

# Delirium and Dementia in Hospital

## Table of Contents

|  |    |
|--|----|
| Part A: Background.....  | 2  |
| Part B: Clinical Care Principles .....   | 4  |
| Part C: Coordination of Delirium and Dementia Care .....                                   | 5  |
| Nursing Staff.....   | 5  |
| Screening.....   | 5  |
| Non-pharmacological prevention and management .....  | 5  |
| Monitoring.....  | 7  |
| Discharge Planning .....   | 8  |
| Medical Staff .....  | 8  |
| Screening.....   | 8  |
| Investigations .....   | 13 |
| Discharge Planning .....   | 14 |
| Interventions .....  | 14 |
| Escalation of aggression or behaviours of concern .....                                    | 17 |
| Multidisciplinary Input for patients with Delirium, Dementia and Cognitive Impairment..... | 18 |
| Neuropsychology.....   | 18 |
| Occupational Therapy .....   | 18 |
| Physiotherapy.....   | 19 |
| Social Work.....   | 19 |
| Speech Pathology .....   | 19 |
| Dietetics.....   | 19 |
| Audiology.....   | 19 |
| Considerations in the Intensive Care Unit.....   | 19 |
| Considerations for Aboriginal and Torres Strait Islander People .....                      | 20 |
| Considerations for culturally and linguistically diverse (CALD) populations .....          | 21 |
| Sunflower Tool .....   | 22 |

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 1 of 24                           | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

# Delirium and Dementia in Hospital

## AUTHOR/S

This clinical guideline has been developed by the Delirium, Dementia and Cognitive Impairment subcommittee reporting to the Monash Health National Standard 5, Comprehensive Care Committee

It is informed by the Australian Commission on Safety and Quality in Health Care '[Delirium Clinical Care Standard](#)', 2016 and the '[Clinical Practice Guidelines and Principles of Care for People with Dementia](#)', 2016 by the NHMRC Partnership Centre for Dealing with Cognitive and Related Functional Decline in Older People

## TARGET AUDIENCE and SETTING

All Monash Health clinical and non-clinical staff working with acute and subacute inpatients receiving care at Monash Health who are:

- at risk of or diagnosed with delirium, and/or
- have undiagnosed or diagnosed dementia.

## Part A: Background

### Delirium

Delirium is an acute change in cognitive function characterised by a disturbance of consciousness, attention, cognition and perception that develops over a short period of time (hours to days). Delirium is common among older patients in hospital but can occur at any age. Delirium can be characterised by agitation (hyperactive delirium), reduced alertness (hypoactive delirium) or a combination of both.

Delirium is under-recognised in hospitals with approximately half of all episodes missed. About 10% to 18% of Australians aged 65 years or older have delirium at the time of admission to hospital, and at least a further 10% develop delirium during their hospital stay. In Victoria, a 2018 point prevalence survey that included Monash Health, found 40% of all inpatients 18 years and older had a delirium.

Higher incidences occur following cardiac and hip surgery (30-40%) and in adult intensive care units (50-70%) regardless of patient age. Further information about delirium can be found at [www.delirium.org.au/health-info](http://www.delirium.org.au/health-info).

**Table 1: Predisposing factors for delirium**

|   |
|---|
| <ul style="list-style-type: none"> <li>• Older age (&gt;65 years and &gt;45 years in Aboriginal and Torres Strait Islander People)</li> <li>• Pre-existing dementia or cognitive impairment</li> <li>• Current hip fracture or major surgery</li> <li>• Severe medical illness</li> <li>• Hearing or visually impaired</li> <li>• History of previous delirium</li> </ul> |
|---|

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 2 of 24                           | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

# Delirium and Dementia in Hospital

**Table 2: Precipitating factors for delirium**



## Dementia

Dementia is a clinical syndrome which results from a number of different underlying pathologies, the commonest two being Alzheimer’s disease and vascular dementia. Dementia can affect memory, thinking, behaviour, communication and ability to perform activities of daily living (WHO, 2012).

Dementia is a common form of cognitive impairment seen in hospitalised older patients. Around 20% of people aged > 70 years of age who are admitted to hospital have dementia – and the rate increases with increasing age (Travers et al, 2013). Dementia can also occur in younger patients, with 8% of all dementia patients under the age of 65 years.

Further information about dementia can be found at [www.dementia.org.au](http://www.dementia.org.au)

**Table 3: Differentiating delirium and dementia**

| Feature            | Delirium                        | Dementia  |
|--------------------|---------------------------------|---|
| <b>Onset</b>       | Acute                           | Insidious   |
| <b>Duration</b>    | Hours/days                      | Months/years  |
| <b>Course</b>      | Fluctuates                      | Stable and progressive                              |
| <b>Alertness</b>   | Impaired or hyperalert          | Normal or impaired                                  |
| <b>Orientation</b> | Impaired                        | Normal or impaired                                  |
| <b>Memory</b>      | Impaired                        | Impaired  |
| <b>Perception</b>  | Visual, auditory hallucinations | Normal, hallucinations common in Lewy Body Dementia |

## Delirium and Dementia in Hospital

### Adverse outcomes

Patients with delirium and/or dementia are at a significantly increased risk of adverse outcomes and preventable complications in hospital, including:

- falls
- significant functional and cognitive decline
- complications such as pressure injuries, pneumonia and urinary tract infections
- increased length of stay
- requirement for new residential placement following admission
- death

An older person with dementia has a five-fold increased risk of developing delirium (delirium superimposed on dementia) while in hospital compared to those without dementia.

Many of these adverse outcomes and complications are preventable, and harm could be minimised if delirium and/or dementia is identified early and risks acted upon.

### Part B: Clinical Care Principles

The principles that underpin this clinical guideline are:

- Delirium is a **medical emergency** – early identification and timely management is key to reducing severity and preventing complications.
- Screening for delirium:  
The 4AT is a short tool for delirium identification designed to be easy to use in clinical care, scoring is based on a numerical value:
  - **4 or above:** possible delirium +/- cognitive impairment
  - **1-3:** possible cognitive impairment
  - **0:** delirium or severe cognitive impairment unlikely
 For further information on the 4AT visit <https://www.the4at.com/>
- Patient-centred care:
  - Provide patient-centred care and support shared decision making by identifying and responding to the individual needs and preferences of the patient, their carer(s) and family
  - Ensure the person’s medical treatment decision maker has been identified and recorded on goals of care summary form
  - Check if the person has completed an advance care directive and / or appointment of medical treatment decision maker
  - Aim to improve quality of life, maintain dignity and function and maximise comfort.

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 4 of 24                           | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

# Delirium and Dementia in Hospital

## Part C: Coordination of Delirium and Dementia Care

- Care of the patient with suspected or confirmed delirium/dementia is the responsibility of **all staff involved in the care of the patient**. A team approach is required to identify, prevent and manage delirium and/or dementia. Specific roles comprise:

### Nursing Staff

#### Screening

- On presentation  
Screening for delirium and/or significant cognitive impairment using the 4AT within 8 hours of presentation for all patients >18 years old (excluding mental health, maternity and day procedures)
  - The 4AT can be found within **Adults Risk Assessment** in the EMR
  - 4AT score > 4** (Possible Delirium +/- cognitive impairment)
    - Medical assessment required
    - Complete Sunflower Tool (paper based)
    - Cognitive Impairment (Delirium and Dementia) Care Plan** is initiated in the EMR.
  - Screening can be undertaken by any member of the multi-disciplinary team who has received training in the use of the 4AT.

#### Non-pharmacological prevention and management

| Area of care           | Care strategies  |
|------------------------|--|
| <b>Communication</b>   | <ul style="list-style-type: none"> <li>Discuss the diagnosis of delirium and/or dementia with the patient and their carer/families and provide written information <a href="#">Delirium in Hospital</a> and/or <a href="#">Dementia in Hospital</a></li> <li>Encourage families / carers to provide information to enable optimum care (i.e. changes in behaviour and potential triggers of unmet needs, physical or mental condition, preferences and routines)</li> <li>Involve medical treatment decision maker / families / carers in the provision of care, decision-making and future care planning (including education about delirium)</li> <li>Encourage families / carers to complete 'Getting to Know You' tools, i.e. <a href="#">TOP5</a>, <a href="#">Sunflower Tool</a></li> <li>Use the patient's preferred name</li> <li>Speak slowly, clearly and repeat information if required</li> <li>Try not to agree with any incorrect ideas but disagree with tact and change the subject</li> <li>Use alternate forms of communication such as pictures</li> <li>Ask one question or make one request at a time</li> <li>Use of distraction and de-escalation techniques</li> </ul> |
| <b>Pain Management</b> | <ul style="list-style-type: none"> <li>Check for pain- conduct a pain screen or look for non-verbal cues if the patient cannot communicate</li> </ul>  |

PROMPT Doc No: SNH0018939 v6.0

Date loaded on PROMPT: 07/11/2011

Page 5 of 24

Review By: 30/11/2023

Version Changed: 27/11/2020

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Last Reviewed Date: 27/11/2020

| Area of care                   | Care strategies   |
|--------------------------------|---|
|                                | <ul style="list-style-type: none"> <li>• Ensure that pain relief is adequate and that a pain management plan is in place</li> </ul>   |
| <b>Hydration and nutrition</b> | <ul style="list-style-type: none"> <li>• Ensure adequate hydration via oral fluids</li> <li>• Ensure patient can reach fluids if safe to leave in reach</li> <li>• Provide support (physical assistance, supervision and/or prompting) at mealtimes if needed</li> <li>• Encourage patients to sit out of bed at mealtimes if appropriate</li> <li>• Minimise interruptions during mealtimes</li> <li>• Involve carer/family in meal times, including provision of food if appropriate, ensuring compliance with the <a href="#">Bringing food into hospital Procedure</a></li> <li>• Maintain accurate fluid and food intake charts</li> <li>• Communicate with health professionals regarding nutrition-related issues (dietician referral if needed)</li> <li>• Ensure risk assessment for nutrition risk is completed and preventative interventions are implemented</li> </ul> |
| <b>Bladder and bowel</b>       | <ul style="list-style-type: none"> <li>• Exclude urinary retention</li> <li>• Avoid indwelling catheters if possible</li> <li>• Avoid constipation e.g. some medications will need review</li> <li>• Toilet patient after each meal, and more frequently if required</li> </ul>   |
| <b>Sensory</b>                 | <ul style="list-style-type: none"> <li>• Provide visual and hearing aids if needed, and ensure they're clean and working</li> <li>• Provide regular orientation to time and place (via verbal cues and visible aids such as calendar clocks, that are visible from the patient's bed) <a href="#">Calendar Clocks</a></li> <li>• Minimise noise (e.g. monitors and alarms)</li> </ul>   |
| <b>Mobility</b>                | <ul style="list-style-type: none"> <li>• Encourage mobility, if clinically appropriate (involve physiotherapist if needed)</li> <li>• Ensure access to appropriate gait aids and footwear</li> <li>• Optimise safety if patient is wandering, and redirect to more suitable environment/ engage in meaningful activity (e.g. secure ward entrances/exits)</li> <li>• Avoid the use of mechanical restraint as this can increase agitation, prolong delirium and increase the risk of injury including falls (see <a href="#">Restrictive Interventions- Bodily Restraint</a>)</li> </ul>  |
| <b>Activity</b>                | <ul style="list-style-type: none"> <li>• Provide activities for stimulating cognition, if appropriate (e.g. reading material, simple activities to prevent boredom)</li> <li>• Provide access to usual activities, if appropriate (e.g. newspaper, television, hobbies)</li> <li>• Ensure activities are meaningful and age appropriate to patient</li> </ul>   |
| <b>Sleep</b>                   | <ul style="list-style-type: none"> <li>• Help promote sleep at night by providing a quiet environment with low lighting, warm milk (if liked)</li> <li>• Do not wake the patient for observations, medication or treatment at night if the patient is asleep</li> </ul>   |

PROMPT Doc No: SNH0018939 v6.0

Date loaded on PROMPT: 07/11/2011

Page 6 of 24

Review By: 30/11/2023

Version Changed: 27/11/2020

Document uncontrolled when downloaded.

Last Reviewed Date: 27/11/2020

## Delirium and Dementia in Hospital

| Area of care                   | Care strategies   |
|--------------------------------|---|
|                                | <ul style="list-style-type: none"> <li>Consider the use of ear plugs or eye shades to promote sleep</li> <li>Encourage patients to wear day clothes during the day and sleepwear at night</li> </ul>  |
| <b>Environment</b>             | <ul style="list-style-type: none"> <li>Ensure patients are visible to staff (e.g. room near nurses station)</li> <li>Limit ward, room and bed changes and provide a single room, if possible</li> <li>Try to have consistent staff, if possible</li> <li>Remove any potential hazards (e.g. trip hazards)</li> <li>Ensure lighting in patient rooms is appropriate to the time of day (e.g. open / close curtains to assist with day-night recognition)</li> <li>Ensure adequate signage to toilet facilities with images and words and at appropriate eye level, consider leaving the door open to assist in the person locating the toilet when they need it</li> <li>The use of colour to contrast or highlight key locations or objects, such as a coloured toilet seat</li> <li>Ensure call bell is within reach</li> <li>Manage patient on a floor lying or a low-low bed if they are a falls risk</li> <li>Ask carers or family members to bring in familiar, non-valuable items from home (e.g. photos, dressing gown)</li> <li>Ensure there are spaces where patients, families and carers can go for private conversation, or to have a break from the clinical environment (i.e. family room)</li> </ul> |
| <b>Falls and pressure care</b> | <ul style="list-style-type: none"> <li>Ensure risk assessment for falls and pressure injuries is completed and preventative interventions are implemented</li> </ul>  |
| <b>Supervision</b>             | <ul style="list-style-type: none"> <li>Set up environment to provide adequate supervision based on assessment and clinical judgement</li> <li>Implement regular rounding to ensure all needs are met</li> <li>Consider a patient observer for patients who exhibit risk behaviours, as per the <a href="#">Medical Special Intervention request and responsibilities (CPO) Procedure</a></li> </ul>   |

### Monitoring

Monitor patients at risk of delirium at a minimum of 8 hourly for changes in behaviour, cognition and physical condition. If a patient has a 4AT score 1-3 or identified risk factors then:

- Complete Sunflower Tool (paper based)
- Document in EMR **rounding, general nursing care** and **adult education** as prevention strategies for delirium

Monitor patients at risk of acute deterioration in mental state, including patients at risk of developing delirium at a minimum of 8 hourly by:

- Asking the patient and their carer/family about any recent changes in the patient's behaviour or thinking OR if there is clinical concern about a deterioration in mental state Then record "Yes" in "**new/change in behaviour or thinking**" in **Adult Interactive View** EMR

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 7 of 24                           | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

## Delirium and Dementia in Hospital

- If “Yes” repeat screening with the 4AT and follow recommendations based on 4AT score.

### Discharge Planning

Initiate discharge planning for patients with delirium and/or dementia early, involve the patient, medical treatment decision maker family/carers and the multidisciplinary team.

Liaise with the family/carers regarding discharge arrangements. Discuss with family/carers whether they need extra support. Some patients will still be recovering, not be entirely themselves or be less able than usual to carry out their daily activities.

Consider introducing [Advance Care Planning](#)

Provide Patient Friendly Discharge information to the patient and their family/carers before they leave hospital. This document is to be printed from the EMR and forms the basis for a discussion between the bedside nurse and patient and/or support person, utilising Teach Back communication principles.

### Medical Staff

#### Screening

Perform screening for delirium within 8 hours of presentation by nursing staff. However, it can also be done by medical staff or requested on EMR as an Order.

**4AT score 0** delirium unlikely, monitor daily and address precipitating risk factors

**4AT score 1-3 monitor daily**, identify and address any risk factors to prevent development of delirium (see Nursing section)

#### 4AT score > 4

Perform a comprehensive medical assessment looking for underlying or reversible causes, if delirium confirmed add it to the problem list in EMR. It is recommended that the **Cognitive Impairment (Delirium and Dementia) Care Plan** be initiated in EMR.

- Go to Orders -> Cognitive Impairment (Delirium and Dementia) Care Plan. This Plan includes a list of Outcomes and Interventions that can be ordered for the patient.

### Medical assessment

The principles of managing patients with delirium:

1. Treat the underlying cause
2. Manage the symptoms
3. Keep the patient safe until the delirium resolves.

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 8 of 24                           | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |



| Assessment                              | Delirium  | Dementia/Suspected Dementia  |
|---|---|--|
| <p><b>Review of medical history</b></p> | <ul style="list-style-type: none"> <li>• Prior diagnosis of dementia or cognitive impairment</li> <li>• Current medications</li> <li>• Alcohol and substance use</li> <li>• Vision and hearing status</li> <li>• History of psychiatric illness, especially depression</li> <li>• Physical ability and functional independence</li> </ul> | <p><b>Dementia</b></p> <p>As per delirium, in addition:</p> <ul style="list-style-type: none"> <li>• Look at any records from Cognitive, Dementia and Memory Service (CDAMS) clinic, including the presence of Behavioural and Psychological Symptoms of Dementia (BPSD)</li> <li>• Look at prior scores on cognitive assessment tools: Mini Mental State Examination (MMSE) Abbreviated Mental Test (AMT) Montreal Cognitive Assessment (MoCA) Rowland Universal Dementia Assessment Scale (RUDAS) for use with culturally and linguistically diverse patients (used with an interpreter)</li> <li>• Involve family/carers in history gathering</li> </ul> <p><b>Suspected dementia</b></p> <p>As per delirium, in addition:</p> <ul style="list-style-type: none"> <li>• Include assessment for risk factors for dementia including diabetes, hypertension, hyperlipidaemia, smoking, alcohol excess, family history, head injury, Down’s syndrome.</li> </ul> <p>NOTE:</p> <ul style="list-style-type: none"> <li>• A new diagnosis of dementia must <b>not</b> be made in the Emergency Department as it requires a comprehensive history and assessment that is not appropriate on first presentation.</li> </ul> |

PROMPT Doc No: SNH0018939 v6.0

Date loaded on PROMPT: 07/11/2011

Page 9 of 24

Review By: 30/11/2023

Version Changed: 27/11/2020

Document uncontrolled when downloaded.

Last Reviewed Date: 27/11/2020

| Assessment                                       | Delirium  | Dementia/Suspected Dementia   |
|--|---|---|
|  |   | <ul style="list-style-type: none"> <li>● The new diagnosis of dementia should rarely be made during an acute hospital admission due to the possibility of superimposed delirium and/or other causes of cognitive impairment</li> </ul>                                |
| <p><b>Shared Decision Making and Consent</b></p> | <ul style="list-style-type: none"> <li>● Ensure the person’s medical treatment decision maker (MTDM) has been identified and the medical goals of care discussed with them: to identify the MTDM refer to, <a href="#">Can your adult patient consent?</a> flowchart</li> <li>● recorded the MTDM details on the goals of care summary form</li> <li>● Check if the person has completed an advance care directive and / or appointment of medical treatment decision maker (ask family / check SMR)</li> <li>● Refer to <a href="#">Consent for medical treatment and refusal of treatment for patients who lack decision making capacity</a></li> </ul> |   |
| <p><b>Collateral history</b></p>                 | <p>Collateral history from family, carer(s) and/or General Practitioner on:</p> <ul style="list-style-type: none"> <li>● substance use</li> <li>● alcohol use</li> <li>● medication history</li> <li>● pain</li> <li>● premorbid physical, cognitive and functional status</li> </ul>   | <p>As per delirium</p>  |
| <p><b>Behavioural changes</b></p>                | <p>Check for any:</p> <ul style="list-style-type: none"> <li>● confusion</li> <li>● decreased concentration</li> <li>● agitation, restlessness</li> <li>● sleepiness (including altered levels of consciousness)</li> <li>● less communicative or responsive than usual</li> <li>● difficulty cooperating with reasonable requests</li> <li>● other alterations in mood</li> </ul>  | <ul style="list-style-type: none"> <li>● Establish if there is any recent change in cognition from usual baseline symptoms</li> <li>● Results of any previous cognitive screening or assessment tools can be used to compare previous versus current state</li> </ul> |

PROMPT Doc No: SNH0018939 v6.0

Date loaded on PROMPT: 07/11/2011

Page 10 of 24

Review By: 30/11/2023

Version Changed: 27/11/2020

Document uncontrolled when downloaded.

Last Reviewed Date: 27/11/2020

## Delirium and Dementia in Hospital

| Assessment                                    | Delirium   | Dementia/Suspected Dementia |
|---|--|-----------------------------|
| <b>Medication review</b>                      | Medication side effects or withdrawal accounts for a third of cases. Check for any: <ul style="list-style-type: none"> <li>• new medications</li> <li>• missed medications</li> <li>• regular medications not charted</li> </ul>   | As per delirium             |
| <b>Physical examination</b>                   | May not be possible if the patient is not cooperative, in this case perform a focused assessment, including: <ul style="list-style-type: none"> <li>• vital signs,</li> <li>• bedside glucose check,</li> <li>• hydration,</li> <li>• any signs of infection</li> <li>• bladder scan</li> </ul> If possible, also perform a: <ul style="list-style-type: none"> <li>• neurological examination (level of consciousness, attention, visual fields, cranial nerve, motor deficits, pupils, jerks and flaps)</li> <li>• PR</li> </ul> | As per delirium             |
| <b>Oral intake, urine output, bowel chart</b> | Check for: <ul style="list-style-type: none"> <li>• limited oral intake,</li> <li>• poor urine output</li> <li>• constipation</li> </ul>   | As per delirium             |
| <b>Investigations</b>                         | <ul style="list-style-type: none"> <li>• See Investigation section below</li> </ul>  | As per delirium             |
| <b>Differential diagnosis</b>                 | <ul style="list-style-type: none"> <li>• Exclude any other possible causes of cognitive impairment (e.g. depression, stroke, Acquired Brain Injury)</li> <li>• Click here for how to differentiate between <a href="#">delirium, dementia and depression</a></li> </ul>  | As per delirium             |

| Assessment   | Delirium   | Dementia/Suspected Dementia   |
|--------------|--|---|
| <b>Tools</b> | <ul style="list-style-type: none"> <li>• 4AT (can be ordered on EMR)</li> <li>• CAM-ICU (can be ordered on EMR)</li> <li>• 3D-CAM</li> <li>• Mini Mental State Examination (MMSE)</li> </ul> | <b>Dementia/Suspected Dementia</b> <ul style="list-style-type: none"> <li>• Mini Mental State Examination (MMSE)</li> <li>• Abbreviated Mental Test (AMT) Montreal Cognitive Assessment (MoCA)</li> <li>• Rowland Universal Dementia Assessment Scale (RUDAS) for use with culturally and linguistically diverse patients (used with an interpreter)</li> </ul> <b>Suspected Dementia:</b> <ul style="list-style-type: none"> <li>• If dementia is suspected referral to the Rehabilitation and Aged Liaison Service geriatrician, a CDAMS (Memory Clinic) or for follow up by the general practitioner if being discharged.</li> </ul> |

# Delirium and Dementia in Hospital

## Investigations

1. Investigations can be found as a **GERI Dementia and Delirium Adult Order Set** on EMR

2. **Specific investigations include:**

|   |  |
|---|--|
| <p><b>Investigations</b><br/>(all patients)</p> | <p>(1) EMR -&gt; Orders -&gt; <b>GERI Dementia/Delirium Adult</b></p> <p>(2) <b>Specific investigations Pathology</b></p> <ul style="list-style-type: none"> <li>• Renal function, electrolytes including calcium, magnesium, phosphate</li> <li>• CRP</li> <li>• FBE</li> <li>• Blood glucose</li> <li>• Thyroid function</li> <li>• LFT</li> <li>• ECG/Troponin/CK (if indicated)</li> <li>• Drug levels (if indicated)</li> <li>• Blood gasses (if indicated)</li> <li>• Septic workup (if indicated) <b>Note:</b> FWT/MSU only if urinary symptoms are present but not as a screening test <a href="#">Investigations of suspected urinary tract infections (UTIs) in adults Clinical Guideline</a></li> </ul> <p><b>Imaging</b></p> <ul style="list-style-type: none"> <li>• CTB, MRIB (if indicated, screening rarely helpful)</li> <li>• CXR (if indicated)</li> </ul> <p>(3) <b>Special tests for investigating dementia</b></p> <ul style="list-style-type: none"> <li>• PET and/or SPECT scanning</li> </ul> |
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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 13 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

# Delirium and Dementia in Hospital

## Discharge Planning

Initiate discharge planning for patients with delirium and/or dementia early and involve the patient, family/carers and the multidisciplinary team.

The medical discharge summary must document strategies for managing persistent delirium and for preventing delirium recurrence. If the patient has dementia, the discharge summary must document any changes in cognition during the admission (including superimposed delirium). Ensure that support is in place before the patient is discharged.

If antipsychotic medication has been prescribed, include a plan for ongoing review and withdrawal.

Identify appropriate post-discharge follow up (GP, geriatrician, psycho-geriatrician, Cognitive, Dementia and Memory Service) and initiate referral if required.

Consider introducing [Advance Care Planning](#) to the person or their medical treatment decision maker / family / carer to support documentation for preferences regarding future care planning.

Provide Patient Friendly Discharge Information to the patient and their family/carers before they leave hospital. See Part C, 2a.

## Interventions

### *Non-pharmacological management*

Consider non-pharmacological management and implement for all patients at risk of *or* diagnosed with delirium, and for patients with dementia (see above under [Non-pharmacological prevention and management](#)) Non-pharmacological symptom management is evidence based whilst there is little evidence for pharmacological management.

### *Pharmacological management (chemical restraint) Patient >65 years*

Refer to [Acute Behavioural Disturbance Guideline](#)

## Principles:

The effective management of acute behavioural disturbance relies on six main components:

1. Assessment of level of agitation
2. Calm, non-pharmacological interventions before and in parallel with pharmacological approaches
3. Pharmacological agents based on level of agitation, single agent medication is preferred.
4. Post-acute agitation review and consultation/escalation
5. Identification and treatment of any underlying cause
6. Evaluation and documentation

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 14 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

*Assess the level of agitation using the Sedation Assessment Tool (SAT)*

| <b>SEDATION ASSESSMENT TOOL (SAT)</b> |                                     |                          |                            |
|---------------------------------------|-------------------------------------|--------------------------|----------------------------|
| <b>SCORE</b>                          | <b>RESPONSIVENESS</b>               | <b>SPEECH</b>            | <b>SCALE</b>               |
| <b>+ 3</b>                            | Combative, violent, out of control  | Continual loud outbursts | <b>+1 to +3 Agitation*</b> |
| <b>+ 2</b>                            | Very anxious and agitated           | Loud outbursts           |                            |
| <b>+ 1</b>                            | Anxious / restless                  | Normal / talkative       |                            |
| <b>0</b>                              | Awake / calm                        | Speaks normally          | <b>ZERO Normal</b>         |
| <b>- 1</b>                            | Asleep but rouses if name is called | Slurring or slowing      | <b>-1 to -3 Sedation</b>   |
| <b>- 2</b>                            | Responds to physical stimulation    | Few recognisable words   |                            |
| <b>- 3</b>                            | No response to stimulation          | Nil                      |                            |

PROMPT Doc No: SNH0018939 v6.0

Date loaded on PROMPT: 07/11/2011

Page 15 of 24

Review By: 30/11/2023

Version Changed: 27/11/2020

Document uncontrolled when downloaded.

Last Reviewed Date: 27/11/2020





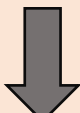
**Delirium and Dementia in Hospital**

**PHARMACOLOGICAL INTERVENTIONS**

**PATIENT AGED GREATER THAN 65 YEARS**

*Not for Use in patients with Parkinson's disease or Lewy Body Dementia (see notes)*

*Considerations for pharmacological interventions in the Intensive Care Unit (see notes)*

| SAT Score                             | +1 Mild   | +2 Moderate   | +3 Severe   |
|---------------------------------------|---|---|---|
| Step 1                                | <p><b>WHEN SAT SCORE +1 MILD AGITATION PHARMACOLOGICAL INTERVENTIONS NOT TO BE USED</b></p> <p>CONSIDER USING <b>Non-Pharmacological strategies</b></p>  | <p><b>Risperidone</b><br/>0.5 mg Oral</p> <p>wait 30 mins</p> <p><i>*Max dose 1.0mg/24 hours</i></p>                                     | <p><b>Olanzapine</b><br/>2.5 mg IM</p> <p>wait 15 mins</p> <p><i>*Max dose 5 mg/24 hours</i></p>   |
| Step 2<br><b>Review &amp; Consult</b> | <p><b>CONSULT</b></p> <p>CONTINUE USING <b>Non-Pharmacological strategies</b></p> <p>If Escalating<br/>Go to +2 Moderate Step 1</p>   | <p><b>MUST REVIEW PATIENT</b></p> <p><b>Risperidone</b><br/>0.5mg Oral</p> <p><i>*Max dose 1.0mg/24 hours</i></p> <p>wait 30 mins</p>  | <p><b>MUST REVIEW PATIENT</b><br/>Prior to second dose discuss with consultant or senior registrar)</p> <p><b>Olanzapine</b><br/>2.5 mg IM</p> <p><i>Max dose 5 mg/24 hours</i></p> <p>wait 15 mins</p>  |
| Step 3<br><b>Review &amp; Consult</b> |   | <p><b>Review Patient and Consult</b><br/>(if unresolved)</p> <p>If Escalating<br/>Go to +3 Moderate Step 1</p>  | <p><b>CODE GREY</b></p> <p>if not already called</p> <p>Further sedation as directed by Code Grey Team</p> <p><i>In Mental Health Units Contact Psychiatrist Treating /On-call Consultant</i></p>   |



# Delirium and Dementia in Hospital

**Please Note:**

This algorithm is not for use in patients with **Parkinson’s disease** or **Lewy Body Dementia**  
 Quetiapine 12.5mg- 25mg oral is recommended in these cases if IM sedation is required, escalate to the Senior Registrar or Consultant.

Quetiapine is frequently utilised in the **Intensive Care Unit** for agitated delirium due to the wide therapeutic index, shorter half-life, titratable response and fewer side effects at lower doses. Initial doses of 25mg twice daily with incrementing doses up to 300mg twice daily.

After pharmacological management monitor:

### Physical Monitoring

Document physical observations at baseline (if able) and post-sedation

- Sedation Assessment Tool score
- Pulse
- Blood Pressure
- Respiratory Rate
- Continuous oximetry with oxygen saturation (O2 sats) measured on room air
  - Action criteria are standard MET vital signs criteria.
- All patients must be monitored but use clinical judgement to determine appropriate monitoring when there is risk of re-activating the behaviour. Respiratory rate and pulse oximetry is less likely to disturb a sedated patient. Use [Adult Observation and Response Procedure](#)

### Referral for Specialist Assistance

At Monash Health, assistance with delirium management can be provided (in order of priority)

1. Rehabilitation and Aged Care (RALS) geriatrician and/or clinician
2. General Medicine registrar or consultant
3. Consultation Liaison Psychiatry if underlying psychiatric condition felt to be contributing to cognitive or behavioural disturbance
4. Drug and Alcohol Services as indicated

### Escalation of aggression or behaviours of concern

Patients with cognitive impairment including delirium and dementia are at a higher risk of manifesting aggressive behaviours or exhibiting behaviours that can put themselves or others at risk of harm. Consider adding a [Patient Clinical Alert](#) in the EMR.

The purpose of a Code Grey is to provide a response focused on early intervention and de-escalation, to safely manage aggressive incidents. The key focus is primarily to de-escalate rather than to use physical or mechanical restraint, which would only be used as a last resort. Refer to [Code Grey in Hospital](#) for guideline.

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 17 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

## Delirium and Dementia in Hospital

A patient’s behaviour can cause distress to staff members, ensure appropriate support and de-briefing processes are put in place. Consider the [Employee Assistance Program](#) for additional and confidential emotional and psychological support

### Family Escalation of Care

Family/carers are an integral part of caring for patients with delirium and dementia. If family report a change in a patient’s baseline cognition or function, re-administer the 4AT and follow process.

The bedside nurse or doctor is the first point of contact if family/carer is concerned or have noticed a change in their family member. Refer to [Family Initiated Escalation of Care](#) procedure, if family/carer’s concerns are not being resolved.

### Multidisciplinary Input for patients with Delirium, Dementia and Cognitive Impairment

A multidisciplinary approach is required for the prevention and management of delirium and dementia in hospital. Consider referrals to the following disciplines, based on individual needs identified.

#### Neuropsychology

Clinical Neuropsychologists have advanced skills in the assessment, diagnosis and treatment planning of cognitive and behavioural disorders across the lifespan. Neuropsychology input can formally characterise the nature and extent of cognitive impairment using sensitive, valid and reliable psychometric tests.

Neuropsychology can also assist with managing behaviours of concern with the development of Behaviour Support Plans (BSP) where appropriate.

Neuropsychology opinion is also useful in dementia work ups and diagnosis. As stated above, this best occurs as an outpatient when the possibility of superimposed delirium and/or other acute/reversible causes of cognitive impairment may be at play in the acute setting.

#### Occupational Therapy

Assist in development of individualised non-pharmacological strategies for prevention and management of delirium and behaviours of concern.

Environmental assessment and intervention based on individual strengths, interests and needs to optimise meaningful engagement in occupations and activities of daily living.

Further cognitive assessment with patients experiencing persistent cognitive impairment, via screening tools and/or functional assessments in the context of the individual’s occupational performance demands, environmental contexts and safety considerations.

Facilitate development of daily routines and strategies to enable optimal participation and safety in occupations following discharge, in consultation with family/carers.

Provide onward referral to community-based services to provide individual and family/carers with ongoing strategies within the context of own home/community environment.

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 18 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

# Delirium and Dementia in Hospital

## Physiotherapy

Assist in development of individualised non-pharmacological strategies for prevention and management of delirium and behaviours of concern

Assess, monitor and optimise mobility and appropriate mobility aids

Facilitate exercise programs to maintain function and prevent decline

Assist in mobilisation of patients with delirium as a management strategy.

## Social Work

Assess patient’s psychosocial background, living conditions, finance management, presence of Power of Attorney via liaison with family, carers, community Case Manager

Provide support to both patient and carer/family, as having delirium, dementia or a cognitive impairment can cause significant distress.

## Speech Pathology

Assess communication and develop personalised strategies to allow the family/carer and multidisciplinary team to optimise communicative exchange with patients, utilising alternative and augmentative (AAC) devices, where relevant.

Assess and manage cognitive-communication deficits to maximise patients’ participation in functional communicative activities, particularly in cases of new or persisting cognitive impairment.

Assessment and management of dysphagia, particularly for patients in acute delirium or with end-stage dementia.

## Dietetics

Dehydration, malnutrition and constipation are identified causes of delirium. Individualised nutrition menu plans, including advice on additional food options, nutritional supplements and monitoring provided by a dietitian, can prevent the nutritional consequences of and contributors to delirium for at-risk individuals.

## Audiology

Assess for hearing impairment

Facilitate referral for hearing aid assessment or other intervention if required

Advice on assistive listening devices.

## Considerations in the Intensive Care Unit

The incidence of delirium in intensive care is up to 50-80%. The assessment and management has evolved to accommodate some of the characteristics inherent to ICU.

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 19 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

## Delirium and Dementia in Hospital

The assessment of pain, analgesia and sedation happens sequentially with the use of the pain assessment tools dependant on the patient’s situation (Visual scores or Critical Care Pain observation tool) and RASS score (Richmond agitation and sedation score).

A target RASS is set daily on the consultant ward round with assessment and documentation every 4 hours by bedside staff. If required, adjustments are then made first to analgesia and then sedation, to achieve a calm, comfortable and co-operative patient able to engage in active management focusing on non-pharmacological interventions and promotion of a natural sleep/wake cycle.

A RASS score and ability to communicate precipitates a delirium screening test. The CAM-ICU (Confusion Assessment Method for the Intensive Care Unit) is performed 12 hourly at a minimum, coinciding with a nursing shift.

The management in ICU of delirium is focused on patient and staff safety. The concerns around critical illness and therapies involved often require a lower threshold for pharmacological and mechanical restraints.

All efforts are made to ensure non-pharmacological adjuncts such as day night routines, re-orientation and family support and attendance.

Multimodal analgesia, titratable sedation and mechanical restraint are escalated after taking the many patient requirements and contra-indications into consideration. Avoidance of delirium inducing medications and discharge planning are carefully considered.

Delirium diagnoses during ICU must to be included in the transfer summary in the EMR prior to transfer.

### Considerations for Aboriginal and Torres Strait Islander People

Aboriginal and Torres Strait Islander people can experience cognitive impairment at an earlier age than the general population.

Consider the use of the Kimberley Indigenous Cognitive Assessment ([KICA-COG Regional Urban](#)) as a screening tool for cognitive impairment. Always involve the patient and their family when conducting an assessment to ensure the language is appropriate to their community.

Aboriginal and Torres Strait Islander people can have broader family structures and social support structures can include Aunties and Uncles who are not biological relations but play an important role of caregiving in the Aboriginal and Torres Strait Islander community.

Ensure the care plan is culturally sensitive, developed with the patient, their family and the Aboriginal Hospital Liaison officer.

Further information can be found at Dementia Australia <https://www.dementia.org.au/resources/for-aboriginal-and-torres-strait-islander-communities> and Aboriginal Victoria <https://www.aboriginalvictoria.vic.gov.au/>

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 20 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

## Delirium and Dementia in Hospital

### Considerations for culturally and linguistically diverse (CALD) populations

Recognise and be responsive to the cultural and linguistic needs of CALD patients with a diagnosis of delirium, and their families and carers.

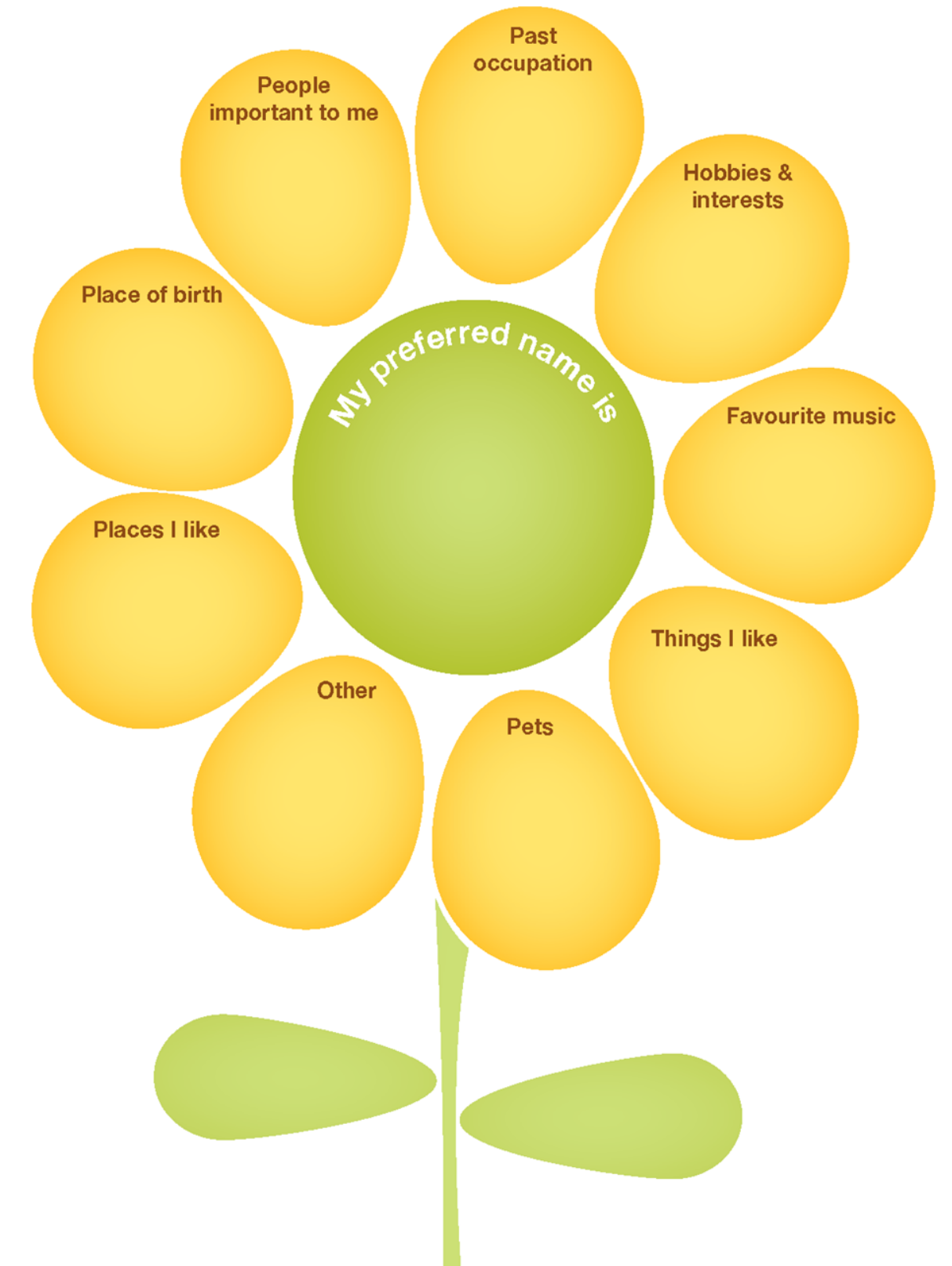
Involve the patient's family / carers in providing information about the patient's usual behaviour, within the cultural context.

Interpreting services must be used during the assessment and to assist with risk and behaviour management

See Monash Health's [Cultural Diversity](#) Policy for more information.

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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 21 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

Sunflower Tool



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|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 22 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

## REFERENCES AND FURTHER READING

Australian Commission on Safety and Quality in Health Care. [A better way to care: Safe and high-quality care for patients with cognitive impairment \(dementia and delirium\) in hospital – Actions for clinicians](#). Sydney; ACSQHC, 2014.

Australian Commission on Safety and Quality in Health Care. [Delirium Clinical Care Standard](#). Sydney; ACSQHC, 2016.

Calver LA, Stokes B, Isbister GK. Sedation assessment tool to score acute behavioural [sic] disturbance in the emergency department. *Emergency Medicine Australasia*. 2011 Aug 30;23(6):732–40.

Dementia Australia. *Dementia Language Guidelines*. Dementia Australia, 2018. Accessed from <https://www.dementia.org.au/resources/dementia-language-guidelines-May-2019>

Dementia Collaborative Research Centre, 2012. *Behaviour Management – A Guide to Good Practice. Managing Behavioural and Psychological Symptoms of Dementia*. Accessed from [http://www.dementiaresearch.org.au/images/dcrc/output-files/328-2012\\_dbmas\\_bpsd\\_guidelines\\_guide.pdf](http://www.dementiaresearch.org.au/images/dcrc/output-files/328-2012_dbmas_bpsd_guidelines_guide.pdf) October 2016.

Department of Health and Human Services. (2119, January). [A guide to the Medical Treatment Planning and Decision Act 2016 for health practitioners](#) (2<sup>nd</sup> Edition.)

National Institute for Health and Clinical Excellence. Delirium: diagnosis, prevention and management; Clinical Guideline 103. London: NICE, 2010. Accessed from <https://www.nice.org.uk/guidance/cg103> May 2019

Scottish Intercollegiate Guidelines Network (SIGN). [Risk reduction and management of delirium. Edinburgh: SIGN; 2019.](#)

(SIGN publication no. 157). [March 2019]. Available from <http://www.sign.ac.uk>

World Health Organisation and Alzheimer’s Disease International. *Dementia: a public health priority*. Geneva: World health Organisation 2012. Accessed from [https://www.who.int/mental\\_health/publications/dementia\\_report\\_2012/en/](https://www.who.int/mental_health/publications/dementia_report_2012/en/) May 2019

MacLulich, A. 4AT rapid clinical test of delirium. Version 1.2 October 2014 Accessed from <http://www.the4at.com> June 2020

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| PROMPT Doc No: SNH0018939 v6.0    |  |                                |
| Date loaded on PROMPT: 07/11/2011 | Page 23 of 24                          | Review By: 30/11/2023          |
| Version Changed: 27/11/2020       | Document uncontrolled when downloaded. | Last Reviewed Date: 27/11/2020 |

| Document Governance   |  |            |
|---|--|------------|
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| <b>Committee Responsible</b>  | Delirium, Dementia and Cognitive Impairment Committee (reporting to National Standards 5 Comprehensive Care Committee)         |            |
| <b>Document Author</b>  | Doctor Julie Lustig, Deputy Service Director Rehabilitation and Aged Care Services<br>Brianna Walpole, Cognition Clinical Lead |            |
| <b>Consumer Review</b>  | <b>Yes</b>   | 14/07/2020 |
| <b>This Guideline has been endorsed by an EMR Subject Matter Expert (SME)</b> | There are no Order Set or Quick Reference Guides linked  |            |