet needs and presents symptoms of dementia. It is important to explore what is going on for the person. Looking at Mr. Y's first week in long-term care,

a. He is wandering a lot, and staff has to re-orient him many times. What do you think is happening and why might he be reacting this way?

Possible answers:

- Not familiar with his new environment
- Change in schedule and routine
- Looking for his first home
- Looking for his wife
- Looking for a washroom
- His wife kept provided cues and orientation often when he was at home, staff may not have the time to provide the same level of attention
- Bored

b. During Mr. Y's personal care, what might be happening for him and why might he be reacting this way?

Possible answers:

- Mr. Y does not know what is being done to him if staff are not prompting him
- Mr. Y does not recognize the staff because he is used to his wife providing him with care
- Invasion of personal space
- Uncomfortable water or room temperature
- Staff are rushed or focused only on the task rather than on Mr. Y

2. What other things can you do to explore underlying causes of a person’s BPSD?

Possible answers:

- Collaborate with other health-care providers (e.g. PSWs and nurses sharing knowledge together about a resident’s patterns of BPSD and “triggers”)
- Use tools developed to assess and monitor BPSD, and to observe and document trends (e.g. Dementia Observational System (DOS) Tool)
- Discuss with his wife or other family members to get their insight

3. A range of non-pharmacological approaches to care have been found to be effective at managing BPSD. But not all approaches are effective or appropriate for everyone. It is important to tailor a care plan to meet the person’s needs and preferences. What non-pharmacological approaches have you used to manage BPSD? Would you want to use these for Mr. Y?

Possible answers:

- Music therapy
- Effective communication strategies
- Person-centred approaches to care
- Sensory interventions
- Group activities
- Art therapies

Facilitator Tip: The facilitator may refer to the BPG’s *Table 2: Non-pharmacological Approaches to Management of the Behavioural and Psychological Symptoms of Dementia (BPSD)* (pg. 50 of this guide).

4. Caring for people with dementia requires effective communication skills. Look at *Appendix K: Attitudes, Skills, and Knowledge That Are Beneficial for Communication in Dementia Care* (pg. 51 of this guide), which strategies might work for Mr. Y? What are some communication strategies that have worked for you in the past?

Possible answers:

- Verbal: identify personal communication styles and preferences, using the person’s name, speaking slowly and clearly, using simple sentences, asking yes/no questions, using one-step instructions, use emotional tone, use positive statements, avoid arguing, accept different perceptions of time and reality, etc.
- Non-verbal: make eye contact, use calm approach, recognize small behavioural changes as attempts to communicate, give enough time, listen actively, etc.

5. There are several strategies to preserve Mr. Y’s abilities and promote living well with dementia.

a. What are some activities that long-term care staff can offer that you think Mr. Y will enjoy? Prompt: Think of what he liked to do at home.

Possible answers:

- Crafts
- Flower arrangements
- Gardening
- Baking
- Exercises
- Music

b. How can we promote Mr. Y's social life?

Possible answers:

- Group social events
- Group exercise
- Encourage family to visit
- Encourage phone calls to family

c. It is important to promote a healthy lifestyle. How can we support Mr. Y's nutrition?

Possible answers:

- Provide favourite foods and drinks
- Encourage family to visit during meal-times
- Encourage family to bring in homemade meals
- Make meal-time more enjoyable

d. How can we improve his quality of sleep?

Possible answers:

- Consistent nighttime routine and schedule
- Reduce noise and light to a minimum during sleeping hours

e. Are there any issues surrounding Mr. Y's safety? What can we do to make the environment safer?

Possible answers:

- Avoid use of restraints
- Close monitoring
- Ensure environment is clear of clutter
- Adequate lighting

Key Points:

- Emphasize the need to explore underlying causes of BPSD.
- Promote collaboration among long-term care health teams.
- Develop individualized plan of care to address BPSD and personal care needs.
- Promote strategies to preserve abilities and optimize quality of life for older adults with dementia.

Section D: Questions about Depression and Care Strategies

Aims:

- Help long-term care staff identify risk factors of depression
- Help long-term care staff identify signs and symptoms of depression
- Help long-term care staff become familiar with key resources that they can use at the point-of-care to support identification of depression

Delirium, Dementia, and Depression in Older Adults: Assessment and Care, Second Edition BPG
Recommendations to consider for Section D:

Recommendation 10.1: Assess for depression during assessments and ongoing observations when risk factors or signs and symptoms of depression are present. Use validated, context-specific screening or assessment tools, and collaborate with the older adult, his/her family/care partners, and the interprofessional team.

Recommendation 10.3: Refer older adults suspected of depression for an in-depth assessment by a qualified health-care professional. Seek urgent medical attention for those at risk for suicide and ensure their immediate safety.

Recommendation 11.1: Develop an individualized plan of care for older adults with depression using a collaborative approach. Where applicable, consider the impact of co-morbid dementia.

Recommendation 12.1: Administer evidence-based pharmacological and/or non-pharmacological therapeutic interventions for depression that are tailored to the person's clinical profile and preferences.

Suggested approach:

Read the Case Study with the participants. Either allow time for participants to read, or the facilitator can read out-loud as participants follow along. Have participants look out for possible risk factors for depression while reading the Case Study. The questions listed here are suggestions to initiate and prompt the discussion. This set of questions will focus on Mr. Y's depression risk factors, and possible non-pharmacological interventions for depression. It is recommended that the BPG's *Flow Chart For Depression* is used as a framework for the learning session.

The following are resources from the BPG that are recommended handouts for the participants:

- *Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression* (pg. 39 of this guide)
- *Table 4: Risk Factors and Signs of Depression* (pg. 38 of this guide)
- *Table 5: Interventions for Depression* (pg. 54 of this guide)

Facilitator Tip: Use the participants' answers to direct the discussion. Encourage them to relate the Case Study to their own experiences when caring for older adults in long-term care. The facilitator may refer to a specific case in the current long-term care setting for participants to further relate to. This should be carried out while maintaining confidentiality and respecting residents' rights around privacy.

Suggestion discussion questions:

1. Is Mr. Y at risk for depression? Explain.

Possible answers:

- Yes, he has just moved into long-term care which is a risk factor for depression
- His family is no longer near-by
- He may feel socially isolated (risk factor)
- He has dementia (risk factor)

2. What are other possible risk factors of depression?

Possible answers:

- Stressful losses (loss of body part, functional status, autonomy)
- Medical diagnosis or diagnoses associated with a high risk of depression
- Chronic physical health problem with associated functional impairment
- Use of a medication associated with high risk of depression
- Alcohol or substance misuse
- Personal or family history of depression or mood disorder
- History of attempted suicide or psychiatric hospitalization
- Domestic abuse or violence
- Bereavement
- Financial difficulties

3. Older adults with depression may not directly say "I am depressed". Some terms or phrases that people may say include "nerves," "feeling blue," and "low spirits". They may have other signs and symptoms and not talk about mood or feelings at all. What are some possible signs and symptoms of depression that we should be looking out for?

Possible answers:

- Sleep disorder (increased or decreased)
- Interest deficit (anhedonia)
- Guilt (worthlessness, hopelessness, regret)
- Energy deficit
- Concentration deficit
- Appetite disorder (increased or decreased)
- Psychomotor retardation or agitation
- Suicidality
- Chronic pain
- Constipation
- Musculoskeletal disorders

Facilitator Tip: Refer to the BPG's *Table 4: Risk Factors and Signs of Depression* (pg. 38 of this guide). The commonly used mnemonic, SIGECAPS, can be used to remember the signs and symptoms of depression in older adults.

Note that a person's cultural, ethnic, and religious background can also affect the way they express and understand depression. Consider referring participants to the RNAO's *Embracing Cultural Diversity in Health Care: Developing Cultural Competency* BPG that focuses on promoting a healthy work environment through culturally competent practices. Recommendations are made for health-care providers to learn to embrace diversity through self-awareness, develop communication skills that promote culturally diverse settings, and to attain cultural competence through new learning.

4. There are several evidence-based strategies to use. Look at *Table 5: Interventions for Depression* (pg. 54 of this guide), what are some interventions we can use in our setting?

Possible answers:

- Exercise
- Favourite activities
- Music therapy
- Group activities
- Reminiscence if facilitated by a trained practitioner
- Animal therapy (there is insufficient evidence to recommend animal therapy, but it may have beneficial effects on severity of depressive symptoms in older adults living in long-term care)
- Antidepressants might be used for severe or persistent depression (although it is unclear how effective they are for people with dementia as well)

Key Points:

- Depression is common in older adults, but it is not a normal part of aging
- Depression is often under-diagnosed, so health-care providers should be vigilant for risk factors, signs, and symptoms of depression
- A person's cultural, ethnic, and religious background can also affect the way they express and understand depression
- If a person is suspected of having depression, refer them to a qualified health-care provider for assessment and care
- Any signs of suicidal thoughts/actions need to be addressed immediately
- Therapeutic relationships built on trust are essential when assessing and caring for older adults with depression
- Health-care providers should develop an individualized plan of care with tailored interventions

Appendix A

Case Study – Mr. Y’s Story

Mr. Y is a 78 year old man who was born in Korea and moved to Canada with his wife 50 years ago. Together, the couple opened a floral shop and ran the business for 40 years. Mrs. Y enjoyed watching her husband’s talent and love of nature come out in his flower arrangements.

When Mr. Y was in his late 60’s, he starting having difficulty making his favourite flower arrangements. Their son also noticed Mr. Y misplacing tools, losing paper orders, and forgetting important pick-up times. At home, Mrs. Y noticed her husband having problems remembering recent events, and waking up at odd hours in the night thinking it was time to open the shop. Mr. Y was becoming irritable at home and at the shop.

When Mr. Y was 70 years old, the family decided to sell the business. Their health-care providers confirmed that Mr. Y was presenting with early stage Alzheimer’s disease. The family then decided that Mrs. Y would be appointed as her husband’s Power of Attorney for personal care and property. She continued to care for her husband at home.

When Mr. Y turned 75 years old, he was having increased difficulty remembering where things were in the house. He often woke his wife at odd hours of the night thinking it was time to get up and ready. When Mrs. Y reoriented her husband that it was still night-time, he would get confused and easily upset. Mr. Y was also becoming more physically weak, but did not perceive his limitations. He was having frequent falls at home. A few times, Mr. Y had become lost outside of their home, forgetting where he had to go and which house was his.

Their son recognized that his mother was not as happy as she used to be. She was constantly worrying about her husband’s increasing care needs, and could not enjoy activities she used to do. She was stressed and was not sleeping properly. With support from their health-care providers, the family decided that a long-term care setting would benefit Mr. Y and Mrs. Y’s well-being.

Admission to long-term care

At the admission conference, the long term care home’s social worker and charge nurse met Mr. Y and his family, and learned more about his history and preferences. His medical diagnosis includes moderate Alzheimer’s disease and osteoarthritis, with a history of urinary tract infections. Mr. Y hears well, uses

reading glasses, and wears upper and lower dentures. Mr. Y also requires reminders to use his walker properly. Mrs. Y always prompted her husband for toileting, as well as when to eat and take medications. Mr. Y requires limited assistance from his wife during activities of daily living, such as dressing or transfers. As for his preferences, Mr. Y loves homemade Korean food, pastries, and warm drinks. He had always enjoyed baths in the evenings.

Mr. Y's first week

During the first week in LTC, the staff noticed Mr. Y pacing the hallways, pushing on locked doors, entering other residents' rooms. When approached by the nursing staff, he had repetitive questions: "Who are you?", "What do I do?", "Where do I go?" Mr. Y required frequent reminders that this was his new home. During meals, Mr. Y ate little despite encouragement and staff offering assistance. During personal care such as changing, toileting and showering, Mr. Y kicked, scratched, grabbed and screamed at the PSWs. Two staff were required during these care activities.

Socially, Mr. Y actively participated in group craft activities and exercise classes when the therapists and staff coached him. During the times with no scheduled activities, Mr. Y paced the hallways and asked staff: "What do I do?", "Where do I go?"

Mr. Y's second week

At the end of the second week in LTC, Mr. Y was no longer pacing the halls. He was often found napping in his room during the days. One afternoon, a PSW went into Mr. Y's room and found him sleeping. She tried to gently wake Mr. Y, but he was not easy to arouse. She tried a second time and asked very loudly, "Mr. Y, it's lunch time, are you ready to go?" Mr. Y slowly opened his eyes. The PSW repeated her question, and Mr. Y replied slowly, "Oh, I ate last week." The PSW then asked, "I know you had breakfast this morning, now it's lunch time. Are you hungry?" Mr. Y paused and closed his eyes. The PSW gently woke him again by rubbing his arm and repeated her question. Mr. Y slowly replied, "Yes, my wife is cooking, I will eat". Together, they walked slowly to the dining room.

In the dining room, Mr. Y stared out the window and did not answer the PSWs when they asked him for his lunch preference. When approached a third time, Mr. Y rambled slowly in English and in Korean to the PSWs. He continued to speak Korean to the PSWs as they tried to assist him with his lunch, but he was unfocused and inattentive. He was unable to finish his meal because of his behaviour. The staff were worried that he was not eating or drinking enough since admission.

When there were group activities, the therapists found it harder to encourage Mr. Y to attend and participate like he had been doing before. It took a lot of encouragement and assistance to have him attend. During the activity, he did not participate or sometimes fell asleep in the middle of the exercise or social program.

A few nights in a row, he was found wandering outside his bedroom without his walker. One time, he told the PSW, "Someone is looking for me." The PSW reassured him that he is safe, and tried to direct him back to his room. But Mr. Y walked past the PSW and said, "I have to go to the bus stop." After a few attempts, the PSW was able to direct Mr. Y to his room to sleep, and reoriented him to the use of the call bell. This behaviour continued with increasing disorientation. The sleep disturbances resulted in Mr. Y being too drowsy in the mornings, and not able to eat any breakfast.

Although Mrs. Y was kept informed of her husband's condition since admission to long-term care, it was not until her first visit during Mr. Y's third week in long-term care when she realized how much her husband had changed. She was alarmed and asked the staff, "What is happening? What will be done for him? How can I help?"

Appendix B

Case Study – Mr. Y’s Story (Facilitator’s Version)

Mr. Y is a 78 year old man who was born in Korea and moved to Canada with his wife 50 years ago. Together, the couple opened a floral shop and ran the business for 40 years. Mrs. Y enjoyed watching her husband’s talent and love of nature come out in his flower arrangements.

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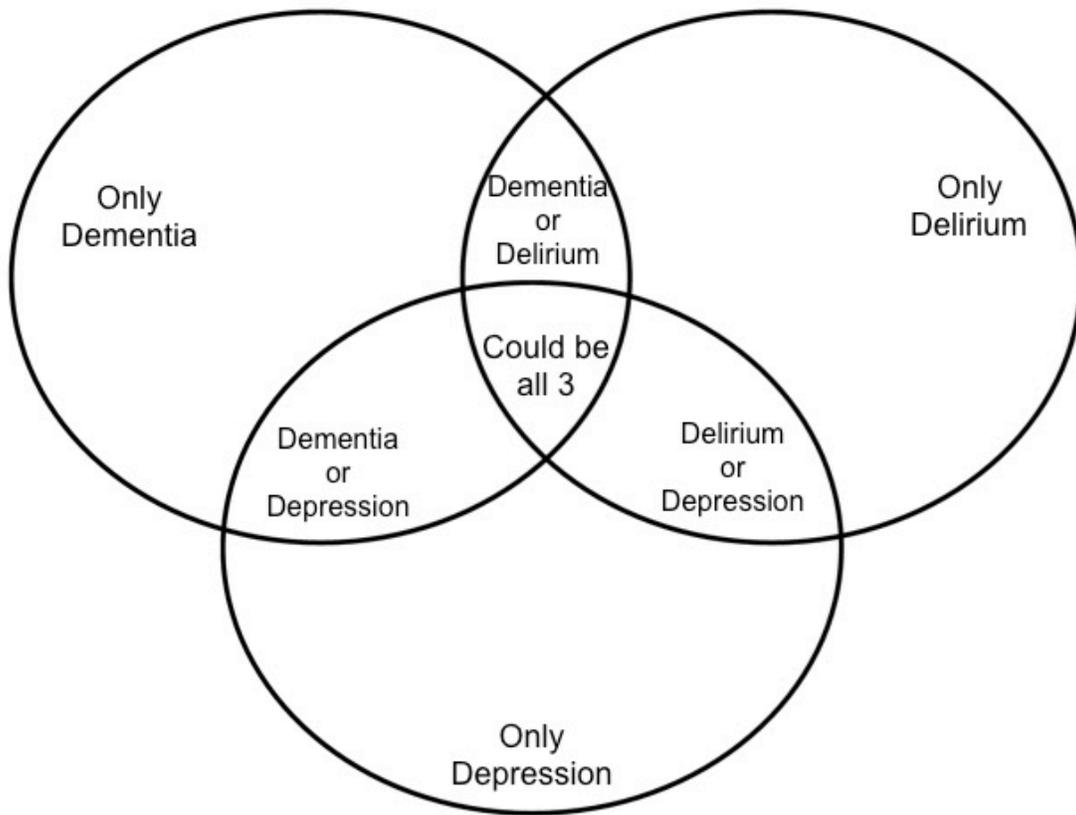
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Appendix C



Appendix G : Delirium Risk Factors and Interventions

The literature and clinical guidelines list various predisposing and precipitating risk factors for delirium.

Bolded text indicates factors of particularly high risk. Health-care providers can apply a variety of preventative interventions tailored to the specific precipitating risk factors. In the second table, examples of specific interventions outlined in the literature are listed alongside the related risk factors. This list is not exhaustive, but includes the risk factors and interventions most frequently cited in the literature. Some risk factors and interventions are more relevant to certain health-care sectors than others.

RISK FACTORS	
Note: see below for risk factors with associated interventions	
Advanced age (older than 65 or 70)	
Alcohol use/abuse	
Depression	
Extensive surgery that causes greater-than-usual physiological stress (e.g., more extensive blood loss, length of operation, or extent of dissection) (e.g., cardiac surgery)	
Hip Fracture	
Previous delirium	
Severe illness or co-morbidity burden	

RISK FACTORS AND INTERVENTIONS	
<i>Risk Factor</i>	<i>Sample Intervention</i>
Cognitive impairment, dementia, disorientation	Cognitive orientation/re-orientation
	Environmental aids: <ul style="list-style-type: none"> ■ adequate lighting ■ clear signage ■ clock ■ calendar
	Avoid unnecessary room changes
	Use clear communication
Sensory deprivation, isolation	Therapeutic or cognitively stimulating activities: <ul style="list-style-type: none"> ■ personally valued activities and familiar background stimulation ■ reminiscence^G ■ family/friend visits Note: avoid unnecessary isolation, sensory deprivation, and sensory overload
Sensory impairment (e.g., hearing or vision impairment)	Optimize sensory function by: <ul style="list-style-type: none"> ■ ensuring hearing and visual aids are available and working ■ ensuring adequate lighting ■ resolving reversible causes of impairment (e.g., impacted ear wax)
Infection, fever	Look for and treat infection

Table continues on next page.

RISK FACTORS AND INTERVENTIONS	
<i>Risk Factor</i>	<i>Sample Intervention</i>
Presence of urinary catheter	Avoid unnecessary catheterization Screen for and treat urinary tract infection Remove indwelling catheters as soon as possible Consider in-and-out catheterization over indwelling catheter
Dehydration and/or constipation	Monitor nutrition, hydration, and bladder/bowel function
Electrolyte abnormalities (hyper- or hyponatremia)	Prevent electrolyte disturbance/dehydration by: <ul style="list-style-type: none"> ■ ensuring adequate fluid intake ■ considering offering subcutaneous or intravenous fluids, if necessary ■ restoring serum sodium, potassium, and glucose levels to normal limits
Sodium and/or potassium and/or calcium abnormalities	Pay attention to those who are at increased risk for dehydration (i.e., taking diuretics, diarrhea, pneumonia, UTI, etc.)
Poor nutrition	Follow nutrition support advice Maintain adequate intake of nutrients and glucose Ensure proper fit of dentures Take time to open food packaging/set up meal tray Encourage families to be present at meal times to assist with feeding
Anemia	Identify and manage treatable causes of anemia
Hypoxia	Optimize oxygenation and monitor oxygen saturation levels
Inadequately controlled pain	Assess, monitor, and control pain
Sleep deprivation or disturbance	Promote high-quality sleep Use non-pharmacological sleep enhancement methods
	Avoid nursing or medical procedures during sleeping hours, and schedule medication rounds to avoid disturbing sleep if possible
	Reduce noise and light to a minimum during sleeping hours
Immobilization or limited mobility: <ul style="list-style-type: none"> ■ Use of restraints ■ Prolonged bed rest or sedation, immobility after surgery 	Avoid use of restraints Minimize use of medical devices (e.g., intravenous lines, catheters) that may restrict mobility or function Encourage mobilization, including: <ul style="list-style-type: none"> ■ walking (if possible) ■ getting out of bed ■ range-of-motion exercises ■ self-care activities
Poor functional status/functional impairment	Provide appropriate walking aids, if needed Encourage mobilization soon after surgery Physiotherapy and occupational therapy as needed (after surgery)
Polypharmacy and use of high-risk medications (e.g., psychoactive medications, sedative-hypnotics, benzodiazepines, anticholinergics, antihistamines, meperidine)	Carry out medication reviews for people taking multiple drugs, and modify dosage or discontinue drugs that increase the risk of delirium when possible

Sources: AGS, 2014; AMDA, 2008; Brooks, 2012; CCSMH, 2010; Clegg et al., 2014; Gage & Hogan, 2014; Holroyd-Leduc et al., 2010; Inouye et al., 2014; Khan et al., 2012; NICE, 2010.

Table 1: Changes That May Indicate Delirium

TYPE OF CHANGE	EXAMPLES
Cognitive function	<ul style="list-style-type: none">■ <i>decreased concentration</i>■ <i>slow responses</i>■ memory impairment■ disorganized thinking■ disorientation■ reduced level of consciousness■ shifting attention
Perception	<ul style="list-style-type: none">■ visual or auditory hallucinations
Physical function	<ul style="list-style-type: none">■ <i>reduced mobility</i>■ <i>reduced movement*</i>■ motor restlessness■ agitation■ <i>changes in appetite*</i>■ sleep disturbance
Social behaviour	<ul style="list-style-type: none">■ lack of cooperation with reasonable requests■ <i>withdrawal</i>■ alterations in communication, mood, and/or attitude

Note: Changes indicative of hypoactive delirium are italicized. Hypoactive delirium is particularly important because it is common but often overlooked (NICE, 2010). Examples added by the expert panel are indicated with an asterisk (*).

Source: Adapted from NICE, 2010, p. 11.

Appendix E: Types of Dementia

Dementia describes the symptoms that occur when the brain is affected by certain diseases or conditions. This table outlines some of the most common types of dementia. It is important to remember that the symptoms and progression of dementia can vary greatly among individuals.

TYPE OF DEMENTIA	DESCRIPTION
Alzheimer's disease	<ul style="list-style-type: none"> ■ Alzheimer's disease (or Alzheimer's dementia*) is the most common cause of dementia ■ Caused by "plaques" and "tangles" formed by buildup of proteins in the brain ■ Slowest progression, on average (symptoms are generally mild in the beginning and worsen over time) ■ Generally progresses through three stages: <ul style="list-style-type: none"> □ Early (mild) stage □ Middle (moderate) stage □ Late (severe) stage ■ Early-stage symptoms: <ul style="list-style-type: none"> □ Short-term memory lapses (e.g., difficulty recalling recent events and learning new information) □ Difficulties with thinking, problem-solving, orientation, and/or language □ Changes in mood (e.g., apathy, depression, irritability) ■ Middle-stage symptoms: <ul style="list-style-type: none"> □ Increased severity of memory loss, communication difficulties, reasoning problems, and orientation problems □ Decreased awareness of surroundings (may get lost*) □ Increased confusion □ Delusions and/or hallucinations may occur □ Agitation (e.g., restlessness or pacing), calling out, repetition of the same question, and/or disturbed sleep patterns may occur ■ Late-stage symptoms: <ul style="list-style-type: none"> □ Loss of memory can be very evident (including longer-term memory problems*) □ Increased physical weakness (increased risk of falls*) □ Language deterioration* and loss of speech □ Paranoia may occur* □ Restlessness and agitation may occur ■ Risk factors: <ul style="list-style-type: none"> □ Age (over 65) □ Gender (female) □ Genetic inheritance (first-degree relatives*) □ Health and lifestyle (e.g., diabetes, stroke, heart problems, high blood pressure, high cholesterol and obesity in mid-life, late-life-onset* depression) ■ On average, people with Alzheimer's disease live for eight to ten years after the first symptoms ■ Often, diagnosis is delayed; may take 2–3 years*

TYPE OF DEMENTIA	DESCRIPTION
Vascular dementia	<ul style="list-style-type: none"> ■ Caused by death of brain cells due to lack of oxygen ■ Two types: <ul style="list-style-type: none"> □ Subcortical vascular dementia: related to diseases of small blood vessels deep in the brain <ul style="list-style-type: none"> ○ usually develops gradually and progresses slowly (similar to Alzheimer’s dementia) □ Stroke-related dementia: related to/following a stroke (or several small strokes) <ul style="list-style-type: none"> ○ can follow a “stepped” progression (particularly as multiple strokes cause further damage to the brain) ■ Symptoms of vascular dementia are similar to those of Alzheimer’s disease, particularly in the later stages ■ Early signs include the following: <ul style="list-style-type: none"> □ Difficulties planning, organizing, or following steps □ Slowed thinking □ Problems concentrating □ Short periods of confusion □ Apathy, mood swings, and more emotional than usual □ Anxiety and depression □ Disinhibition and impulsivity* ■ On average, people with vascular dementia live approximately 5 years after symptoms begin
Mixed dementia	<ul style="list-style-type: none"> ■ More than one type of dementia at the same time ■ Most common combination is vascular dementia with Alzheimer’s dementia ■ Symptoms can include those from all types of dementia that are present
Dementia with Lewy bodies	<ul style="list-style-type: none"> ■ Caused by protein deposits in the brain (presence of Lewy bodies*), which cause damage and death to nerve cells ■ Memory problems develop slowly and progress gradually (similar to Alzheimer’s disease); however, mobility problems usually progress quickly* ■ Symptoms: <ul style="list-style-type: none"> □ Varied attention and alertness (from day-to-day or at different times of day; fluctuations may mimic delirium*) □ Recurrent* visual hallucinations, misperceptions, and/or auditory hallucinations □ Movement problems (similar to those in Parkinson’s disease, which is also caused by Lewy bodies) □ Problems with depth perception and balance; syncope and increased risk of falling □ Severe neuroleptic sensitivities with atypical antipsychotics* ■ On average, people with dementia with Lewy bodies live for 6 to 12 years

TYPE OF DEMENTIA	DESCRIPTION
Frontotemporal dementia (e.g., Pick's disease)	<ul style="list-style-type: none"> ■ Caused by severe shrinkage of brain tissue and death of nerve cells in the frontal and/or temporal lobes, which is linked abnormal proteins (e.g., Pick bodies) inside the cells ■ Serotonin deficits* ■ Diagnosed at higher frequency in younger people than other types of dementia ■ Three types: <ul style="list-style-type: none"> □ Behavioural variant (more common) □ Language variants: <ul style="list-style-type: none"> ○ Progressive, non-fluent aphasia ○ Semantic dementia ■ Behavioural variant symptoms: <ul style="list-style-type: none"> □ Loss of inhibitions (e.g., socially inappropriate behaviour, pica may occur) □ Decreased interest and motivation □ Severe depression, apathy, withdrawal* □ Loss of empathy, self-focused behaviour □ Repetitive behaviours, compulsivity ■ Language variant symptoms: <ul style="list-style-type: none"> □ Difficulties with language (slow progression) □ Aphasia: difficulty speaking, grammatical errors (e.g., leaving out link words such as 'the'), difficulty understanding sentences (but no difficulty understanding words) □ Semantic dementia: loss of vocabulary and word meaning, difficulty recognizing people or objects □ Memory remains relatively intact in early frontotemporal dementia, as language changes typically occur first* ■ Later stage symptoms: <ul style="list-style-type: none"> □ As frontotemporal dementia progresses, people with the different types develop symptoms of the other type (i.e., people with behavioural variant symptoms develop language problems, and people with language variants develop behavioural problems) □ Other symptoms similar to those of the later stages of Alzheimer's disease ■ People with frontotemporal dementia sometimes have motor disorders (stiff muscles, awkward movements, spasticity*) ■ May be inherited ■ Life expectancy is estimated to be approximately eight years after the onset of symptoms

Note: Content added by the expert panel is indicated with an asterisk (*).

Source: Adapted from Alzheimer's Society, 2016.

Appendix I: Early Warning Signs of Cognitive Change

The following table outlines some of the early warning signs of cognitive challenges that caregivers and health professionals can detect. The signs can be used to identify individuals who should be assessed for dementia.

Table 8: Early Warning Signs Suggesting Cognitive Challenges

SIGNS CAREGIVERS CAN DETECT	SIGNS HEALTH PROFESSIONALS CAN DETECT
<ul style="list-style-type: none"> ■ Difficulty performing familiar tasks ■ Problems with language <ul style="list-style-type: none"> □ Confusion with regard to time and place ■ Poor and decreased judgment ■ Problems with abstract thinking ■ Misplacing things ■ Changes in mood and behaviour ■ Changes in personality ■ Loss of initiative ■ Memory loss affecting day-to-day function 	<ul style="list-style-type: none"> ■ Frequent phone calls/appointments—missing/wrong day ■ Poor historian, vague, seems “off,” repetitive questions or stories ■ Poor compliance meds/instructions ■ Appearance/mood/personality/behaviour ■ Word-finding/decrease social interaction ■ Subacute change in function without clear explanation/frequent visits to ER ■ Confusion—surgery/illness/meds ■ Weight loss/dwindles/“failure to thrive” ■ Driving—accidents/problems/tickets/family concerns ■ Head turning sign (turning to caregiver for answer)

Source: Reprinted from “Dementia and Screening Assessment,” by Regional Geriatric Program of Eastern Ontario, n.d. Retrieved from <http://giic.rgps.on.ca/sites/default/files/1b%20Dementia%20screening%20overview.pdf> Reprinted with permission.

Seven A's of Dementia

Some health-care providers also use the Seven A's of dementia to identify common signs. The A's are: anosognosia, agnosia, aphasia, apraxia, altered perception, amnesia, and apathy. For more information, visit the Alzheimer Society of Canada website at: <http://www.alzheimer.ca/en/york/About-dementia/What-is-dementia/Seven-A-s-of-dementia>

Table 4: Risk Factors and Signs of Depression

PREDISPOSING AND PRECIPITATING RISK FACTORS	SIGNS AND SYMPTOMS
<ul style="list-style-type: none"> ■ Cognitive decline or dementia ■ Social isolation ■ Medical diagnosis or diagnoses associated with a high risk of depression (e.g., neurodegenerative disease, cerebrovascular disease) ■ Chronic physical health problem with associated functional impairment ■ Personal or family history of depression or mood disorder ■ History of attempted suicide or psychiatric hospitalization ■ Current use of a medication associated with a high risk of depression ■ Alcohol or substance misuse (may include chronic benzodiazepine use*) ■ Institutional placement (admission to long-term care or in-patient setting) ■ New stressful losses, including loss of autonomy, loss of privacy, loss of functional status, loss of body part ■ Financial difficulties* ■ Bereavement ■ Domestic abuse or violence 	<p>SIGECAPS:</p> <ul style="list-style-type: none"> Sleep Disorder (increased or decreased) Interest deficit (anhedonia) Guilt (worthlessness, hopelessness, regret) Energy deficit Concentration deficit Appetite disorder (increased or decreased) Psychomotor retardation or agitation Suicidality <p>Additional symptoms: chronic pain, constipation and musculoskeletal disorders</p>

Sources: AMDA, 2011; NICE, 2011; O'Connor et al., 2009; Trangle et al., 2016. Sources: Jenike, 1989, as cited in RNAO, 2010b; Trangle et al., 2016.

Note: Content added by the expert panel is indicated with an asterisk (*).

Appendix D: Comparison of the Clinical Features of Delirium, Dementia, and Depression

FEATURE	DELIRIUM	DEMENCIA	DEPRESSION
Onset	Acute	Chronic, progressive decline	Variable; may appear abruptly and coincide with life changes
Course	Short, fluctuating, and often worse at night	Long, progressive, stable loss over time	Diurnal effects; typically worse in the morning
Duration	Typically, short (hours to less than 1 month) Can be persistent	Chronic (months to years)	Signs and symptoms present for at least 2 weeks, but may persist
Alertness	Lethargic or hyper-alert Fluctuates	Normal until late stage	Normal
Attention	Inattention Unfocussed Distracted Fluctuates	Generally normal May decline with disease progression	Minimal impairment Distractible Poor concentration
Orientation	May be impaired Fluctuates in severity	Increasing impairment over time	Selectively intact Answers "I don't know"
Memory	Recent memory impaired	Recent memory impaired Remote memory is increasingly impaired with progression of disease	Selective or patchy impairment, "islands" of intact memory
Thinking	Disorganized Disconnected Tangential Rambling Incoherent	Difficulty with abstract thinking Poor judgment	Intact; themes of hopelessness, helplessness, and guilt; rumination
Perception	Acute onset hallucinations, delusions, or illusions common	May be longstanding (e.g., dementia with Lewy bodies) or may occur at late stage of illness (e.g. Alzheimer's dementia)	Rarely impaired; hallucinations absent except in severe cases (psychosis)

Source: Created by Dianne Rossy and Laura Wilding. The Ottawa Hospital. Reprinted with permission.

Appendix H: Screening and Assessment Tools

The following is not an exhaustive list of screening and assessment tools but rather suggestions of tools identified within the systematic review, AGREE II appraised guidelines, by the expert panel or external stakeholder feedback.

Note: Inclusion of a tool in this list does not constitute an endorsement by RNAO. Please refer to **Recommendation 15.2** and the related discussion of evidence for considerations when selecting and using tools. It is important to select a tool that is appropriate for use in the setting in which you practice and suitable for your scope of practice.

Some tools may be validated only in specific settings. In the far right column, a check mark is provided where validation studies could be located.

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
TOOLS APPLICABLE TO DELIRIUM, DEMENTIA, AND/OR DEPRESSION			
<i>Diagnostic and Statistical Manual of Mental Disorders (DSM–5)</i> , by the American Psychiatric Association	<ul style="list-style-type: none"> ■ A classification and diagnostic tool for mental disorders ■ Cost associated with use 	www.dsm5.org http://www.psychiatry.org/psychiatrists/practice/dsm/dsm-5	see www.dsm5.org for details on the development process
Extensive Nursing Assessment/Mental Status Questions	<ul style="list-style-type: none"> ■ Sample questions to be used for nurse–client interviews 	Fortinash, K. M. & Holoday-Worret, P. A. (1999). <i>Psychiatric nursing care plans (3rd ed.)</i> . St. Louis: Mosby.	
Mini-Cog	<ul style="list-style-type: none"> ■ Used to assess a person’s registration, recall, and executive function ■ Can be performed quickly ■ Appropriate for use with older adults at various language and literacy levels, and from different culturesG 	Borson, S., Scanlan, J., Brush, M., Vitaliano, P., & Dokmak, A. (2000). The Mini-Cog: a cognitive ‘vital signs’ measure for dementia screening in multi-lingual elderly. <i>International Journal of Geriatric Psychiatry</i> , 15(11), 1021–1027.	
Mini Mental Status Examination (MMSE) Note: MMSE is proprietary	<ul style="list-style-type: none"> ■ Measures a person’s memory, orientation, language, attention, visuospatial, and constructional skills ■ Cost associated with use 	Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). “Mini-mental state”: A practical method for grading the cognitive state of patients for the clinician. <i>Journal of Psychiatric Research</i> , 12(3), 189–198. http://www4.parinc.com/Products/Product.aspx?ProductID=MMSE	✓
Montreal Cognitive Assessment (MoCA)	<ul style="list-style-type: none"> ■ A cognitive screening test designed to assist health professionals in the detection of mild cognitive impairment ■ Preferred for assessment of executive dysfunction 	http://www.mocatetest.org/	✓

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
NEECHAM confusion scale	<ul style="list-style-type: none"> Measures levels of confusion in processing, behaviour, and physiologic control 	Miller, J., Neelon, V., Champagne, M., Bailey, D., Ng'andu, N., Belyea, M., ... Williams, A. (1997). The assessment of acute confusion as part of nursing care. <i>Applied Nursing Research</i> , 10(3), 143–151.	✓
Resident Assessment Instrument (RAI) Minimum Data Set (MDS) from interRAI™	<ul style="list-style-type: none"> Electronic data collection tools Assist with development of a care plan MDS aids in monitoring effectiveness of a care plan 	http://www.interrai.org/	✓
DELIRIUM TOOLS			
4AT	<ul style="list-style-type: none"> Rapid assessment test for delirium and cognitive impairment Can be used to test people who are “untestable” (e.g., drowsy) Does not require training 	http://www.the4at.com/	✓
Confusion Assessment Method Instrument (CAM)	<ul style="list-style-type: none"> Helps identify individuals who may be suffering from delirium or an acute confusional state Useful for distinguishing between delirium and dementia 	Inouye, S. K., Van Dyck, C. H., Alessi, C. A., Balkin, S., Siegal, A. P., & Horwitz, R. I. (1990). Clarifying confusion: The confusion assessment method—A new method for detection of delirium. <i>Annals of Internal Medicine</i> , 113(12), 941–948. http://www.hospitalelderlifeprogram.org/delirium-instruments/short-cam/	✓
3D CAM	<ul style="list-style-type: none"> A brief assessment tool that can be used to test for delirium Takes approximately three minutes to complete 	http://www.hospitalelderlifeprogram.org/delirium-instruments/3dcam/	✓
CAM-ICU	<ul style="list-style-type: none"> Helps identify individuals who may be suffering from delirium or an acute confusional state Useful for distinguishing between delirium and dementia For use in intensive care unit populations 	Ely, E. W., Margolin, R., Francis, J., May, L., Truman, B., Dittus, R., ... Inouye, S. K. (2001). Evaluation of delirium in critically ill patients: Validation of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). <i>Critical Care Medicine</i> , 29(7), 1370–1379.	✓
Delirium Observation Scale	<ul style="list-style-type: none"> 13-item tool Fast to administer Captures early symptoms of delirium that can be observed over the course of care Does not necessarily require specialized training in geriatric care 	Schuermans, M. J., Shortridge-Baggett, L. M., and Luursma, S. A. (2003). The Delirium Observation Screening Scale: A screening instrument for delirium. <i>Research and Theory for Nursing Practice</i> , 17(1), 31–50.	✓

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
Delirium Rating Scale—Revised 98 (DRS-R 98)	<ul style="list-style-type: none"> 16-item scale with 13 severity items and 3 diagnostic items Includes severity scale for repeated measurement Can be used for monitoring patients over a period of time 	Trzepacz, P. T., Mittal, D., Torres, R., Canary, K., Norton, J., & Jimerson, N. (2001). Validation of the Delirium Rating Scale-revised-98. <i>The Journal of Neuropsychiatry and Clinical Neurosciences</i> , 13(2), 229–242.	✓
Delirium Symptom Interview (DSI)	<ul style="list-style-type: none"> Interview questions that align with DSM-III criteria for delirium Designed to be administered (on a daily basis) to hospitalized older people by non-clinicians 	Albert, M. S., Levkoff, S. E., Reilly, C., Liptzin, B., Pilgrim, D., Cleary, P. D., ... Rowe, J. W. (1992). The delirium symptom interview: An interview for the detection of delirium symptoms in hospitalized patients. <i>Journal of Geriatric Psychiatry and Neurology</i> , 5(1), 14–21.	✓
I WATCH DEATH	<ul style="list-style-type: none"> The I-WATCH-DEATH mnemonic is widely used in clinical practice to help health-care providers remember common causes of delirium, and helps support bedside assessments 	Wise, M. G. (1986). Delirium. In R. E. Hales & S. C. Yudofsky (Eds.), <i>American Psychiatric Press Textbook of Neuropsychiatry</i> (pp. 89–103). Washington, DC: American Psychiatric Press Inc.	
Intensive Care Delirium Screening Checklist (ICDSC)	<ul style="list-style-type: none"> Observational eight-item checklist of delirium symptoms Evaluated over an 8–24-hour period 	Bergeron, N., Dubois, M. J., Dumont, M., Dial, S., & Skrobik, Y. (2001). Intensive Care Delirium Screening Checklist: Evaluation of a new screening tool. <i>Intensive Care Medicine</i> , 27(5), 859–864.	✓
Memorial Delirium Assessment Scale (MDAS)	<ul style="list-style-type: none"> A scale designed to measure the severity of delirium symptoms Can help measure changes in delirium symptoms 	Breitbart, W., Rosenfeld, B., Roth, A., Smith, M. J., Cohen, K., & Passik, S. (1997). The memorial delirium assessment scale. <i>Journal of Pain and Symptom Management</i> , 13(3), 128–137.	✓ validated among hospitalized patients with advanced cancer and AIDS
Nursing Delirium Screening Scale (Nu DESC)	<ul style="list-style-type: none"> Observational five-item scale Can be completed quickly Continuous (observations over a 24-hour period) 	Gaudreau, J. D., Gagnon, P., Harel, F., Tremblay, A., & Roy, M. A. (2005). Fast, systematic, and continuous delirium assessment in hospitalized patients: The nursing delirium screening scale. <i>Journal of Pain and Symptom Management</i> , 29(4), 368–375.	✓ hospital setting
PRE-DELIRIC (PREdiction of DELIRium in ICu patients)	<ul style="list-style-type: none"> 10-item tool Uses routinely available data collected within the first 24 hours of admission to intensive care units (ICU) Assesses the risk of delirium developing in patients in critical care 	Van den Boogaard, M., Pickkers, P., Slooter, A. J. C., Kuiper, M. A., Spronk, P. E., Van Der Voort, P. H. J., ... Schoonhoven, L. (2012). Development and validation of PRE-DELIRIC (PREdiction of DELIRium in ICu patients) delirium prediction model for intensive care patients: Observational multicentre study. <i>British Medical Journal</i> , 344, e420.	✓

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
<p>Recognizing Active Delirium As part of your Routine (RADAR)</p> <p>*Note: this tool was created by one of the expert panel members. Please see the conflict of interest statement at the beginning of this Guideline.</p>	<ul style="list-style-type: none"> ■ A three-step process to identify delirium among older persons ■ Observation of three signs of altered level of consciousness and inattention every time medication is given 	http://radar.fsi.ulaval.ca/?page_id=54	✓
DEMENTIA TOOLS			
Abbreviated Mental Test Score (AMTS)	<ul style="list-style-type: none"> ■ 10-question test ■ Assesses for confusion and other cognitive impairment 	Hodkinson, H. M. (1972). Evaluation of a mental test score for assessment of mental impairment in the elderly. <i>Age and Ageing, 1</i> (4), 233–238.	✓ mainly evaluated with older adults
Addenbrooke's Cognitive Examination (ACE)	<ul style="list-style-type: none"> ■ 100-point test ■ Evaluation of six cognitive domains (orientation, attention, memory, verbal fluency, language, and visuospatial ability) ■ Can help with differentiating the subtypes of dementia 	Mathuranath, P. S., Nestor, P. J., Berrios, G. E., Rakowicz, W., & Hodges, J. R. (2000). A brief cognitive test battery to differentiate <i>Alzheimer's disease and frontotemporal dementia</i> . <i>Neurology, 55</i> (11), 1613–1620.	✓
Clock Drawing Test	<ul style="list-style-type: none"> ■ May assist in supporting a diagnosis of dementia or in indicating areas of difficulty experienced by a client ■ Complements other tests that focus on memory/language 	<p>Cockrell, R. & Folstein, M. (1988). Mini-mental state examination. <i>Journal of Psychiatry Research, 24</i>(4), 689–692.</p> <p>Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician. <i>Journal of Psychiatric Research, 12</i>(3), 189–198.</p>	
Cornell Scale for Depression in Dementia	<ul style="list-style-type: none"> ■ 9-item, clinician-administered instrument ■ Provides a quantitative rating of depression in individuals with or without dementia ■ Uses information from the caregiver as well as the client 	Alexopoulos, G. S., Abrams, R. C., Young, R. C., & Shamoian, C. A. (1988). Cornell scale for depression in dementia. <i>Biological Psychiatry, 23</i> (3), 271–284.	✓
Frontal Assessment Battery (FAB)	<ul style="list-style-type: none"> ■ A bedside battery to assess the presence and severity of a dysexecutive syndrome affecting both cognition and motor behaviour ■ Provides a measure to distinguish frontotemporal dementia from Alzheimer's disease in mildly demented patients (diagnostic test) 	<p>Dubois, B., & Litvan, I. (2000). The FAB: A frontal assessment battery at bedside. <i>Neurology, 55</i>(11), 1621–1626.</p> <p>Slachevsky, A., & Dubois, B. (2004). Frontal Assessment Battery and differential diagnosis of frontotemporal dementia and Alzheimer disease. <i>Archives of Neurology, 61</i>(7), 1104–1107.</p>	✓

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
Functional Assessment Staging of Alzheimer's Disease (FAST)®	<ul style="list-style-type: none"> Helps evaluate changes in functional performance and activities of daily living skills throughout the course of Alzheimer's disease 	Sclan, S. G., & Reisberg, B. (1992). Functional assessment staging (FAST) in Alzheimers' disease: Reliability, validity, and ordinality. <i>International Psychogeriatrics</i> , 4(3), 55–69.	✓
Lawton Brody Instrumental Activities of Daily Living (IADL) Scale	<ul style="list-style-type: none"> Used to assess a person's current functional abilities with regard to IADLs, such as using the telephone, shopping, and food preparation 	Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. <i>Gerontologist</i> , 9(3), 179–186.	✓ suitability may vary for gender and setting
Rowland Universal Dementia Assessment Scale (RUDAS)	<ul style="list-style-type: none"> 6-item scale assesses multiple cognitive domains, including memory, praxis, language, judgment, drawing, and body orientation 	Storey, J. E., Rowland, J. T., Conforti, D. A., & Dickson, H. G. (2004). The Rowland Universal Dementia Assessment Scale (RUDAS): A multicultural cognitive assessment scale. <i>International Psychogeriatrics</i> , 16(1), 13–31.	✓
DEMENTIA BEHAVIOUR			
Antecedent-Behaviour-Consequence (ABC) Mapping	<ul style="list-style-type: none"> "Antecedent-Behaviour-Consequence," or an ABC chart to record behaviour A = Antecedent. What specific activity or event occurred before the challenging behaviour? B = Behaviour. What, specifically, did the person do or say? C = Consequence. What happened after or as a result of the challenging behaviour? 	https://mconnect.milwaukee.k12.wi.us/MPS-English/CAO/Documents/PBIS/fba-bip-ABC-Behaviour-chart.pdf https://www.health.qld.gov.au/abios/behaviour/professional/abc_behaviour_pro.pdf	
Cohen-Mansfield Agitation Inventory (CMAI)	<ul style="list-style-type: none"> Caregivers' rating questionnaire consisting of 29 agitated behaviours, each rated on a 7-point scale of frequency Assesses the frequency of agitated behaviours in elderly persons Developed for use in nursing homes 	Cohen-Mansfield, J., Marx, M. S., & Rosenthal, A. S. (1989). A description of agitation in a nursing home. <i>Journal of Gerontology</i> , 44(3), M77–M84.	✓ institutional settings
Dementia Observational System (DOS) Tool	<ul style="list-style-type: none"> Assess a person's behaviour over a 24-hour cycle for up to 7 days Can be used to establish a baseline behavioural profile, make observations after behavioural changes are observed, and review the effectiveness of interventions 	Putting the P.I.E.C.E.S. Together. (n.d.). <i>Dementia Observation System (DOS)</i> . http://pieceslearning.com/	

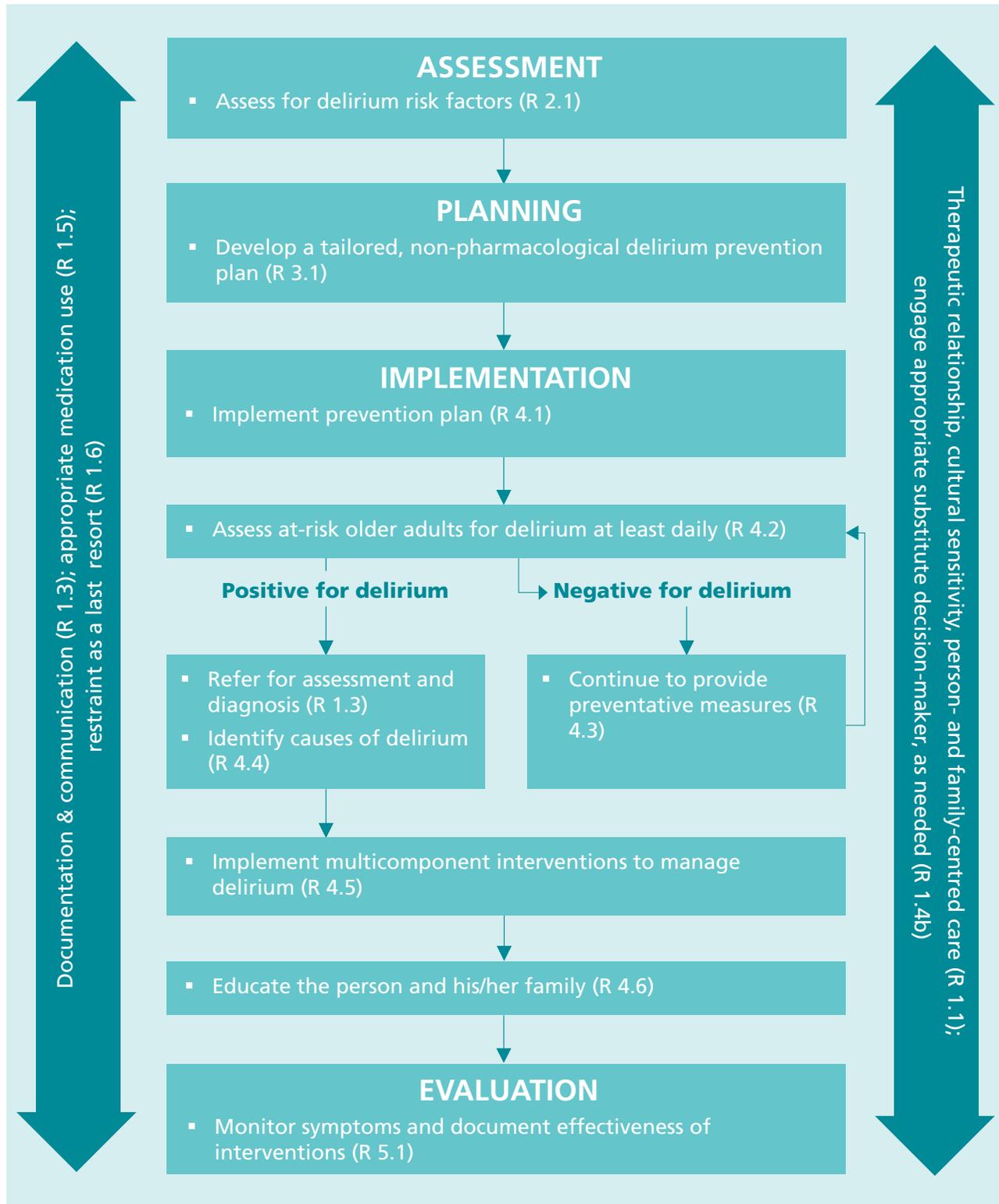
TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
Kingston Standardized Behavioural Assessment (community and long-term-care versions)	<ul style="list-style-type: none"> Complements cognitive assessment tools by providing an indication of the number of behavioural symptoms associated with dementia that are currently affecting an individual 	http://www.kingstonscales.org/behaviour-assessment.html	
Neuropsychiatric Inventory (NPI)	<ul style="list-style-type: none"> 12 items to evaluate the frequency and severity of the following symptoms: delusion, hallucinations, agitation, depression/dysphoria, anxiety, euphoria/jubilation, and apathy/indifference, disinhibition, irritability/lability, motor behaviour without a purpose, sleep alteration, and eating disorder Used to assess behavioural and psychological symptoms in patients with dementia 	Cummings, J. L., Mega, M., Gray, K., Rosenberg-Thompson, S., Carusi, D.A., & Gornbein, J. (1994). The Neuropsychiatric Inventory: Comprehensive assessment of psychopathology in dementia. <i>Neurology</i> , 44(12). 2308–2314.	✓ institutional settings
PAIN			
Abbey Pain Scale	<ul style="list-style-type: none"> Measures pain in people with dementia who cannot verbalize Six questions to record observations in the following categories: vocalization, facial expression, change in body language, behavioural change, physiological change, and physical change 	Abbey, J., Piller, N., De Bellis, A., Esterman, A., Parker, D., Giles, L., & Lowcay, B. (2004). The Abbey pain scale: A 1-minute numerical indicator for people with end-stage dementia. <i>International Journal of Palliative Nursing</i> , 10(1), 6–13.	
Checklist of Nonverbal Pain Indicators (CNPI)	<ul style="list-style-type: none"> Designed to measure pain in cognitively impaired older adults through behavioural observation Considers pain during movement and at rest 	Feldt, K. S. (n.d.). <i>Geriatric assessment tools: Pain</i> . Iowa City, IA: Iowa Geriatric Education Center. Retrieved from http://www.healthcare.uiowa.edu/igec/tools/categoryMenu.asp?categoryID=7	
Doloplus 2	<ul style="list-style-type: none"> Pain scale that can be used for people with mild or moderate cognitive impairment, and with proxy rating when a person is unable to self-report 	http://www.assessmentscales.com/scales/doloplus	
Mobilization-Observation-Behaviour-Intensity-Dementia Pain Scale (MOBID)	<ul style="list-style-type: none"> Nurse-administered instrument to observe pain behaviours Signs of pain are observed during guided movements 	Husebo, B. S., Strand, L. I., Moe-Nilssen, R., Husebo, S. B., Snow, A. L., & Ljunggren, A. E. (2007). Mobilization-Observation-Behaviour-Intensity-Dementia Pain Scale (MOBID): Development and validation of a nurse-administered pain assessment tool for use in dementia. <i>Journal of Pain and Symptom Management</i> , 34(1), 67–80.	✓ nursing home

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC)	<ul style="list-style-type: none"> Used to screen for pain in older adults who have dementia or other cognitive impairment and a limited ability to communicate 60-item tool assessing four categories: facial expressions, activity/body movements, social and personality changes, and other (appetite or sleeping changes) Can be administered quickly 	Fuchs-Lacelle, S., & Hadjistavropoulos, T. (2004). Development and preliminary validation of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC). <i>Pain Management Nursing</i> , 5(1), 37–49.	✓
Pain Assessment in Advanced Dementia (PAINAD) Scale	<ul style="list-style-type: none"> Observational behavioural tool measuring five items: breathing, facial expression, body language, negative vocalizations, and consolability Can be administered quickly For use with people with advanced dementia 	Warden, V., Hurley, A. C., & Volicer, L. (2003). Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. <i>Journal of the American Medical Directors Association</i> , 4(1), 9–15.	✓
CARE PROVIDERS & CAREGIVERS			
Calgary Family Assessment Model	<ul style="list-style-type: none"> Model to assess families in three main categories: structural, developmental, and functional levels 	Wright, L. M., & Leahey, M. (2012). <i>Nurses and families: A guide to family assessment and intervention</i> . FA Davis	
Family Confusion Assessment Method (FAM-CAM)	<ul style="list-style-type: none"> Based on the Confusion Assessment Method (CAM) May help with early detection of delirium by family caregivers 	http://www.hospitalelderlifeprogram.org/delirium-instruments/fam-cam/	
Sense of Competence in Dementia Care Staff (SCIDS) Scale	<ul style="list-style-type: none"> 17-item scale Means of measuring sense of competence in care staff 	Schepers, A. K., Orrell, M., Shanahan, N., & Spector, A. (2012). Sense of Competence in Dementia Care Staff (SCIDS) scale: Development, reliability, and validity. <i>International Psychogeriatrics</i> , 24(7), 1153–1162.	✓
Zarit Burden Interview	<ul style="list-style-type: none"> 22-item questionnaire measures caregiver burden Self-report measure 	Zarit, S. H., Reever, K. E., & Bach-Peterson, J. (1980). Relatives of the impaired elderly: Correlates of feelings of burden. <i>The Gerontologist</i> , 20(6), 649–655.	✓
DEPRESSION TOOLS			
Cornell Scale for Depression in Dementia	<i>See above in the Dementia section of this table</i>		

TOOL	DESCRIPTION	SOURCE/WEBSITE	VALIDATION STUDIES LOCATED
Distress Thermometer	<ul style="list-style-type: none"> ■ Simple, self-report measure ■ Consists of a line with a 0–10 scale (zero point is “No distress” and ten is “Extreme distress”) ■ Can be used to assess those with significant language or communication difficulties 		✓
Geriatric Depression Scale	<ul style="list-style-type: none"> ■ Available in long and short form ■ Questionnaire consisting of 30 or 15 yes/no questions for the patient to answer ■ Screening tool to facilitate the assessment of depression in older adults ■ Provides a quantitative rating of depression ■ Does not assess for risk of suicide 	Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. <i>Journal of Psychiatric Research, 17</i> (1), 37–49.	✓
Patient Health Questionnaire-9 item interview (PHQ-9)	<ul style="list-style-type: none"> ■ Depression screening tool ■ Staff interview instrument to be used for individuals who cannot self-report ■ Adapted version for Staff Assessment of Resident Mood (PHQ-9-OV) suitable for long-term care 		✓
SIGECAPS	<ul style="list-style-type: none"> ■ Mnemonic used to recall the most frequent symptoms of depression 	Jenike, M. A. (1989). <i>Geriatric psychiatry and psychopharmacology: A clinical approach</i> . Chicago, IL: Yearbook Medical Publishing.	

Source: Adapted from RNAO, 2010b.

Flow Chart For Delirium



Flow Chart For Dementia

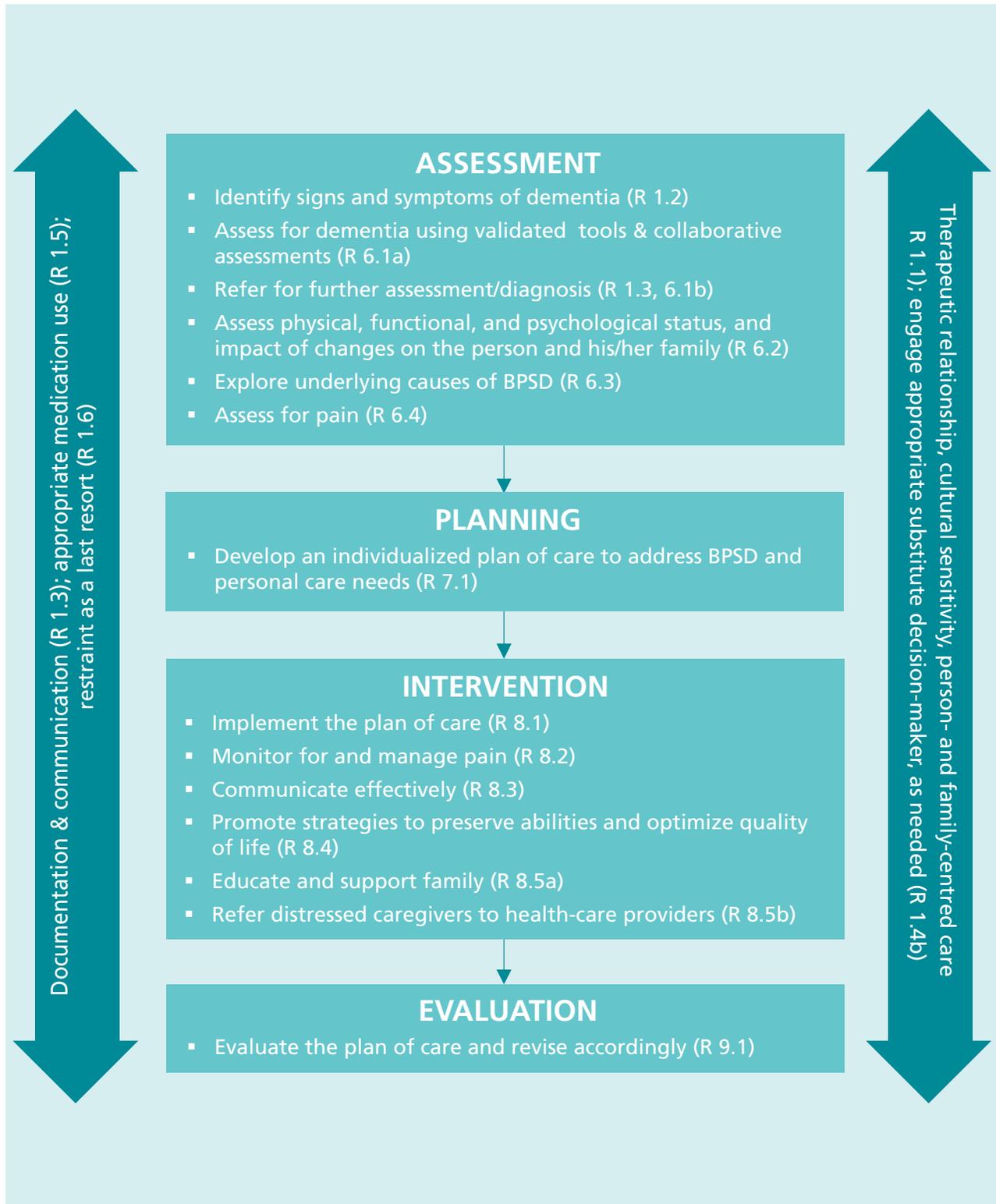


Table 2: Non-pharmacological Approaches to Management of the Behavioural and Psychological Symptoms of Dementia (BPSD)

APPROACH	EVIDENCE
<p>Music therapy</p> <p>Note: Music therapy includes a single music-related experience or a combination of music-related experiences that can be provided individually or in groups. Examples include actively singing or playing a musical instrument, or listening to recorded or live music (Blackburn & Bradshaw, 2014; Ueda et al., 2013).</p>	<ul style="list-style-type: none"> ■ Potential benefits include: reduced BPSD (agitation), improved mood (decreased anxiety or depression), reduced pain, and improved socialization and quality of life (Konno et al., 2013; Livingston et al., 2014; Pieper et al., 2013; Ueda et al., 2013). ■ Playing music during bathing may reduce agitated behaviours (Konno et al., 2013). ■ Evidence suggests that music therapy is more effective if structured and led by a trained therapist; there is little evidence to indicate effectiveness outside of a care-home setting (Livingston et al., 2014).
<p>Effective communication strategies and person-centred approaches to care</p>	<ul style="list-style-type: none"> ■ Approaches are effective in reducing agitated behaviours in people with dementia (Konno et al., 2013; Livingston et al., 2014). ■ Health-care providers must be properly trained and supervised to be effective (Livingston et al., 2014). ■ Supportive evidence most relevant to long-term-care or supported-living settings (Livingston et al., 2014). ■ See Appendix K (Attitudes, Skills, and Knowledge That Are Beneficial for Communication in Dementia Care) for information about communication skills. See Appendix A, the Glossary of Terms, for a definition of person-centred approaches.
<p>Sensory Interventions</p> <p>Note: Sensory interventions include massage, gentle touch or therapeutic touch, and stimulation of the senses (visual, auditory, touch) (Hulme et al., 2010; Kverno et al., 2009; Livingston et al., 2014; Moyle et al., 2013).</p>	<ul style="list-style-type: none"> ■ Sensory interventions may reduce agitation (Livingston et al., 2014; Moyle et al., 2013) ■ Such interventions appear to be effective for people with severe cognitive impairments (Kverno et al., 2009).
<p>Group Activities in Care Homes</p> <p>Note: Group activities include any activities offered to residents (e.g., animal-assisted therapy, dance, cooking, etc.).</p>	<ul style="list-style-type: none"> ■ Reduces agitation, but not necessarily for those who are severely agitated (Livingston et al., 2014).
<p>Art Therapies</p> <p>Note: Examples include visual arts, drama/movement, songwriting, poetry, etc.</p>	<ul style="list-style-type: none"> ■ One review, rated weak for methodological quality, reports potential benefits for behavioural or emotional symptoms (Cowl & Gaugler, 2014).

Appendix K: Attitudes, Skills, and Knowledge That Are Beneficial for Communication in Dementia Care

Table 9 lists suggested content of communication skills training in dementia care.

Table 9: Content of Communication Skills Training in Dementia Care

SKILLS, ATTITUDES, AND KNOWLEDGE		
Verbal skills	Before physical care	Announce single activities Use one-step instructions, no usage of multiple instructions Delay physical assistance after verbal prompt
	At an early stage of illness trajectory	Avoid arguing, accept different perceptions of time and reality Use of yes/no and choice questions versus open-ended questions Suggest words when person is struggling for a specific word
	At a moderate to late stage of illness trajectory	Use names and nouns Use the person's name Use simple sentences Repeat and rephrase sentences
	General skills	Use positive and biographical statements Identify personal communication styles and preferences Identify and do not use elder speak (diminutives, pronoun substitutions) Slow down
Non-verbal and emotional skills	Recognize unusual communicative attempts	Recognize micro-behavioral changes (eye movement, lifting the corner of the mouth, tears, etc.) as attempts to communicate View behavior that challenges as an attempt to communicate unmet needs
	Reflect your own non-verbal behavior	Make eye contact Give enough time Avoid high-pitch voice Listen actively
	Recognize and answer to emotions	Notice and validate person with dementia's effects Use emotional tone Show empathy

SKILLS, ATTITUDES, AND KNOWLEDGE		
Attitudes towards people with dementia	Change perspectives	Take a resident's perspective on communication
	Think about activities	Try to increase pleasant events
	Reflect on your perceptions	Identify impacts on your communication (self-concept, depression, isolation, dependency)
	General attitudes	Use a calm approach Avoid over-nurturing, i.e. infantilizing or patronizing speech
Behavioral management skills	General behavioral skills	Respond to behavioral disturbances Use distraction techniques when aggressive behavior occurs Avoid confrontation Be practical Set realistic goals Clarify emotions
Usage of tools		Create and use memory books Create and use memory aids Create memory charts Use a behavior diary
Self-experiences	Reflect your communication style	Collect and reflect your successful and ineffective personal communication strategies Work out what works individually
	Give and receive feedback	Share experiences with others
Theoretical knowledge	General and basic knowledge	Know about dementia and symptoms; recognize the difference between normal forgetting, mild cognitive impairment, and Alzheimer's; know nature of behavioral symptoms, person, and environment Develop appropriate expectations of Alzheimer patients

Source: Reprinted from "Communication skills training in dementia care: A systematic review of effectiveness, training content, and didactic methods in different care settings," by E. Eggenberger, K. Heimerl, & M. I. Bennett, 2013, *International Psychogeriatrics*, 25(3), 345–358. Reprinted with permission.

Flow Chart For Depression

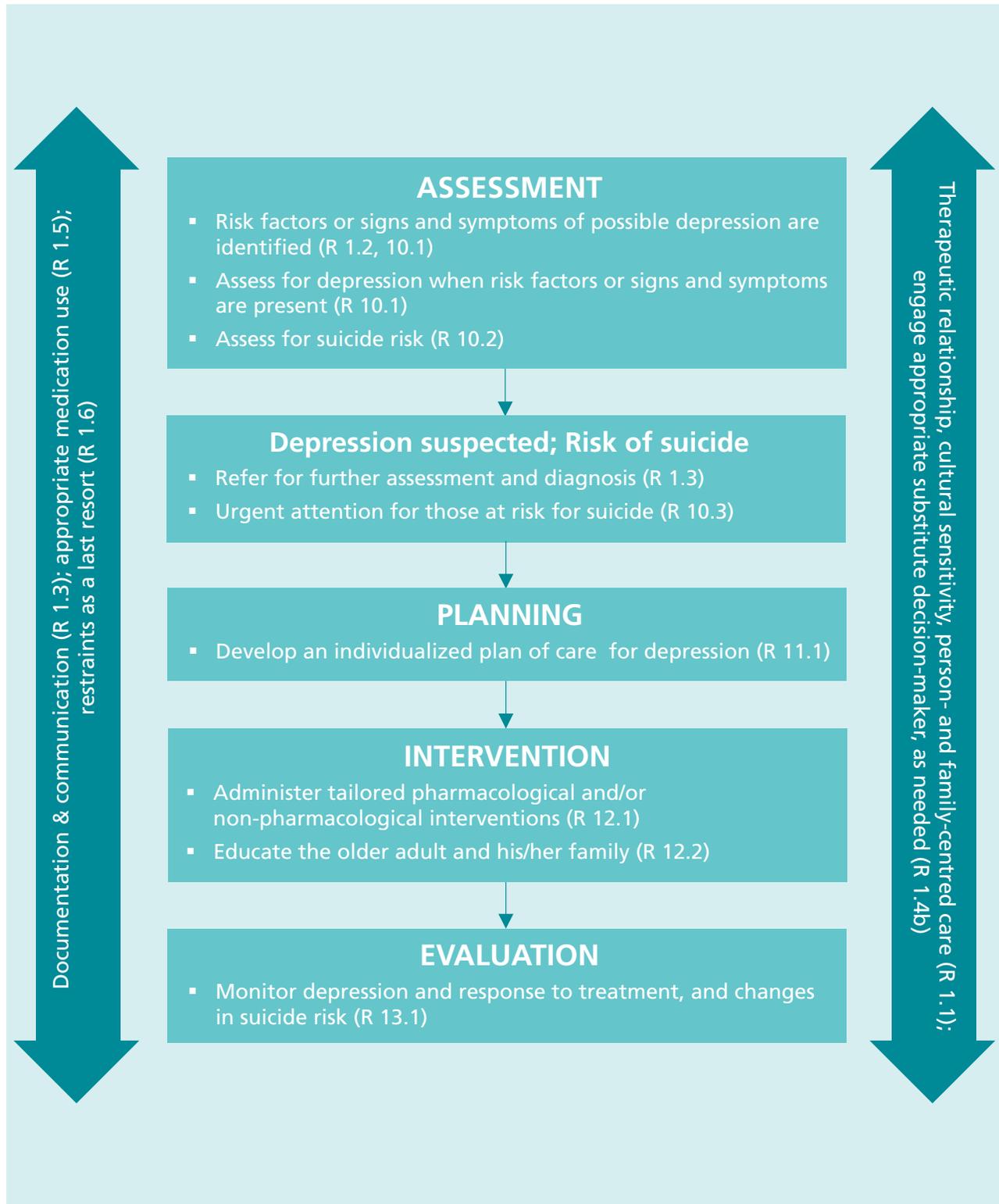


Table 5: Interventions for Depression

NON-PHARMACOLOGICAL INTERVENTIONS
PSYCHOTHERAPY
General
<ul style="list-style-type: none">■ Psychotherapy is recommended together with antidepressants in primary care (O'Connor et al., 2009).■ Psychotherapy may be beneficial for people with depression in long-term care (Cody & Drysdale, 2013).■ Psychological interventions with antidepressants can be used for moderate or severe depression (NICE, 2011).■ Psychological interventions added to usual care can reduce symptoms of depression and anxiety for people with dementia (Orgeta et al., 2014).
Behavioural therapy⁶
<ul style="list-style-type: none">■ Behavioural therapy appears to have comparable effectiveness with alternative psychotherapies (Samad et al., 2011).
Cognitive behavioural therapy (CBT)
<ul style="list-style-type: none">■ CBT showed positive findings (e.g., improved mood) (Gould, Coulson, & Howard, 2012; Kiosses et al., 2011; Krishna et al., 2011; Regan & Varanelli, 2013; Simon, Cordas, & Bottino, 2015).■ CBT is recommended for individuals (SIGN, 2010) and groups (Krishna et al., 2011).■ Computerized CBT, delivered via computer- or web-based programs, may be appropriate for treating mild to moderate depression (NICE, 2009; NICE, 2011).
Interpersonal therapy⁶
<ul style="list-style-type: none">■ Interpersonal therapy is recommended for treating mild or moderate depression (NICE, 2011).
Problem-solving therapy⁶
<ul style="list-style-type: none">■ Problem-solving therapy showed positive findings in two studies (Kiosses et al., 2011; Regan & Varanelli, 2013).■ Problem-solving therapy should be delivered by highly qualified or experienced therapists (NICE, 2012b).

Table continued on next page.

NON-PHARMACOLOGICAL INTERVENTIONS CONT...

EXERCISE

Exercise

- Exercise may reduce the severity of depression (Bridle et al., 2012).
- Tai Chi reduced self-reported depression (Chi et al., 2013).
- Benefits of exercise programs/exercise therapy may include decreased symptoms, improved quality of life, and improved self-esteem (Park et al., 2014).
- Structured group physical activity is appropriate for people with mild to moderate depression (NICE, 2011).
- Exercise should be tailored to an individual's abilities (Bridle et al., 2012).

PSYCHOLOGICAL AND SOCIAL INTERVENTIONS

Reminiscence

- Reminiscence may have therapeutic benefits in long-term care settings (socialization), but should be facilitated by a trained practitioner (Housden, 2009).

Behavioural activation

- Behavioural activation was recommended in two clinical guidelines (SIGN, 2010; Trangle et al., 2016).

Mindfulness

- Mindfulness-based cognitive therapy, when practiced in a group setting, may help reduce relapse in people with recurrent depression (SIGN, 2010).

Peer support or self-help

- Peer support or self-help may be appropriate for mild to moderate depression (NICE, 2012b) and those with a chronic physical health problem (NICE, 2011).

Music therapy

- Music therapy may reduce anxiety and depression, but must be individualized (Ueda et al., 2013; Wall & Duffy, 2010).

Animal therapy

- There is insufficient evidence to recommend animal therapy, but it may have beneficial effects on the severity of depressive symptoms in older adults living in long-term-care or psychiatric institutions (SIGN, 2010).

ELECTROCONVULSIVE THERAPY (ECT)

ECT

- ECT may be considered for treatment of severe, life-threatening depression, or when other treatments have failed (NICE, 2009).

PHARMACOLOGICAL INTERVENTIONS

Antidepressants

- Antidepressants are important for the treatment of severe major depression (Conn et al., 2014).
- SSRIs are usually the preferred antidepressants (NICE, 2012b), including for people in long-term care (Conn et al., 2014).
- Antidepressants are recommended together with non-pharmacological treatments (NICE, 2011; O'Connor et al., 2009).
- The evidence supporting the use of antidepressants for people with depression and dementia is unclear (Nelson & Devanand, 2011).