AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE





Delirium Clinical Care Standard

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AUSTRALASIAN DELIRIUM ASSOCIATON



Australasian College for Emergency Medicine





The Royal Australian & New Zealand College of Psychiatrists



ANZCA Australian and New Zealand College of Anaesthetists



Australian College of Rural & Remote Medicine WORLD LEADERS IN RURAL PRACTICE



















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Delirium Clinical Care Standard

Quality statements

Early identification of risk

A patient with any key risk factor for delirium is identified on presentation and a validated tool is used to screen for cognitive impairment, or obtain a current score if they have known cognitive impairment. Before any planned admission, the risk of delirium is assessed and discussed with the patient, to enable an informed decision about the benefits and risks.

2 Interventions to prevent delirium

A patient at risk of delirium is offered a set of interventions to prevent delirium and is regularly monitored for changes in behaviour, cognition and physical condition. Appropriate interventions are determined before a planned admission or on admission to hospital, in discussion with the patient and their family or carer.

Patient-centred information and support

A patient at risk of delirium and their family or carer are encouraged to be active participants in care. If a patient is at significant risk or has, delirium, they and their family or carer are provided with information about delirium and its prevention in a way that they can understand. When delirium occurs, they receive support to cope with the experience and its effects.

4

Assessing and diagnosing delirium

A patient with cognitive impairment on presentation to hospital, or who has an acute change in behaviour or cognitive function during a hospital stay, is promptly assessed using a validated tool by a clinician trained to assess delirium. The patient and their family or carer are asked about any recent changes in the patient's behaviour or thinking.

A diagnosis of delirium is determined and documented by a clinician working within their scope of practice.

5 6 7

Identifying and treating underlying causes

A patient with delirium is offered a set of interventions to treat the causes of delirium, based on a comprehensive assessment that includes relevant multidisciplinary consultation.

Preventing complications of care

A patient with delirium receives care to prevent functional decline, dehydration, malnutrition, falls and pressure injuries, based on their risk.

Avoiding use of antipsychotic medicines

Antipsychotic medicines are not recommended to treat delirium. Behavioural and psychological symptoms in a patient with delirium are managed using non-drug strategies.

8 Transition from hospital care Before a patient with persistent

Before a patient with persistent or resolved delirium leaves hospital, an individualised comprehensive care plan is developed collaboratively with the patient and their family or carer. The plan describes the patient's post-discharge care needs and includes strategies to help reduce the risk of delirium and related complications, a summary of changes in medicines and any other ongoing treatment. This plan is provided to the patient and their family or carer before discharge, and to their general practitioner and other regular clinicians within 48 hours of discharge.

Indicators for local monitoring

The following indicators will support health service organisations to monitor how well they are implementing the care recommended in this clinical care standard. The indicators are intended to support local quality improvement activities.



Early identification of risk

Indicator 1a: Evidence of a locally approved policy that defines the process for delirium risk identification, screening and assessment. The policy should specify the:

- Process to identify patients who have risk factors for delirium
- Process to inform at-risk patients and their family or carer about the risk of delirium and to encourage participation in care
- Local delirium screening and assessment pathway
- Endorsed validated tools for screening and assessment, and the process for documenting the results
- Process to ensure staff are trained and competent in the use of the policy and the endorsed screening and assessment tools
- Process to assess adherence to the policy.

Indicator 1b: Proportion of admitted patients aged 65 years or older or 45 years or older for Aboriginal and Torres Strait Islander people who were screened for cognitive impairment using a validated tool within 24 hours of presentation to hospital.

2

Interventions to prevent delirium

Indicator 2: Evidence of a locally approved policy to ensure interventions are implemented to prevent delirium for at-risk patients. The policy should specify the:

- Interventions available, and the patient groups and settings where they are appropriate
- Process to partner with patients and their family or carers to select and implement interventions
- Process to monitor changes in behaviour, cognition and physical condition
- Process to ensure clinicians are trained and competent in providing the interventions
- Process to assess adherence to the policy.



Assessing and diagnosing delirium

Indicator 4a: Proportion of admitted patients who screened positive for cognitive impairment on presentation to hospital who were then assessed for delirium using a validated tool.

Indicator 4b: Evidence of a locally approved policy that defines the process for monitoring rates of delirium and improving documentation of delirium. The policy should specify the:

- Process to monitor rates of delirium
- The information that must be documented in the patient's medical record if delirium is diagnosed
- Process to monitor and improve the documentation of delirium.

5

Identifying and treating underlying causes

Indicator 5a: Proportion of patients with delirium who had a comprehensive assessment that includes relevant multidisciplinary consultation to investigate the cause(s) of delirium.

Indicator 5b: Proportion of patients with delirium who received multicomponent interventions to treat delirium.

6 Preventing complications of care

Indicator 6a: Proportion of patients with delirium who were assessed for risk of functional decline, dehydration, malnutrition, falls and pressure injuries.

Indicator 6b: Proportion of patients with delirium who experienced dehydration, malnutrition, a fall resulting in fracture or other intracranial injury or a pressure injury during their hospital stay.

7

Avoiding use of antipsychotic medicines

Indicator 7: Proportion of patients with delirium who were prescribed antipsychotic medicines in hospital.

8 Transition from hospital care

Indicator 8a: Proportion of patients with current or resolved delirium who had an individualised comprehensive care plan on discharge.

Indicator 8b: Proportion of patients aged 65 years or older or 45 years or older for Aboriginal and Torres Strait Islander people who experienced delirium in hospital and were readmitted for delirium within 10 days.

The definitions required to collect and calculate indicator data are online at **meteor.aihw.gov.au/content/ index.phtml/itemld/745804**. More information about indicators and other quality improvement measures is in Appendix B.

Clinical care standards

Clinical care standards support the delivery of evidence-based clinical care and promote shared decision making between patients, carers and clinicians. They aim to ensure people receive best practice care for a specific clinical condition or procedure, regardless of where they are treated in Australia.

A clinical care standard contains a small number of quality statements that describe the expected clinical care for the clinical condition or procedure. Indicators are included for some quality statements to assist health service organisations monitor how well they are implementing the care recommended in the clinical care standard.

A clinical care standard differs from a clinical practice guideline. Rather than describing all the components of care for a specific clinical condition or procedure, a clinical care standard focuses on key areas of care where the need for quality improvement is greatest.

Clinical care standards aim to improve healthcare outcomes by describing key components of appropriate care, enabling:

- Patients and the community to understand the care that is recommended and their healthcare choices
- Clinicians to provide best-practice care
- Health service organisations to monitor their performance and make improvements in the care they provide.

Clinical care standards are developed by the Australian Commission on Safety and Quality in Health Care (the Commission), an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care, based on the best available evidence. By working in partnership with the Australian Government, states and territories, the private sector, clinical experts, and patients and carers, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care.

About the Delirium Clinical Care Standard

Context

Delirium is a serious condition associated with increased mortality^{1,2,3} which is often under-recognised. In 2019–20, the rate of delirium as a hospital-acquired complication (HAC) was 35.7 per 10,000 admissions in Australia⁴, and it is the most common of the set of HACs identified by the Commission.⁵ The cost associated with delirium in Australia in 2016–17 was estimated to be \$8.8 billion.⁶

This clinical care standard was initially developed in 2016 and has been widely implemented in Australian hospitals since then. The 2016 standard built on other work undertaken by the Commission, such as the cognitive impairment program and the Better Way to Care resources7; and state and territory-based initiatives such as the Care of Confused Hospitalised Older Persons (CHOPS) program (New South Wales)⁸ and the Older People in Hospital resource (Victoria).9 This revised clinical care standard complements the Comprehensive Care Standard in the National Safety and Quality Health Service Standards (second edition), which requires health service organisations to incorporate best-practice strategies for the early recognition, prevention, treatment and management of cognitive impairment in their systems of care, including the Delirium Clinical Care Standard.

This clinical care standard describes the key components of care that patients can expect when they have delirium. It supports the provision of high-quality, evidence-based care.

Although the standard applies to all healthcare services providing care for patients with delirium, implementation should consider the context in which care is provided, and local variation and the quality improvement priorities of the individual health service organisation. In rural and remote settings, different strategies may be needed to implement the standard, such as hub-and-spoke models integrating larger and smaller health services and using telehealth consultations.

Goal

To improve the prevention of delirium in patients at risk and the early diagnosis and treatment of patients with delirium, so that the incidence, severity and duration of delirium are reduced.

Scope

The *Delirium Clinical Care Standard* relates to the care that adult patients (18 years and older) with suspected delirium – or are at risk of developing delirium – should receive, from presentation to hospital through to their transition to primary care.

Many quality statements in the *Delirium Clinical Care Standard* also apply to patients with delirium receiving palliative or end-of-life care. Specific guidance on the management of delirium in patients receiving palliative care should also be consulted if appropriate.

What is not covered

The care of patients with delirium tremens (alcohol or substance withdrawal delirium) is outside the scope of this clinical care standard. Specific guidance on the management of delirium tremens exists and should be consulted if appropriate.^{10,11}

This clinical care standard does not cover the care of children and young people (under the age of 18 years) with suspected delirium; however, several of the prevention and management strategies used for the adult population are relevant to children, such as providing a supportive environment and actively involving families.¹²

Pathway of care

Although this clinical care standard applies primarily to the care received by patients in hospitals, it can also be adapted for use in residential aged care services. For example, a change in location or in the clinical condition of a patient may increase the risk of delirium and prompt the need for the interventions described in the standard.

In this document, the term 'clinician' refers to all types of healthcare providers who deliver direct clinical care to patients, including:

- Doctors
- Nurses
- Midwives
- Pharmacists
- Allied health professionals
- Nurse practitioners
- Aboriginal and Torres Strait Islander health workers or practitioners
- Paramedics.

Updates in 2021

A review of the evidence sources used to develop the first *Delirium Clinical Care Standard* was undertaken for this update. The United Kingdom's National Institute for Health and Clinical Excellence (NICE) guideline was revised in 2019 and the Scottish Intercollegiate Guidelines Network (SIGN) national clinical guideline was released in 2019. The revised clinical care standard aligns the quality statements and indicators to the evidence base and current practice.

Key changes in the current version include:

- Adding Quality statement 3: Patient-centred information and support, a new quality statement regarding information and support to reduce the distress and severity of symptoms of delirium
- Changes to Quality statement 6: Preventing complications of care to include the risks of functional decline, malnutrition and dehydration for those with delirium rather than only the risk of falls and pressure injuries
- Changes to Quality statement 7: Avoiding use of antipsychotic medicines to reflect current evidence that the routine use of antipsychotic medicines is not recommended for a patient with delirium.

Minor changes were also made to wording in other quality statements. The order of Quality statements 2 and 3 from the 2016 version has also changed, to follow the patient pathway of care.

Evidence that underpins this clinical care standard

Key sources that underpin the *Delirium Clinical Care Standard* are the:

- Clinical Practice Guidelines for the Management of Delirium in Older People¹³
- NICE guideline: Delirium: Prevention, diagnosis and management¹
- SIGN national clinical guideline: Risk Reduction and Management of Delirium.¹⁴

A list of the evidence sources for this clinical care standard is available on the Commission's website at www.safetyandquality.gov.au/delirium-ccs.

Supporting documents

Clinical care standard resources

The following supporting documents for this clinical care standard are available on the Commission's website at **safetyandquality.gov.au/delirium-ccs**.

These include the:

- Clinician fact sheet
- Consumer guide
- Health service organisation information sheet.

Other Commission resources

The Commission has developed the following relevant resources:

- NSQHS Standards User Guide for Health Service Organisations Providing Care for Patients with Cognitive Impairment or at Risk of Delirium¹⁵
- A Better Way to Care Actions for clinicians¹⁶
- Cognitive Impairment: Actions for clinicians fact sheet¹⁷
- Cognitive Impairment: Actions in the National Safety and Quality Health Service Standards¹⁸
- Hospital-Acquired Complication 11. Delirium fact sheet short¹⁹ and long²⁰
- My Healthcare Rights: A guide for people with cognitive impairment²¹
- Cognitive impairment in the NSQHS Standards.

The Commission's **cognitive impairment resources** web page includes details on how to use the resources to improve the quality of care.

Other resources

The following resources are also available:

- ACI Aged Health Network: Key principles for Care of Confused Hospitalised Older Persons (NSW)⁸
- <u>ACI's delirium brochure</u>, available in 15 languages
- Older people in hospital (Victoria)⁹
- Delirium Collaborative (Safer Care Victoria)
- The Commission has developed the following relevant resources:
- 'Delirium' in *Therapeutic Guidelines: Psychotropic* [subscription required].¹¹

How to use this clinical care standard

The quality statements describe the expected standard for key components of patient care. By describing what each statement means, they support:

- Patients to know what care may be offered by their healthcare system, and to make informed treatment decisions in partnership with their clinician
- Clinicians to make decisions about appropriate care
- Health service organisations to understand the policies, procedures and organisational factors that can enable the delivery of high-quality care.

This clinical care standard should be implemented as part of an overall approach to safety and quality, incorporating the following principles and standards.

General principles of care

When applying the information contained in a clinical care standard, clinicians are advised to use their clinical judgement and to consider the individual patient's circumstances, in consultation with the patient or their support people.

This clinical care standard aligns with key principles that are the foundation for achieving safe, high-quality care including:

- Person-centred care and shared decision making
- Informed consent
- Cultural safety for Aboriginal and Torres Strait Islander people.

For more information and additional Commission resources, see <u>Appendix A</u>.

Measurement for quality improvement

Measurement is a key component of quality improvement processes. The Commission has developed a set of indicators to support clinicians and health services organisations to monitor how well they are implementing the care recommended in this clinical care standard. The indicators are intended to support local quality improvement activities. No benchmarks are set for these indicators.

The indicators are listed with the relevant quality statements. The definitions required to collect and calculate indicator data are available online at meteor.aihw.gov.au/content/index.phtml/ itemId/745804. More information about indicators and other quality improvement measures is provided in Appendix B.

Information on other quality measures including patient-reported outcome measures and patient experience measures is provided in **Appendix C**.

Meeting the requirements of national standards and accreditation

Implementing this clinical care standard as part of a quality improvement activity can help health services meet the requirements of the National Safety and Quality Health Service (NSQHS) Standards (second edition).

The relevant standards and actions include:

- Clinical Governance Standard: Actions 1.27b and 1.28
- Comprehensive Care Standard: Action 5.29
- Recognising and Responding to Acute Deterioration Standard: Actions 8.05 (a)(b)(c)(d) (e), 8.06 and 8.07.

Advisory AS19/01²³, released in April 2019, describes the minimum requirements to support the Recognising and Responding to Acute Deterioration Standard.

More information about clinical care standards and the NSQHS Standards (2nd ed.) is in **Appendix D**.

Background: Delirium

Delirium is an acute change in mental status that is often triggered by acute illness, surgery, injuries or adverse effects of medicines. It is more common among older patients in hospital, with a prevalence of 23% in general medical settings, but also occurs in other age groups.^{13,24,14} Prevalence is higher in critical care and hospital palliative care settings, and rates in residential aged care services exceed those in the general community.²⁴

Despite being a serious condition that is associated with increased mortality^{1,2,3}, delirium has been poorly recognised in Australian hospitals²⁵ and internationally.^{24,26} Prevention is the most effective strategy, but early intervention can also improve outcomes for patients with delirium.

Delirium is characterised by disturbances in consciousness, attention, cognition and perception that develop over a short period of time (usually hours to a few days).^{1,27} Patients with delirium may be agitated and restless (hyperactive delirium), or quiet and withdrawn (hypoactive delirium). Patients may also move between these two subtypes (mixed delirium).^{13,1}

Delirium is sometimes confused with dementia, but there are important differences. The onset of delirium is quick (over hours to a few days), and people with delirium often have disturbed consciousness and impaired attention. Symptoms also usually fluctuate. In contrast, onset of dementia is gradual. People with dementia are usually alert, and loss of cognition and related symptoms are slowly progressive.¹³ Dementia is a risk factor for delirium. This can complicate diagnosis, as some people who present to hospital with delirium may have underlying and undiagnosed dementia.¹³

The burden associated with delirium is high. Often a frightening and isolating experience²⁸, it is also associated with poor outcomes for patients.¹ Compared with patients of the same age without delirium, patients with delirium have an increased:

- Risk of death
- Length of stay
- Risk of falls
- Chance of being discharged to a higher dependency of care
- Chance of developing dementia.^{13,1,2}

About 10-18% of Australians aged 65 years or older have delirium at the time of admission to hospital, and a further 2-8% develop delirium during their hospital stay.^{25,29} In 2019–20, the rate of delirium as a hospital-acquired complication was 35.7 per 10,000 admissions.⁴ There are currently no data on the incidence of delirium among Aboriginal and Torres Strait Islander people. However studies have found high rates of dementia and cognitive impairment in some Aboriginal and Torres Strait Islander communities, often at a younger age compared with non-Indigenous Australians.^{30,31,32,33} These data suggest that delirium prevalence may also be greater than in the overall Australian population, and suggest a need for screening at a younger age for Aboriginal and Torres Strait Islander people. In 2016–17, hospitalisation rates for dementia in Aboriginal and Torres Strait Islander people were 1.5 times higher than for non-Indigenous people, and delirium superimposed on dementia (13%) was one of the most common dementia diagnoses.³⁴

Rates of delirium vary according to the healthcare setting, with rates of 30% or more in patients following heart or hip surgery¹³, and 50% or more in adult intensive care units, regardless of patient age.^{13,35,36}

Although delirium can occur in patients of any age, older patients with cognitive impairment, dementia, severe medical illness or a hip fracture are considered at greatest risk during a hospital admission.¹ The following also predispose older patients to develop delirium^{13,37}:

- Sensory impairment (difficulty in hearing or seeing)
- Infection
- The use of certain medicines or multiple medicines
- Abnormal serum sodium levels
- Urinary catheterisation
- Depression.

Because there is a greater risk of delirium after surgery in older people, it is important to discuss the risk – and potential effects – of delirium with the patient and their family or carer before planned surgery to enable fully informed decision-making and consent. Without appropriate screening, early detection is poor and many cases of delirium are missed.^{25,26} A United Kingdom point prevalence study conducted in 2018 found that higher screening rates were associated with five-fold higher recognition rates.³⁸ Delirium was less likely to be recognised in the very frail patient.³⁸

Delirium is preventable in more than a third of older people with risk factors.³⁹ Early identification of patients at risk is important so that effective interventions can be put in place.^{13,1} Prompt diagnosis and timely treatment of underlying causes are important for reducing the severity and duration of delirium, and risk of complications from it. Since the *Delirium Clinical Care Standard* was first released in 2016, Australian health service organisations have implemented systems to improve the assessment and management of delirium with several strategies, including developing and implementing delirium care pathways and ensuring that the family or carers are involved in the patient's care. One service demonstrated that implementing the standard resulted in an increase from 4.7% to 33.6% in the use of a screening tool and a significant decrease in the rate of delirium for people with a hip fracture.⁴⁰

The *Delirium Clinical Care Standard* aims to ensure that:

- Patients at risk of delirium are identified promptly and receive preventive strategies before or during a hospital admission
- Patients with delirium receive optimal treatment to reduce the duration and severity of the condition.

Clinicians and health service organisations can use this clinical care standard to support the delivery of high-quality care.

1

Quality statement 1 – Early identification of risk

A patient with any key risk factor for delirium is identified on presentation and a validated tool is used to screen for cognitive impairment, or obtain a current score if they have known cognitive impairment. Before any planned admission, the risk of delirium is assessed and discussed with the patient, to enable an informed decision about the benefits and risks.

Purpose

To ensure patients at risk of delirium who present to hospital or a pre-admission clinic are identified early so that appropriate assessment, management and preventive measures can be put in place. Screening provides a baseline for monitoring changes during a hospital stay for those at risk.^{13,41,42}

What the quality statement means

For patients

When you come to hospital or are planning admission for a procedure or other treatment, your clinician will check if you have any of the risk factors for delirium. If so, you will be offered a short screening tool to see if you have problems with:

- Your memory
- Putting your thoughts together
- Communicating with others.

In the screening tool, a clinician will ask you a series of questions. If you have any difficulties with these questions, you may be at risk of delirium. You and your carer or family will also be asked about any recent changes in your behaviour.

If you are planning surgery or a procedure and you are at risk of delirium, you will be advised about the risk and what this means for you. This can help you to make a decision about having the surgery or a procedure, especially if it is not essential.

For clinicians

Conduct a delirium risk assessment in the pre-admission clinic or within 24 hours of presentation to hospital for admitted patients. Identify key risk factors that include any of the following:¹

- Age ≥ 65 years (≥ 45 years for Aboriginal and Torres Strait Islander people⁸)
- Known cognitive impairment or diagnosed dementia
- A previous diagnosis of delirium
- A severe medical illness (a clinical condition that is deteriorating or is at risk of deterioration)
- Current hip fracture.

Patients with any of these risk factors should receive a validated screening test for cognitive impairment, which is recognised as a significant risk factor for developing delirium. Conducting cognitive screening on presentation to hospital helps identify patients who should be assessed for delirium and enables monitoring for delirium onset during a hospital stay by providing a baseline measure. This also applies to patients with known cognitive impairment. Offer screening for cognitive impairment using a validated tool that is culturally appropriate. (See 'Related resources' below.)

Assess the risk of delirium before a planned admission, particularly for surgical and procedural interventions. Patients and carers should be advised of their risk and potential consequences of developing delirium, to inform decision-making and consent and to help with management if delirium does develop.¹⁴

When screening identifies probable cognitive impairment, clinical assessment for delirium is necessary (see **Quality statement 4**). Note that a positive score on a screening tool is not a diagnosis, but a prompt for further assessment, early intervention and early family involvement.

For health service organisations

Ensure systems, policies and procedures are in place to identify risk of delirium within 24 hours of presentation, and to support routine screening of cognitive function for patients at risk of delirium who present to a health service and are admitted for care. A structured approach can improve detection rates.¹³ Identify and use a local delirium screening and assessment pathway. This includes ensuring the availability of locally agreed, validated delirium screening and cognitive screening tools that are appropriate to the cultural backgrounds of relevant communities and protocols for when they will be used. Ensure that the staff who use these tools are trained and competent in their use, and that workforce proficiency is maintained.

Ensure policies and procedures are in place to inform at-risk patients and their family or carer about the risk of delirium and to encourage participation in care.

Ensure pre-admission protocols and consent processes incorporate an assessment of the risk of delirium and discussion with the patient before surgery or another procedure, as part of their informed consent. The Commission's *Informed Consent in Health Care – Fact sheet for clinicians* can direct clinicians in obtaining valid informed consent.

Related resources

The 4AT has been validated both for screening for cognitive impairment and delirium assessment:

 4AT: Assessment test for delirium and cognitive impairment, available in 17 languages at the4at.com.^{43,44}

A range of other validated tools for screening for cognitive impairment are available – for example:

- Abbreviated Mental Test Score (AMTS), available at <u>aci.health.nsw.gov.au/chops/chops-key-principles/delirium-risk-identification-and-preventive-measures/resources-and-useful-links⁴⁵
 </u>
- Kimberly Indigenous Cognitive Assessment (KICA) tools, available at <u>dementiaresearch</u>. org.au/doms/cognition/.⁴⁶

The Commission's *Informed Consent in Health Care – Fact sheet for clinicians* is also available.

Indicators for local monitoring

Indicator 1a: Evidence of a locally approved policy that defines the process for delirium risk identification, screening and assessment. The policy should specify the:

- Process to identify patients who have risk factors for delirium
- Process to inform at-risk patients and their family or carer about the risk of delirium and to encourage participation in care
- Local delirium screening and assessment pathway
- Endorsed validated tools for screening and assessment, and the process for documenting the results
- Process to ensure staff are trained and competent in the use of the policy and the endorsed screening and assessment tools
- Process to assess adherence to the policy.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745807.

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Indicator 1b: Proportion of admitted patients aged 65 years or older or 45 years or older for Aboriginal and Torres Strait Islander people who were screened for cognitive impairment using a validated tool within 24 hours of presentation to hospital.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745810.

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.



Quality statement 2 – Interventions to prevent delirium

A patient at risk of delirium is offered a set of interventions to prevent delirium and is regularly monitored for changes in behaviour, cognition and physical condition. Appropriate interventions are determined before a planned admission or on admission to hospital, in discussion with the patient and their family or carer.

Purpose

To reduce the incidence of delirium among patients who are at risk, and to prevent complications of delirium, such as falls, and improve outcomes.³⁹ The regular monitoring of patients at risk of delirium can help to detect delirium promptly.¹³

What the quality statement means

For patients

If you are at risk of developing delirium, your clinicians will offer care to prevent it from happening. They may do things such as checking and changing your medicines, giving you more fluids or helping you stay as mobile as possible.^{13,1} Your family or carers will be encouraged to be involved in your care and will be given information about delirium and how to prevent it. You will also receive regular checks on your physical condition, thinking and memory (cognition). Cognition is the ability to put your thoughts together and communicate them.

For clinicians

Develop a delirium prevention plan, in partnership with the patient and family or carer, as part of a comprehensive care plan for those at risk of developing delirium.^{1,14}

Offer at-risk patients appropriate multicomponent interventions to prevent delirium, while considering clinical risk factors and the setting.^{13,47} Discuss the interventions being put in place and encourage family or carers to be involved (for example, to orient and reassure the patient). Ask the family or carer to alert the healthcare team to any changes in the patient's mental or physical condition. Educate patients and family or carers about delirium before it occurs, to reduce distress if it does occur.⁴⁸

Monitor patients regularly, at least daily for changes in cognition and behaviour, and for clinical deterioration.¹³ Risk of delirium is increased post-operatively. Conduct medication reconciliation before patients are transferred between locations, or phases of care (such as before moving between wards or transferring to another facility).

Interventions for preventing delirium are listed below. These should be used as part of a multicomponent intervention, for which evidence is stronger than for single-component interventions.⁴⁷ These also apply to patients with delirium^{1,13,14}:

- Communicate clearly. Identify yourself and explain to the patient what is happening.
 You may need to repeat yourself
- Use eye contact when culturally appropriate for example, this may be viewed as disrespectful or aggressive in Aboriginal and Torres Strait Islander culture⁴⁹
- Review medicines to identify any that may increase the risk of delirium and to discontinue them if appropriate
- Reconcile medicines before any transfers of care
- Perform mobilisation activities at least once or twice daily, and mobilise a patient early after a procedure
- Sit out of bed for meals
- Help patients who usually wear hearing or visual aids, and ensure that they are in good working order
- Maintain optimal hydration and nutrition, and encourage or help the patient as necessary (confirm dentures are in place)
- Regulate bladder and bowel function
- Regularly reorientate and reassure the patient
- Avoid moving the person within and between wards
- Use activities that help increase cognition for example, reminiscence
- Use non-pharmacotherapy measures to help promote sleep (such as relaxation techniques, and using earplugs in the intensive care unit [ICU])
- Maintain a quiet environment
- Make a clock and calendar available to the patient. This may be a clock on the wall or a familiar one from home
- Provide lighting that is appropriate to the time of day
- Use effective pain management. Assess pain regularly and provide pain relief strategies
- Provide oxygen therapy where appropriate.

For health service organisations

Ensure that policies, procedures and protocols are in place to enable clinicians to provide patients at risk of delirium with a multicomponent set of preventive strategies and to conduct regular monitoring. Ensure processes are in place for clinicians to partner with patients and their family or carers when determining and implementing interventions. Ensure that staff are trained and competent in providing care to prevent and manage delirium. Identify and implement a format for prevention plans for high-risk patients.⁵⁰

Ensure that systems are in place for medication reconciliation to occur whenever patients are transferred between locations of care, especially when transferring out of ICU or before discharge. This is to reduce the inappropriate continuation of short-term medicines.

Ensure that policies and procedures support environmental care strategies, such as reducing noise and avoiding ward moves wherever possible for patients at risk of delirium or with delirium.¹⁴

Ensure that equipment and devices, such as call bells, signs, calendars and clocks, are available to help orientate patients to decrease the risk of, or effectively manage, delirium.

Related resources

Some tools for assessing delirium may not be appropriate for repeat measurement and monitoring. Tools suitable for monitoring for incident delirium include¹⁴:

- Confusion Assessment Method ICU (CAM-ICU)
- Delirium Observation Screening (DOS) scale (13-item)
- Recognising Acute Delirium as Part of Your Routine (RADAR)
- Modified Richmond Agitation-Sedation Scale (mRASS)
- Single Question in Delirium (SQiD)
- Nursing Delirium Screening Scale (Nu-DESC).⁵¹

Other resources include:

- NSW ACI Aged Health Network: Care of Confused Hospitalised Older Persons (CHOPS)⁸
- Canterbury District Health Board: <u>THINK Delirium: Preventing delirium among older</u> people in our care. Tips and strategies from the Older Persons' Mental Health THINK Delirium Prevention Project.⁵²

Indicator for local monitoring

Indicator 2: Evidence of a locally approved policy to ensure interventions are implemented to prevent delirium for at-risk patients. The policy should specify the:

- Interventions available, and the patient groups and settings where they are appropriate
- Process to partner with patients and their family or carers to select and implement interventions
- Process to monitor changes in behaviour, cognition and physical condition
- Process to ensure clinicians are trained and competent in providing the interventions
- Process to assess adherence to the policy.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745812

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Quality statement 3 – Patient-centred information and support

A patient at risk of delirium and their family or carer are encouraged to be active participants in care. If a patient is at significant risk or has, delirium, they and their family or carer are provided with information about delirium and its prevention in a way that they can understand. When delirium occurs, they receive support to cope with the experience and its effects.

Purpose

To ensure that patients at risk of, or with, delirium receive information and support to reduce the distress and severity of symptoms. The patient's family or carer are also informed about delirium to help them understand what is happening, and are supported to be involved in the patient's care to improve outcomes.

What the quality statement means

For patients

If you are at risk of delirium, you and your family or carer will be given information and advice about delirium and how it can be prevented. You should be given this information in a way that you can understand it, whether it is written information or someone talking to you. Being prepared and acting early can help to reduce the effects of delirium. You and your family or carer will be encouraged to alert your healthcare team of any changes in your behaviour, thinking or physical condition. The health service organisation will have systems in place to take action if your health worsens. It is important that you and your family or carer know what to expect, what you can do if this happens and how to ask for help.

Your family or carer can provide valuable information to the clinicians caring for you and should be involved in your care if you wish them to be. An interpreter can be used for these conversations if required. If you develop delirium, the plan for your care will be discussed with you and your family or carer, and informed consent will be sought for any treatment you receive. The aim of your care will be to reduce your symptoms and any distress experienced with delirium.

People with delirium may^{24,50}:

- Appear confused and forgetful
- Be unable to pay attention
- Be different from their normal selves
- Be very agitated, quiet and withdrawn, sleepy, or a combination of these
- Have rapid and unpredictable mood changes
- Be unsure of the time of day or where they are
- Have changes to their sleeping habits, such as staying awake at night and being drowsy during the daytime
- Feel fearful, distressed, upset, irritable, angry or sad
- Have hallucinations and see frightening things that are not there but seem very real to them
- Lose control of their bladder or bowels
- Have delusions or become paranoid, and strongly believe things that are not true for example, they may believe that someone is trying to physically harm them or has poisoned their food.

These symptoms fluctuate during the day, and may worsen in the evening or night.

Family members or carers can support you because they are familiar to you. They can:

- Reassure you
- Remind you about eating and drinking
- Bring in familiar objects
- Help the healthcare team to get to know you and understand what you are normally like.

For clinicians

Inform patients, families and carers about the causes and symptoms of delirium. Ensure that interventions for preventing delirium, such as modifying the environment, are in place and understood by the patient and their family or carer. Explain how they can help with prevention and management if they are able to do so.

Recognise when to engage an interpreting service to ensure the patient, families and carers understand the information you are sharing with them. Family or friends may not be appropriate interpreters because of health privacy issues.

If a patient develops delirium, proactively assess their distress and inform them and their family or carer about the plans to treat and reduce the severity of symptoms and any distress experienced with delirium. Support patients to make their own decisions and to choose a support person to be involved in decisions. Ask patients specifically about fears or concerns, and about hallucinations. Reassure patients and help them feel safe.⁴⁸ It can be reassuring to patients and their family or carer to know the clinicians are informed about delirium and will take steps to help them avoid it, or to recognise and treat it early if it occurs.

Recognise that delirium is often a frightening, distressing and isolating experience that requires a gentle and friendly approach for the patient and family or carer.²⁸

For health service organisations

Ensure that systems are in place to support clinicians in providing person-centred care for those with, or at risk of, delirium. Consider flexible visiting arrangements to support family or carer involvement in delirium prevention and management.

Identify appropriate interpreting services and educate the workforce on how to use interpreters appropriately.

Ensure that systems are in place to recognise when a patient has cognitive impairment and to work with the person, families and carers in a safe, calm and respectful environment. The Commission has developed resources to support health service organisations to provide safe care for people with cognitive impairment during COVID-19, which can be found at **Cognitive impairment and COVID-19**.

Ensure that processes are in place for patients, carers or families to directly escalate care. Examples of good practice include the following:

- <u>Ryan's Rule</u> is a three-step process in place in Queensland public hospitals to support
 patients, their families and carers, to raise concerns if a patient's health condition is
 getting worse or not improving as well as expected.
- Call and Respond Early (CARE) (WA and ACT) is another example of allowing patients or their families and carers to call for rapid assistance when they feel that the healthcare team has not fully recognised the patient's changing health condition.
- <u>REACH (Recognise, Engage, Act, Call, Help is on its way)</u> (NSW) is a patient and family escalation system developed by the NSW Clinical Excellence Commission for New South Wales hospitals.

Related resources

Examples of patient information about delirium can be found at:

- Agency for Clinical Innovation: delirium brochures, available in 15 languages
- Scottish Intercollegiate Guidelines Network (SIGN): <u>Delirium: A booklet for people who</u> have experienced delirium, and for their carers.

Quality statement 4 – Assessing and diagnosing delirium

A patient with cognitive impairment on presentation to hospital, or who has an acute change in behaviour or cognitive function during a hospital stay, is promptly assessed using a validated tool by a clinician trained to assess delirium. The patient and their family or carer are asked about any recent changes in the patient's behaviour or thinking.

A diagnosis of delirium is determined and documented by a clinician working within their scope of practice.

Purpose

To improve the early diagnosis and timely treatment of patients with delirium for the best chance of recovery.

What the quality statement means

For patients

If you are in hospital and your symptoms suggest that you may have delirium, a clinician will assess you to see if you have delirium. They may ask if you or your family or carer have noticed any recent changes in your thinking or behaviour, such as being confused or agitated, or quieter, sleepier or less communicative than usual. If a family member or carer notices any sudden change in your mental or physical condition, it is important for them to alert a clinician. The clinician will discuss your diagnosis with you and your family or carer, and write down your diagnosis of delirium in your healthcare record. This will help other clinicians to care for you.

For clinicians

Using a validated tool, assess for delirium in:

- Patients with cognitive impairment on presentation to hospital
- Patients who have a sudden decline in cognitive function or change in behaviour during their hospital admission.^{18,13}

Seek information about the patient's usual mental status from the patient or their family or carer, general practitioner, or other primary care provider or similar. Ask about behavioural changes, such as:

- Confusion or worsened concentration
- Agitation or restlessness
- Sleepiness, including altered levels of consciousness
- Whether the patient has been less communicative or less responsive than usual
- Whether the patient has had difficulty cooperating with reasonable requests or has had other alterations in mood.¹

Family members or carers are often the best source of information about acute changes in a patient's mental status or behaviour.⁵³ As delirium symptoms can vary throughout the day, more than one assessment may be required to diagnose delirium.¹⁴

Identifying hypoactive, hyperactive or mixed cases of delirium is necessary to implement appropriate treatment strategies. Hypoactive delirium is more common in older people, but is often missed and has a worse prognosis than other subtypes of delirium^{54,55}, including worse long-term cognition when delirium has a longer duration.⁵⁶ Delirium is less likely to be recognised in patients with frailty or dementia.³⁸

Where delirium is detected, the diagnosis is determined and documented by a clinician working within their scope of practice. Document the diagnosis to aid in transfers of care, including in handover notes, referral and discharge letters. A history of delirium increases the risk of recurrence, and documenting an episode of delirium allows for preventive measures and monitoring for new delirium in subsequent healthcare encounters.^{1,14}

Discuss the diagnosis with the patient and their family or carer.¹

Current international clinical guidelines include validated delirium diagnostic tools, some of which require training to use the tool effectively.^{1,14}

For health service organisations

Ensure that systems, policies and processes are in place to support clinicians who are assessing patients with suspected delirium. The policy should ensure that a locally agreed, validated diagnostic tool for delirium is available and that clinicians are competent in its use. Educate clinicians on the use of the tool, including specified training where required and according to the tool chosen.

Develop and implement protocols for escalating care when acute deterioration occurs.

Ensure that protocols are in place to support accurate documentation and coding of delirium. Monitor rates of delirium to enable quality improvement. Awareness of delirium prevalence can assist in the effective planning of services, such as the capacity for adequate resourcing, which may include specialist nurses.

Related resources

Some examples of validated tools to assess for delirium include:

- 4AT Assessment test for delirium and cognitive impairment^{1,44,43}
- Confusion Assessment Method (CAM)^{53,57}
- Confusion Assessment Method for the Intensive Care Unit (CAM-ICU)⁵⁸
- 3D-CAM⁵⁹
- Delirium Observation Screening (DOS) scale
- Delirium Rating Scale-Revised-98 (DRS-R-98)
- Memorial Delirium Assessment Scale (MDAS)⁶⁰
- Nursing Delirium Screening Scale (Nu-DESC).

The current diagnostic standard for delirium is described in the *Diagnostic Statistical Manual* of Mental Disorders, Fifth Edition (DSM-5).⁶¹

Indicators for local monitoring

Indicator 4a: Proportion of admitted patients who screened positive for cognitive impairment on presentation to hospital who were then assessed for delirium using a validated tool.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745814

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Indicator 4b: Evidence of a locally approved policy that defines the process for monitoring rates of delirium and improving documentation of delirium. The policy should specify the:

- Process to monitor rates of delirium
- The information that must be documented in the patient's medical record if delirium is diagnosed
- Process to monitor and improve the documentation of delirium.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745816

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Quality statement 5 – Identifying and treating underlying causes

A patient with delirium is offered a set of interventions to treat the causes of delirium, based on a comprehensive assessment that includes relevant multidisciplinary consultation.

Purpose

To ensure patients with delirium receive timely and appropriate treatment for the underlying cause(s) of delirium.

What the quality statement means

For patients

If you are diagnosed with delirium, a clinician will carry out a medical check to identify what is causing the delirium and how best to treat it. You and your family or carer will be consulted as part of the assessment. This may include a physical examination, tests (such as blood or urine tests, chest X-ray), a check of the medicines you are taking and any recent changes to them, and checking whether you are in pain. You will receive treatments for anything that may be causing your delirium. For example, your medicines may be changed, you may be given more fluids or you may be given antibiotics if you have an infection.

For clinicians

Carry out a comprehensive assessment of the patient, in consultation with the patient and their family or carer, to identify possible causes of delirium.^{13,1} Seek a patient summary from the patient's general practitioner to help inform the investigation. A comprehensive assessment involves:

- A medical and social history, paying close attention to the patient's medication history, including adverse reactions, their pain management needs, and their hydration and nutritional status
- A physical examination
- Investigations, informed by the medical history and physical examination
- Consultation with other clinicians with relevant expertise (such as a geriatrician, psychiatrist, dietitian), whenever possible. In rural and remote health services this could be facilitated by using telehealth when information technology systems allow.

Start treatment based on the cause when it can be identified. Ensure that the multicomponent interventions recommended for preventing delirium are also in place to manage delirium, including involving family or carers and modifying the environment (see **Quality statement 2**). Prevention is the most effective strategy, but outcomes for patients with delirium can also be improved by early intervention. Monitor patients regularly for changes in cognition and behaviour, including clinical deterioration.

For health service organisations

Ensure that systems and processes are in place to support clinicians in identifying and treating the causes of delirium. Ensure that arrangements support multidisciplinary assessment, including telehealth consultation with clinicians, such as dietitian, nurse practitioner, geriatric medicine or psychiatry consultants when required.

Within a local health region, consider the hub-and-spoke organisation design model to support the provision of multidisciplinary assessment to rural and remote health services. The relationship between the larger hospital (hub) and the rural facility (spoke) could be structured to suit local arrangements, using information and communication technologies.

Provide regular training for staff on strategies to prevent and treat delirium.

Indicators for local monitoring

Indicator 5a: Proportion of patients with delirium who had a comprehensive assessment that includes relevant multidisciplinary consultation to investigate the cause(s) of delirium.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745818

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Indicator 5b: Proportion of patients with delirium who received multicomponent interventions to treat and manage delirium.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745820

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

6

Quality statement 6 – Preventing complications of care

A patient with delirium receives care to prevent functional decline, dehydration, malnutrition, falls and pressure injuries, based on their risk.

Purpose

To minimise the risk of complications of care for patients with delirium.

What the quality statement means

For patients

If you have delirium, your care will include a plan to keep your physical health from getting worse while you are in hospital or another health service organisation. The plan includes ways to prevent falls and having an injury from a fall, such as wearing safe footwear or hip protectors, and care to prevent pressure injuries. You will be offered a nutritious diet to prevent malnutrition and dehydration. You will be encouraged to keep mobile. Your family or carers are encouraged to be involved in your care.

For clinicians

If a patient has delirium, assess, monitor and document their risks of:

- Functional decline
- Falling and being harmed from a fall
- Developing a pressure injury, dehydration or malnutrition.

Put in place interventions tailored to their risk, in consultation with other clinicians, the patient and their family or carer. Examples of interventions for falls prevention can include reorientation, appropriate lighting and ensuring that patients are using their eyeglasses or hearing aids.^{1,14} To lessen the risk of functional decline, encourage mobility and self-care with assistance as necessary.^{62,63}

Assist patients as required throughout the day to ensure that they maintain optimal nutrition and hydration. Ensure dentures are fitted correctly, particularly at mealtimes. For patients at risk of malnutrition, arrange for a dietitian to assess and manage them.

For health service organisations

Ensure that systems and policies are in place to support clinicians to identify and manage the risk of functional decline, falls, pressure injuries, malnutrition, dehydration and other complications for patients with delirium. This includes implementation of the National Safety and Quality Health Service Standards (second edition).⁶⁴

Ensure that appropriate resources and equipment are available to decrease the risk of complications (such as low-rise beds for falls prevention).

Indicators for local monitoring

Indicator 6a: Proportion of patients with delirium who were assessed for risk of functional decline, dehydration, malnutrition, falls and pressure injuries.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745822

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Indicator 6b: Proportion of patients with delirium who experienced dehydration, malnutrition, a fall resulting in fracture or other intracranial injury or a pressure injury during their hospital stay.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745824

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Quality statement 7 – Avoiding use of antipsychotic medicines

Antipsychotic medicines are not recommended to treat delirium. Behavioural and psychological symptoms in a patient with delirium are managed using non-drug strategies.

Purpose

To prevent inappropriate prescribing of antipsychotic medicines in patients with delirium and to ensure that non-drug strategies are the mainstay of care.

What the quality statement means

For patients

If you have delirium and you are distressed, your healthcare team will investigate what is causing your distress and reassure you, and address anything that is disturbing you, such as pain, discomfort or noise. Your family or carers will be encouraged to be involved in your care.

Antipsychotic medicines (such as the active ingredients quetiapine, olanzapine and risperidone) are not usually recommended, because they do not help to treat the underlying cause of delirium and their side effects can result in serious harm.⁶⁵ They may be considered if you are likely to harm yourself or others, and if it is not possible to reduce your distress in other ways. In this case, a clinician may discuss using an antipsychotic medicine at a low dose for a short time. A single dose may be enough. When an antipsychotic medicine is being considered for this reason, your clinician will discuss with you and your family or carer the choice of antipsychotic medicine, its side effects and benefits, dose, and how long you need to take it for.

Use of devices that restrict movement is avoided whenever possible.

For clinicians

If a patient with delirium has severe behavioural or emotional disturbance:

- Investigate possible causes by conducting a comprehensive assessment that includes a medication review. Identify medicines that are known to contribute to delirium and adjust if appropriate, such as medicines with anticholinergic or sedative properties. Ensure that any medical causes for distress and agitation, such as pain, constipation, urinary retention and hypoxia, are treated
- Reassure the patient and offer non-drug strategies involving family or carers, if possible, or one-on-one nursing – to calm the patient and de-escalate the situation^{5,6,42}
- Obtain information about the patient, their needs and preferences, and ways to reduce distress. If the patient cannot provide the information themselves, engage with family or carers, and use a structured tool such as the TOP 5 model⁶⁶
- Ensure that the environment is safe for the patient and that noise is minimised, and the
 patient is observed without the staff invading their personal space^{13,67}

- Use verbal and non-verbal techniques to de-escalate the situation, such as:
 - being respectful
 - introducing yourself and using their title rather than their given name if the patient does not know you
 - talking slowly and calmly
 - not disagreeing with the patient
 - asking questions and listening to the answers
 - expressing empathy and concern to show that you have understood
 - inclining your head slightly, to show you are listening and to give you a non-threatening posture
 - acknowledging their feelings and that the situation they find themselves in is frightening or distressing
 - providing a distraction
- Avoid using physical or mechanical restraints, as they can increase agitation, prolong delirium and increase the risk of injury.^{68,69}

Evidence does not support the routine use of antipsychotics for treating delirium.⁶⁵ However short-term antipsychotic use may be considered in limited circumstances – for instance, when non-drug strategies are unsuccessful and there is an imminent risk of the patient harming themselves or others. In such cases, assess the potential harms and benefits of prescribing an antipsychotic^{13,22,70,71} and, whenever possible, discuss the use of the medicine with the patient and family and obtain informed consent. Use the lowest appropriate dose for the shortest possible duration, as described in *Therapeutic Guidelines: Psychotropic.*²² A single dose is usually enough. When an antipsychotic medicine has been used in an emergency situation, discuss the use with the patient and their family or carer, so they understand why it was used.

If an antipsychotic is prescribed for a longer duration (more than a single dose), document the plan for the duration of therapy and the criteria for cessation – that is, the change in behaviour to be achieved. Advise the patient and their family or carer that longer-term use of antipsychotics has a greater risk of harm than of benefit, except in limited circumstances. Provide information on the process for review and monitoring the use of the medicine.²²

Arrange psychiatry or geriatric review for a patient with delirium who has other indications for antipsychotic use, or who has an existing prescription for antipsychotics.

Over-sedation can have serious consequences, such as dehydration, falls, respiratory depression, pneumonia and death. People with Parkinson's disease or with Lewy body dementia are at an increased risk of severe adverse reactions from antipsychotics.¹ Avoid benzodiazepines when managing delirium, as complications are common and long-acting benzodiazepines increase delirium.^{22,72}

For health service organisations

Ensure that policies and systems are in place to treat delirium and to support using non-drug strategies as first-line therapy. The policies should include guidance about the non-drug strategies to be tried, evaluated and documented. These may include patient specialling (cohort care or one-on-one nursing), using specialist delirium/dementia care nurses with expertise in behaviour interventions, and involving family or carers.^{13, 67} Provide regular training for clinicians on de-escalation techniques and other non-drug strategies.

Ensure that clinicians have access to guidance about:

- The potential harms of antipsychotic medicines and current recommendations for their use in delirium
- Appropriate prescribing when there is an imminent risk of self-harm or harm to others, including the appropriate choice of antipsychotic, and dose and duration (such as described in *Therapeutic Guidelines: Psychotropic*).²²

Policies should describe the process followed for when an antipsychotic is being considered for a patient at risk of harming themselves or others. The process should include documenting:

- The non-drug strategies tried
- How the patient and family will be advised and provide informed consent
- The process for review, monitoring and cessation of the medicine, including review before discharge.

If antipsychotic use occurs in an emergency context, the policy should ensure that the patient and family or carer are advised.

Ensure that discharge communication to primary care clinicians and care providers, the patient and their family or carer is accurate, to prevent inadvertent continuation of antipsychotics used acutely.

Ensure that systems are in place to minimise the use of physical restraints, and that clinicians are educated in the appropriate use of restraints.

Related resources

Commission: Informed Consent in Health Care – Fact sheet for clinicians.

Indicator for local monitoring

Indicator 7: Proportion of patients with delirium who were prescribed antipsychotic medicines in hospital.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745827

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

8

Quality statement 8 – Transition from hospital care

Before a patient with persistent or resolved delirium leaves hospital, an individualised comprehensive care plan is developed collaboratively with the patient and their family or carer. The plan describes the patient's post-discharge care needs and includes strategies to help reduce the risk of delirium and related complications, a summary of changes in medicines and any other ongoing treatment. This plan is provided to the patient and their family or carer before discharge, and to their general practitioner and other regular clinicians within 48 hours of discharge.

Purpose

To ensure patients with persistent or resolved delirium, their family or carer, and their general practitioner and other regular clinicians are informed about the diagnosis of delirium and about the treatment the patient will require after they leave hospital. Involving patients and family or carers in the development of the care plan allows treatment goals to be tailored to the patient's needs and circumstances.

What the quality statement means

For patients

Before you leave hospital, a clinician will talk with you and your family or carer about your episode of delirium and the ongoing care you will need when you leave hospital. They will help develop a plan with you and your family or carer in a format that you understand. The plan sets out your goals of care and any extra care you need to stay well and avoid complications from delirium. This may include eating a nutritious diet and drinking enough water. The plan will describe ongoing treatments such as the medicines you need to take and if any medicines have been stopped or changed. It will also include any community support services you have been referred to. You will be given a copy of this plan before you leave hospital. Your general practitioner and other regular clinicians should receive a copy within two days of you leaving hospital.

For clinicians

Before the patient leaves hospital, develop an individualised comprehensive care plan with the patient and their family or carer, and provide them with information about delirium. In the plan, include the goals of care, strategies for managing persistent delirium, if present, and for preventing delirium recurrence. Include a plan for review by a specialist clinic, specialist or primary healthcare provider 10 days after discharge. Describe all ongoing treatments and any follow-up needed for any comorbidities. Arrange appropriate outpatient rehabilitation services when required. List all medicines that the patient needs to take, specifying the generic drug name, dose, reason for use and duration for each one. Explain why any medicines have been stopped or changed.⁷³

Advise the patient of ongoing support services in the community and provide contact details, as appropriate. Provide the care plan to the patient and their family or carer before they leave hospital and to their general practitioner, and other regular clinicians or care providers within 48 hours of the patient leaving hospital. Include information about any cognitive screening tests or assessment carried out in hospital, and when and where the patient should be reassessed, if appropriate. This is especially important for patients whose cognitive function may improve after discharge, to determine their ongoing level of function.

For health service organisations

Ensure that systems, policies and procedures are in place for clinicians to provide information about delirium to patients and their family or carer, and to develop an individualised comprehensive care plan with the patient and family or carer before discharge. The care plan should include the details of cognitive screening tests or assessments that were conducted and arrangements for follow-up care post-discharge.

Ensure that systems enable the plan to be provided to the patient's general practitioner and other regular clinicians and care providers within 48 hours of discharge. Where systems allow, enable uploading of the discharge care plan to the patient's My Health Record. This enables other clinicians to access the details of the patient's hospital care, which can be vital for informing ongoing care in the community. Sharing information on the care provided in hospital is particularly important if the patient is discharged to interim care (rehabilitation hospital or respite aged care) before returning home or consulting their usual general practitioner.

Indicators for local monitoring

Indicator 8a: Proportion of patients with current or resolved delirium who had an individualised comprehensive care plan on discharge.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745829

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Indicator 8b: Proportion of patients aged 65 years or older or 45 years or older for Aboriginal and Torres Strait Islander people who experienced delirium in hospital and were readmitted for delirium within 10 days.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/745831

More information about the indicator and the definitions needed to collect and calculate indicator data can be found online in the above METeOR link.

Appendix A: General principles of care

This clinical care standard aligns with key principles that are the foundation for achieving safe, highquality care. When implementing this clinical care standard, health services should ensure quality improvement activities support these principles.

Person-centred care

Person-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.^{64,73}

Clinical care standards support the key principles of person-centred care, namely:

- Treating patients with dignity and respect
- Encouraging patient participation in decisionmaking (see 'Shared decision making')
- Communicating with patients about their clinical condition and treatment options
- Providing patients with information in a format that they understand and encouraging them to participate in decision-making.

Shared decision making

Shared decision making involves discussion and collaboration between a consumer and their clinician. It is about bringing together the consumer's values, goals and preferences with the best available evidence about benefits, risks and uncertainties of treatment, to reach the most appropriate healthcare decisions for that person.

Involving support people

The Australian Charter of Healthcare Rights (second edition) describes the rights that consumers, or someone they care for, can expect when receiving health care.⁷⁴

Patients have the right to involve the people they want in planning and making decisions about their health care and treatment. This could be a family member, carer, friend or a consumer advocate such as a social worker. Many health services employ different types of liaison officers, such as Aboriginal and Torres Strait Islander liaison officers, who can provide patients with advocacy, information and support. This clinical care standard refers to family members and carers. Statements that refer to clinicians' discussions with patients and their family or carer should be understood to include support people if this is what the patient wishes, or a substitute decision-maker if the person is unable to provide their consent.

Informed consent

Informed consent is a person's voluntary and informed decision about a healthcare treatment, procedure or intervention that is made with adequate knowledge and understanding of the benefits and risks to them, and the alternative options available. The Commission available at safetyandquality.gov.au/publications-andresources/resource-library/informed-consent-factsheet-clinicians.

Action 2.4 in the National Safety and Quality Health Service (NSQHS) Standards (second edition) requires health service organisations to ensure that informed consent processes comply with legislation and best practice.⁶⁴

Cultural safety and patient safety

Cultural safety is about overcoming the cultural power imbalances of places, people and policies to contribute to improvements in Aboriginal and Torres Strait Islander health.⁷⁵

The Cultural Respect Framework 2016-2026

commits the Australian Government and all states and territories to embed cultural respect principles into their health systems.⁷⁶ The Framework should be used to develop, implement and evaluate cultural awareness and cultural competency strategies.

Health consumers are safest when clinicians have considered power relations, cultural differences and patients' rights. Part of this process requires clinicians to review their own beliefs and attitudes.⁷⁷

The NSQHS Standards *User Guide for Aboriginal and Torres Strait Islander Health*⁷⁸ describes six specific actions that aim to help health services improve the quality of care and health outcomes for Aboriginal and Torres Strait Islander people.⁶⁴

Appendix B: Indicators to support local monitoring

The Commission has developed a set of indicators to support clinicians and health services in monitoring how well they implement the care described in this clinical care standard. The indicators are a tool to support local quality improvement activities. No benchmarks are set for any indicator.

The process to develop the indicators specified in this document comprised:

- A review of existing Australian and international indicators
- Prioritisation, review and refinement of the indicators with the topic working group.

All of the data underlying these indicators are collected from local sources, through prospective data collection or retrospective chart audits or review of policies and protocols.

In this document, the indicator titles and hyperlinks to the specifications are included with the relevant quality statement under the heading 'Indicator(s) for local monitoring'. Full specifications for the *Delirium Clinical Care Standard* indicators can be found in the Metadata Online Registry (METeOR) available at <u>meteor.aihw.gov.au/content/index.phtml/</u> itemId/745804.

METeOR is Australia's web-based repository for national metadata standards for the health, community services and housing assistance sectors. Hosted by the Australian Institute of Health and Welfare, METeOR provides users with online access to a wide range of nationally endorsed data and indicator definitions.

The Commission recommends other quality improvement indicators listed below to support monitoring.

Other Commissionendorsed indicators to support local monitoring

Hospital-acquired complications

A hospital-acquired complication (HAC) refers to a complication for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring.⁵⁰ The HACs list comprises 16 agreed, high-priority complications for which clinicians, managers and others can work together to address and improve patient care. Each of the HACs has several associated diagnoses and codes, which allow further exploration of the data. Data for HACs are derived from the admitted patient data collection.

Delirium is one of the HACs. Hospital-acquired delirium prolongs the length of hospitalisation, which impacts on patients and their families. Hospital-acquired delirium also increases the cost of admission incurred by the health service. This additional cost may be the result of an increased length of stay or more complex care requirements. While there is an increased financial cost, the most significant cost is the pain and discomfort experienced by the patient.

The Commission has developed several resources for clinicians, managers and executives, governing bodies and others that can help them put in place strategies that reduce the occurrence of HACs. These are available at <u>safetyandquality.gov.au/our-</u> work/indicators/hospital-acquired-complications. *Hospital-Acquired Complication – 11. Delirium fact* <u>sheet</u> (short¹⁹ and long²⁰) are specific for delirium.

Appendix C: Measuring and monitoring patient experiences

Systematic, routine monitoring of patients' experiences of, and outcomes from, health care is an important way to ensure that the patient's perspective drives service improvements and person-centred care. This is the case in all health services.

Patient experience measures

While this clinical care standard does not include indicators specific to measuring patient experiences, the Commission strongly encourages health services to use the Australian Hospital Patient Experience Question Set (AHPEQS). AHPEQS is a 12-question generic patient experience survey that has been validated in both day-only and admitted hospital patients across many clinical settings. The instrument is available for download to both private and public sector health services at safetyandquality.gov.au/our-work/indicatorsmeasurement-and-reporting/australian-hospitalpatient-experience-question-set.

Patient-reported outcome measures

In Australia, patient-reported outcome measures (PROMs) are an emerging method of assessing the quality of health care. The Commission is leading a national work program to support the consistent and routine use of PROMs to drive quality improvement.

PROMs are standardised, validated questionnaires that patients complete, without any input from healthcare providers. They are often administered at least twice to an individual patient – at baseline and again after an intervention, or at regular intervals during a chronic illness. The information contributed by patients filling out PROMs questionnaires can be used to support and monitor the movement of health systems towards personcentred, value-based health care.

PROMs are being used to evaluate healthcare effectiveness at different levels of the health system, from the individual level to service and system levels. There is growing interest across Australia and internationally in the routine interrogation of patient-reported outcome information for evaluation and decision-making activities at levels of the health system beyond the clinical consultation.

Appendix D: Integration with the National Safety and Quality Health Service Standards

Monitoring the implementation of this clinical care standard will help organisations to meet some of the requirements of the National Safety and Quality Health Service (NSQHS) Standards (second edition).⁶⁴

The NSQHS Standards (2nd ed.) aim to protect the public from harm and improve the quality of health service provision. They provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met.

Within the NSQHS Standards (2nd ed.), the Clinical Governance Standard and the Partnering with Consumers Standard combine to form the clinical governance framework for all health service organisations that applies to all other standards:

- The Clinical Governance Standard aims to ensure that systems are in place within health service organisations to maintain and improve the reliability, safety and quality of health care.
- The Partnering with Consumers Standard aims to ensure that consumers are partners in the design, delivery and evaluation of healthcare systems and services, and that patients are given the opportunity to be partners in their own care, to the extent that they choose.

Information about the NSQHS Standards is available at <u>safetyandquality.gov.au/standards/nsqhs-</u><u>standards</u>.

Action 1.27b and Action 1.28

Under the Clinical Governance Standard, health service organisations are expected to support clinicians to use the best available evidence, including clinical care standards (see Action 1.27b) and to monitor and respond to unwarranted clinical variation (Action 1.28).

Health service organisations are expected to implement the NSQHS Standards (2nd ed.) in a way that suits the clinical services provided and their associated risks.

Action 5.29

Action 5.29 of the Comprehensive Care Standard requires the health service organisation providing services to patients who have cognitive impairment or are at risk of developing delirium to have a system for caring for patients with cognitive impairment to:

- a. Incorporate best-practice strategies for early recognition, prevention, treatment and management of cognitive impairment in the care plan, including the *Delirium Clinical Care Standard*, where relevant
- b. Manage the use of antipsychotics and other psychoactive medicines, in accordance with best practice and legislation.

Action 8.05, Action 8.06 and Action 8.07

The Recognising and Responding to Acute Deterioration Standard requires that leaders of a health service organisation set up and maintain systems for recognising and responding to acute deterioration.

Action 8.05

Action 8.05 of the Recognising and Responding to Acute Deterioration Standard requires health service organisation to have processes for clinicians to recognise acute deterioration in mental state that require clinicians to:

- a. Monitor patients at risk of acute deterioration in mental state, including patients at risk of developing delirium
- b. Include the person's known early warning signs of deterioration in mental state in their individualised monitoring plan
- c. Assess possible causes of acute deterioration in mental state, including delirium, when changes in behaviour, cognitive function, perception, physical function or emotional state are observed or reported
- d. Determine the required level of observation
- e. Document and communicate observed or reported changes in mental state.

Action 8.06 and Action 8.07

Action 8.06 and Action 8.07 of the Recognising and Responding to Acute Deterioration Standard requires health service organisation to have protocols that specify criteria for escalating care, and processes for patients, carers or families to directly escalate care.

Advisory AS19/01 Recognising and Responding to Acute Deterioration Standard: Recognising deterioration in a person's mental state

Advisory AS19/01, released in April 2019²³ describes the requirements for health service organisations to comply with Actions 8.5, 8.6 b, c, d and e and 8.12 of the Recognising and Responding to Acute Deterioration Standard. These include, from 1 January 2019:

- Health service organisations must demonstrate full implementation of processes for recognising and responding to delirium
- Accrediting agencies are required to review evidence that the organisation has processes for recognising and responding to delirium.

Glossary

| Term | Definition |
|--|---|
| Abbreviated Mental Test Score (AMTS) | A quick and easy to use screening test to detect cognitive impairment. ⁶ |
| adverse event | An incident that results, or could have resulted, in harm to a patient or consumer. A near miss is a type of adverse event. ⁶⁴ |
| antipsychotic medicine | A medicine used to treat psychosis and other mental illnesses and conditions. ⁴⁶ |
| assessment | A clinician's evaluation of a disease or condition based on the patient's subjective report of the symptoms and course of the illness or condition, and the clinician's objective findings. These findings include data obtained through laboratory tests, physical examination and medical history; and information reported by family members, carers and other members of the healthcare team. ⁶⁴ |
| benzodiazepine medicine | A class of medicines that has a hypnotic and sedative action, used mainly as a tranquiliser to control symptoms of anxiety. ⁴⁸ |
| care plan (individualised) | A written agreement between a consumer and clinician (and/or social services) to help manage day-to-day health. ⁴⁹ This information is identified in a healthcare record. |
| carer | A person who provides personal care, support and assistance to another individual who needs it because they have a disability, medical condition (including a terminal or chronic illness) or mental illness, or they are frail or aged. An individual is not a carer merely because they are a spouse, de facto partner, parent, child, other relative or guardian of an individual, or live with an individual who requires care. A person is not considered a carer if they are paid, a volunteer for an organisation, or caring as part of a training or education program. ⁷⁸ |
| | For Aboriginal and Torres Strait Islander people, there may be a collective approach to carer responsibilities. Confirming who is responsible for different aspects of care is important for ensuring that carer engagement is effective. ⁶⁴ |
| clinical practice guidelines | Statements that include recommendations intended to optimise patient care and are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options. ⁷⁹ |
| clinician | A trained health professional, including registered and non-registered practitioners, who provides direct clinical care to patients. Clinicians may provide care within a health service organisation as an employee, a contractor or a credentialed healthcare provider, or under other working arrangements. They include nurses, midwives, medical practitioners, allied health professionals and other professions who provide health care, and students who provide health care under supervision. |
| cognition | The mental activities associated with thinking, learning and memory. ⁸⁰ |

| Term | Definition |
|--------------------------------|--|
| cognitive function test | A tool developed to aid clinicians conduct a cognitive assessment. Cognitive assessments are commonly used for: Screening for cognitive impairment Differential diagnosis of cause of disease Rating the severity of a disorder, or monitoring disease progression.⁸¹ |
| cognitive impairment | Difficulty with memory, thinking, concentration, and ability to read and write. ¹ People may be cognitively impaired due to an acquired brain injury, a stroke or an intellectual disability. ¹⁶ |
| cognitive screening | Using a simple test to identify patients with cognitive impairment. It can also be used to establish baseline cognitive function for ongoing monitoring during a hospital stay. |
| | See cognitive function test. |
| comorbidities | Coexisting diseases (other than that being studied or treated) in an individual. ¹ |
| comprehensive care plan | A document that describes the agreed goals of care, and outlines the planned medical, nursing, midwifery and allied health activities for a patient. A single comprehensive care plan should be prepared for a patient so that essential information can be shared, accessed and acted on by all members of the multidisciplinary team. ⁸² |
| consumer | A person who has used, or may potentially use, health services, or is a carer for a patient using health services. A healthcare consumer may also act as a consumer representative to provide a consumer perspective, contribute consumer experiences, advocate for the interests of current and potential consumers, and take part in decision-making processes. ⁸³ |
| delirium | A disturbance of consciousness, attention, cognition and perception that develops over a short period of time (usually hours or days) and tends to fluctuate during the course of the day. ⁸⁴ Recovery is expected to be complete if the underlying cause (e.g. physical illness, drug toxicity) is promptly corrected or self-limited. |
| fall | An event that results in a person coming to rest inadvertently on the ground or floor or another lower level. ⁶⁹ |
| functional decline | A new loss of independence in self-care capabilities. |
| healthcare record | Includes a record of the patient's medical history, treatment notes, observations, correspondence, investigations, test results, photographs, prescription records and medication charts for an episode of care. ⁶⁴ |
| health service organisation | A separately constituted health service that is responsible for implementing clinical governance, administration and financial management of a service unit or service units providing health care at the direction of the governing body. A service unit involves a group of clinicians and others working in a systematic way to deliver health care to patients. It can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients' homes, community settings, practices and clinicians' rooms. ⁶⁴ |

| Term | Definition |
|---------------------------------|--|
| hospital | A licensed facility providing healthcare services to patients for short periods of acute illness, injury or recovery. ⁶⁴ |
| hospital-acquired complications | Diagnoses that have an onset during the episode of admitted patient care. ⁸⁵ |
| informed consent | A process of communication between a patient and clinician about options for treatment, care processes or potential outcomes. This communication results in the patient's authorisation or agreement to undergo a specific intervention or participate in planned care. The communication should ensure that the patient has an understanding of the care they will receive, all the available options and the expected outcomes, including success rates and side effects for each option. ⁸⁶ |
| intervention | Healthcare action intended to benefit the patient – for example, a medicine, surgical procedure, psychological therapy. |
| mechanical restraint | The application of devices (including belts, harnesses, manacles, sheets and straps) on a person's body to restrict their movement. This is to prevent the person from harming themself or endangering others or to ensure the provision of essential medical treatment. It does not include the use of furniture (including beds with cot sides and chairs with tables fitted on their arms) that restricts the person's capacity to get off the furniture except where the devices are used solely for restraining a person's freedom of movement. ⁸⁷ |
| medical practitioner | A medically qualified person whose primary role is the diagnosis and treatment of physical and mental illnesses, disorders and injuries. They include general practitioners, medical specialists, interns and residents. |
| medical record | See healthcare record. |
| medication reconciliation | Medication reconciliation is the process of creating the most accurate list possible of all medicines a patient is taking. When a patient's care is transferred to another clinician, a current and accurate list of medicines, including reasons for change, is given to that clinician. Transition points of care are particularly prone to unintended changes in medication regimes and other medication errors. |
| medication review | A critical review of all prescribed, over-the-counter and complementary medications undertaken to optimise therapy and minimise medication-related problems. ⁸⁸ |
| medicine | A chemical substance given with the intention of preventing, diagnosing, curing, controlling or alleviating disease, or otherwise improving the physical or mental wellbeing of people. These include prescription, non-prescription, investigational, clinical trial and complementary medicines, regardless of how they are administered. ⁸⁹ |
| multicomponent intervention | A combination of different strategies or treatments aimed at preventing or treating a medical condition. |

| Term | Definition |
|-----------------------------|--|
| non-drug strategy | A treatment or other intervention that does not involve a medicine. Examples of non-drug strategies for managing delirium include: A support person with training in delirium care Modifying the environment (e.g. dim lights at night time, bright light during the day, calendar, clock) Offering support and reassurance from family or carers Regular mobilisation and relaxation strategies.¹³ |
| palliative care | An approach to treatment that improves the quality of life of patients and their families facing life-limiting illness, through the prevention and relief of suffering. It involves early identification, and impeccable assessment and treatment of pain and other problems (physical, psychosocial and spiritual). ⁹⁰ |
| patient | A person who is receiving care in a health service organisation. ⁶⁴ |
| perception | The process or result of becoming aware of objects, relationships and events by means of the senses, which includes such activities as recognising, observing and discriminating. These activities enable organisms to organise and interpret the stimuli received into meaningful knowledge and to act in a coordinated manner. ⁹¹ |
| persistent delirium | Delirium in patients who met the full criteria for delirium at the discharge interview, or who had full delirium during the hospitalisation and partial symptoms on discharge. ¹ |
| physical restraint | When clinicians use hands-on immobilisation or the physical restriction of a person to prevent the person from harming themself or endangering others, or to ensure the provision of essential medical treatment. ⁸⁷ |
| point of care | The time and location of an interaction between a patient and a clinician to deliver care. ⁶⁴ |
| presentation to hospital | Care received by patients on entry to the hospital system, including the emergency department, pre-admission clinic, acute assessment unit, ward or day surgery. For some remote areas, this may include primary health clinics. |
| pressure injuries | These are localised to the skin and/or underlying tissues, usually over a bony prominence and caused by unrelieved pressure, friction or shearing. Pressure injuries occur most commonly on the sacrum and heel but can develop anywhere on the body. Pressure injury is synonymous for pressure ulcer or pressure sore. ⁹² |
| primary health care | Primary health care is generally the first point of contact for individuals, families and communities with health services and brings health care as close as possible to where people live and work. It constitutes a large and essential part of the health care system. Primary health care includes health promotion, prevention, early intervention, treatment of acute conditions, management of chronic conditions and end of life care. ⁹³ |
| procedure | The set of instructions to make policies and protocols operational, which are specific to an organisation. ⁶⁴ |
| psychotropic medicines | Medicines that exert an effect on the mind or modify mental activity. ²² |

| Term | Definition |
|---|--|
| quality improvement | The combined efforts of the workforce and others – including consumers, patients and their families, researchers, planners, and educators – to make changes that will lead to better patient outcomes (health), better system performance (care) and better professional development. ⁹⁴ Quality improvement activities may be sequential, intermittent or continuous. ⁶⁴ |
| risk assessment | The assessment, analysis and management of risks. It involves recognising which events may lead to harm in the future, and minimising their likelihood and consequence. ⁹⁵ |
| risk factor | A characteristic, condition or behaviour that increases the possibility of disease, injury or loss of wellbeing. |
| scope of practice | The extent of an individual clinician's approved clinical practice within a particular organisation, based on the clinician's skills, knowledge, performance and professional suitability, and the needs and service capability of the organisation. ⁹⁶ |
| screening | A process of identifying people who may be at increased risk of a disease or condition. They can then be offered information, more tests and appropriate treatment to reduce their risk and/or any complications arising from the disease or condition. ⁹⁷ |
| shared decision making | A consultation process in which a clinician and a patient jointly participate in making a health decision, having discussed the options and their benefits and harms, and having considered the patient's values, preferences and circumstances. ⁹⁸ |
| side effects | Unintended effects from a medicine, treatment or device. |
| specialling | Special and constant observation of a patient deemed to be at risk to themselves and others. ⁹⁹ |
| Standardised Mini-Mental State Examination (SMMSE) | A test for evaluating cognitive impairment in older adults. The SMMSE was developed to provide scoring instructions and clear unambiguous guidelines for administration of the Mini-Mental State Examination. ¹⁰⁰ |
| substitute decision-maker | A person appointed or identified by law to make health, medical, residential and other personal (but not financial or legal) decisions on behalf of a person whose decision-making capacity is impaired. A substitute decision-maker may be appointed by the person, appointed on behalf of the person, or identified as the default decision-maker by legislation, which varies from state to state. ¹⁰¹ |
| system | The resources, policies, processes and procedures that are organised, integrated, regulated and administered to accomplish a stated goal. A system: Brings together risk management, governance, and operational processes and |
| | Deploys an active implementation plan; feedback mechanisms include agreed |
| | protocols and guidelines, decision support tools and other resource materials Uses several incentives and sanctions to influence behaviour and encourage compliance with policy, protocol, regulation and procedures. |
| | The workforce is both a resource in the system and involved in all elements of systems development, implementation, monitoring, improvement and evaluation. ⁶⁴ |

References

- National Institute for Health and Clinical Excellence. Delirium: diagnosis, prevention and management. Clinical guideline 103. London: NICE; 2019.
- 2. Travers C, Byrne G, Pachana N, Klein K, Gray L. Delirium in Australian hospitals: a prospective study. Current Gerontology and Geriatrics Research 2013; 2013.
- 3. Siddiqi N, House AO, Holmes JD. Occurrence and outcome of delirium in medical in-patients: a systematic literature review. Age Ageing 2006 Jul;35(4):350–364.
- Australian Commission on Safety and Quality in Health Care. ACSQHC analysis of the Admitted Patient Care National Minimum Data Set, 2019–20. Public hospitals only, which meet the robust condition onset flag coding criteria, all care types (unpublished). Sydney: ACSQHC; 2020.
- 5. Australian Institute of Health and Welfare. Admitted patient care 2017–18: Australian hospital statistics. Canberra: AIHW; 2019.
- Pezzullo L, Streatfeild J, Hickson J, Teodorczuk A, Agar MR, Caplan GA. Economic impact of delirium in Australia: a cost of illness study. BMJ Open 2019;9:e027514.
- Australian Commission on Safety and Quality in Health Care. A better way to care: actions for health service managers. Sydney: ACSQHC; 2014.
- ACI Aged Health Network. Key principles for care of confused hospitalised older persons. Sydney: Agency for Clinical Innovation; 2014.
- Department of Health & Human Services Victoria, The Clinical Leadership Group on Care of Older People in Hospital, The National Ageing Research Institute. Older people in hospital. [Internet] Melbourne: DHHS; 2015 [cited 17 Mar] Available from: www2.health.vic.gov.au/ hospitals-and-health-services/patient-care/ older-people.
- National Institute for Health and Clinical Excellence. Alcohol-use disorders: diagnosis and clinical management of alcohol-related physical complications. London: NICE; 2010.

- 11. Therapeutic Guidelines. Alcohol and other drug problems [published 2013 Jul]. In: Therapeutic Guidelines [digital]. Melbourne: Therapeutic Guidelines Limited; 2021 Mar. Available from: www.tg.org.au.
- 12. Traube C, Silver G, Gerber LM, Kaur S, Mauer EA, Kerson A, et al. Delirium and mortality in critically ill children: epidemiology and outcomes of pediatric delirium. Critical Care Med 2017 May;45(5):891–898.
- Clinical Epidemiology and Health Service Evaluation Unit. Clinical practice guidelines for the management of delirium in older people. Melbourne: Victorian Government Department of Health & Human Services; 2006.
- 14. Scottish Intercollegiate Guidelines Network. Risk reduction and management of delirium. Edinburgh: SIGN; 2019.
- 15. Australian Commission on Safety and Quality in Health Care. User guide for health service organisations providing care for patients with cognitive impairment or at risk of delirium. Sydney: ACSQHC; 2019.
- 16. Australian Commission on Safety and Quality in Health Care. A better way to care: actions for clinicians. Sydney: ACSQHC; 2019.
- 17. Australian Commission on Safety and Quality in Health Care. Cognitive impairment: actions for clinicians fact sheet. Sydney: ACSQHC; 2019.
- Australian Commission on Safety and Quality in Health Care. Cognitive impairment: actions in the National Safety and Quality Health Service Standards Sydney: ACSQHC; 2019.
- Australian Commission on Safety and Quality in Health Care. Hospital-acquired complication – 11. Delirium fact sheet (short). Sydney: ACSQHC; 2018.
- 20. Australian Commission on Safety and Quality in Health Care. Hospital-acquired complication – 11. Delirium fact sheet (long). Sydney: ACSQHC; 2018.
- 21. Australian Commission on Safety and Quality in Health Care. My healthcare rights: a guide for people with cognitive impairment. Sydney: ACSQHC; 2020.

- 22. Therapeutic Guidelines. Delirium [published 2021 Mar]. In: Therapeutic Guidelines [digital]. Melbourne: Therapeutic Guidelines Limited; 2021 Mar. Available from: www.tg.org.au.
- 23. Australian Commission on Safety and Quality in Health Care. Advisory AS19/01 Recognising and Responding to Acute Deterioration Standard: recognising deterioration in a person's mental state. Sydney: ACSQHC; 2019.
- 24. Wilson JE, Mart MF, Cunningham C, Shehabi Y, Girard TD, MacLullich AM, et al. Delirium. Nat Rev Disease Primers 2020;6(1):1–26.
- Iseli RK, Brand C, Telford M, LoGuidice D. Delirium in elderly general medical inpatients: a prospective study. Intern Med J 2007;37: 806–811.
- Han JH, Zimmerman EE, Cutler N, Schnelle J, Morandi A, Dittus RS, et al. Delirium in older emergency department patients: recognition, risk factors, and psychomotor subtypes. Academic Emerg Med 2009 Mar;16(3):193–200.
- 27. Inouye S, Westendorp R, Saczynski J. Delirium in elderly people. The Lancet 2014;383(9920): 911–922.
- 28. Belanger L, Ducharme F. Patients' and nurses' experiences of delirium: a review of qualitative studies. Nursing Crit Care 2011 Nov– Dec;16(6):303–315.
- 29. Travers C, Byrne G, Pachana N, Klein K, Gray L. Prospective observational study of dementia and delirium in the acute hospital setting. Intern Med J 2012;43(3):262–269.
- Smith K, Flicker L, Lautenschlager NT, Almeida OP, Atkinson D, Dwyer A, et al. High prevalence of dementia and cognitive impairment in Indigenous Australians. Neurology 2008 Nov 4;71(19):1470–1473.
- 31. Li SQ, Guthridge SL, Eswara Aratchige P, Lowe MP, Wang Z, Zhao Y, et al. Dementia prevalence and incidence among the Indigenous and non-Indigenous populations of the Northern Territory. MJA 2014 May 5;200(8):465–469.
- Radford K, Mack HA, Draper B, Chalkley S, Daylight G, Cumming R, et al. Prevalence of dementia in urban and regional Aboriginal Australians. Alzheimer's & dementia 2015;11(3):271–279.

- Lo Giudice D, Smith K, Fenner S, Hyde Z, Atkinson D, Skeaf L, et al. Incidence and predictors of cognitive impairment and dementia in Aboriginal Australians: a follow-up study of 5 years. Alzheimer's & dementia 2016 May 18;12(3):252–261.
- Australian Institute of Health and Welfare. Hospital care for people with dementia 2016–17. Canberra: AIHW; 2019.
- Reade MC, Eastwood GM, Peck L, Bellomo R, Baldwin I. Routine use of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) by bedside nurses may underdiagnose delirium. Critical Care Resusc 2011 Dec;13(4):217–224.
- Salluh JI, Wang H, Schneider EB, Nagaraja N, Yenokyan G, Damluji A, et al. Outcome of delirium in critically ill patients: systematic review and meta-analysis. BMJ 2015;350:h2538.
- Ahmed S, Leurent B, Sampson EL. Risk factors for incident delirium among older people in acute hospital medical units: a systematic review and meta-analysis. Age Ageing 2014 May;43(3):326–333.
- Geriatric Medicine Research Collaborative. Delirium is prevalent in older hospital inpatients and associated with adverse outcomes: results of a prospective multi-centre study on World Delirium Awareness Day. BMC Medicine 2019;17:1–11.
- Hshieh TT, Yue J, Oh E, Puelle M, Dowal S, Travison T, et al. Effectiveness of multicomponent nonpharmacological delirium interventions: a meta-analysis. JAMA Intern Med 2015 Feb 2;175(4):512–520.
- 40. Oberai T, Laver K, Woodman R, Crotty M, Kerkhoffs G, Jaarsma R. Does implementation of a tailored intervention increase adherence to a national safety and quality standard? A study to improve delirium care. Int J Qual Health Care 2021;33(1):mzab006.
- O'Keeffe ST, Mulkerrin EC, Nayeem K, Varughese M, Pillay I. Use of serial Mini-Mental State Examinations to diagnose and monitor delirium in elderly hospital patients. J Am Geriat Soc 2005 May;53(5):867–870.
- 42. Jitapunkul S, Pillay I, Ebrahim S. Delirium in newly admitted elderly patients: a prospective study. Quart J Med 1992 Apr;83(300):307–314.

- 43. Tieges Z, Maclullich AM, Anand A, Brookes C, Cassarino M, O'connor M, et al. Diagnostic accuracy of the 4AT for delirium detection in older adults: systematic review and metaanalysis. Age Ageing 2020.
- Bellelli G, Morandi A, Davis DH, Mazzola P, Turco R, Gentile S, et al. Validation of the 4AT, a new instrument for rapid delirium screening: a study in 234 hospitalised older people. Age Ageing 2014 Jul;43(4):496–502.
- 45. Hodkinson HM. Evaluation of a mental test score for assessment of mental impairment in the elderly. Age Ageing 1972 Nov;1(4):233–238.
- LoGiudice D, Smith K, Thomas J, Lautenschlager NT, Almeida OP, Atkinson D, et al. Kimberley Indigenous Cognitive Assessment tool (KICA): development of a cognitive assessment tool for older Indigenous Australians. Int Psychogeriatrics 2006 Jun;18(2):269–280.
- 47. Burton JK, Craig LE, Yong SQ, Siddiqi N, Teale EA, Woodhouse R, et al. Non-pharmacological interventions for preventing delirium in hospitalised non-ICU patients. Cochrane Database of Systematic Reviews 2021 (7).
- 48. Williams ST, Dhesi JK, Partridge JS. Distress in delirium: causes, assessment and management. Eur Geriat Med 2020;11(1):63–70.
- 49. Queensland Health. Communicating effectively with Aboriginal and Torres Strait Islander people. Brisbane: Queensland Health; 2015.
- 50. Australian Commission on Safety and Quality in Health Care. Hospital-acquired complications: information kit. Sydney: ACSQHC; 2018.
- Bergjan M, Zilezinski M, Schwalbach T, Franke C, Erdur H, Audebert HJ, et al. Validation of two nurse-based screening tools for delirium in elderly patients in general medical wards. BMC Nursing 2020;19(1):72.
- 52. Gee S, Bergman J, Hawkes T, Croucher M. Think delirium: preventing delirium among older people in our care. Christchurch: Canterbury District Health Board; 2016.
- 53. Inouye SK, van Dyck CH, Alessi CA, Balkin S, Siegal AP, Horwitz RI. Clarifying confusion: the confusion assessment method. A new method for detection of delirium. Ann Intern Med 1990 Dec 15;113(12):941–948.

- 54. Avelino-Silva TJ, Campora F, Curiati JAE, Jacob-Filho W. Prognostic effects of delirium motor subtypes in hospitalized older adults: a prospective cohort study. PLoS One 2018;13(1):e0191092.
- 55. Gual N, Inzitari M, Carrizo G, Calle A, Udina C, Yuste A, et al. Delirium subtypes and associated characteristics in older patients with exacerbation of chronic conditions. Am J Geriat Psych 2018;26(12):1204–1212.
- 56. Hayhurst CJ, Marra A, Han JH, Patel MB, Brummel NE, Thompson JL, et al. Association of hypoactive and hyperactive delirium with cognitive function after critical illness. Critical Care Med 2020;48(6):e480–e488.
- Shi Q, Warren L, Saposnik G, Macdermid JC. Confusion assessment method: a systematic review and meta-analysis of diagnostic accuracy. Neuropsych Dis Treat 2013;9: 1359–1370.
- Ely EW, Margolin R, Francis J, May L, Truman B, Dittus R, et al. Evaluation of delirium in critically ill patients: validation of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). Critical Care Med 2001 Jul;29(7): 1370–1379.
- 59. Marcantonio ER, Ngo LH, O'Connor M, Jones RN, Crane PK, Metzger ED, et al. 3D-CAM. Derivation and validation of a 3-minute diagnostic interview for CAM-defined delirium: a crosssectional diagnostic test study. Ann Intern Med 2014 Oct 21;161(8):554–561.
- 60. Helfand BK, D'Aquila ML, Tabloski P, Erickson K, Yue J, Fong TG, et al. Detecting delirium: a systematic review of identification instruments for non-ICU settings. J Am Geriat Soc 2020;69(2):547–555.
- 61. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, fifth edition. Washington, DC: APA; 2013.
- 62. Mudge AM, Banks MD, Barnett AG, Blackberry I, Graves N, Green T, et al. CHERISH (collaboration for hospitalised elders reducing the impact of stays in hospital): protocol for a multi-site improvement program to reduce geriatric syndromes in older inpatients. BMC Geriat 2017 Jan 9;17(1):11.

- 63. Australian Commission on Safety and Quality in Health Care. A better way to care – Safe and high-quality care for patients with cognitive impairment or at risk of delirium in acute health services: Actions for clinicians. 2nd ed. Sydney: ACSQHC; 2019.
- 64. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards (2nd ed.). Sydney ACSQHC; 2017.
- 65. Nikooie R, Neufeld K, Oh E, Wilson L, Zhang A, Robinson K, et al. Antipsychotics for treating delirium in hospitalized adults. Ann Intern Med 2019:doi.org/10.7326/M7319-1860.
- Clinical Excellence Commission. TOP 5: improving the care of patients with dementia 2012–2013. Sydney: Clinical Excellence Commission; 2014.
- 67. Peisah C, Chan DK, McKay R, Kurrle SE, Reutens SG. Practical guidelines for the acute emergency sedation of the severely agitated older patient. Intern Med J 2011 Sep;41(9):651–657.
- Australian and New Zealand Society for Geriatric Medicine. Delirium in older people: Position Statement 13. Sydney: ANZSGM; 2012.
- 69. Australian Commission on Safety and Quality in Health Care. Preventing falls and harm from falls in older people. Best practice guidelines for Australian hospitals. Sydney: ACSQHC; 2009.
- 70. O'Keeffe S, Lavan J. The prognostic significance of delirium in older hospital patients. J Am Geriat Soc 1997 Feb;45(2):174–178.
- 71. Australian Medicines Handbook. AMH aged care companion. Adelaide: AMH; 2014.
- 72. Hilmer S, Gnjidic D, Reeve E, Kalisch L, Wu H, Raymond J. Use of antipsychotic medicines: a literature review. Sydney: ACSQHC; 2020.
- 73. Australian Commission on Safety and Quality in Health Care. Patient-centred care: improving quality and safety through partnerships with patients and consumers. A discussion paper. Sydney: ACSQHC; 2011.
- 74. Australian Commission on Safety and Quality in Health Care. Australian Charter of Healthcare Rights (2nd ed.). Sydney: ACSQHC; 2019.
- 75. Australian Indigenous Doctors' Association. Cultural safety for Aboriginal and Torres Strait Islander doctors, medical students and patients (position paper) Canberra: AIDA; 2018.

- 76. National Aboriginal and Torres Strait Islander Health Standing Committee. Cultural Respect Framework 2016–2026. Canberra: Australian Government Department of Health; 2019.
- 77. Australian Commission on Safety and Quality in Health Care. User guide for Aboriginal and Torres Strait Islander health. Sydney: ACSQHC; 2016.
- 78. Social Services Australia. Carer Recognition Act 2010 (No. 123). Canberra: SSA; 2010.
- 79. Steinberg E, Greenfield S, Wolman DM, Mancher M, Graham R. Clinical practice guidelines we can trust. Washington DC: US National Academies Press; 2011.
- The Free Dictionary. Cognition. [Internet] Huntingdon Valley, Pennsylvania: Farlex;
 2012 [cited 17 Mar] Available from: medicaldictionary.thefreedictionary.com/cognition.
- Woodford HJ, George J. Cognitive assessment in the elderly: a review of clinical methods. QJM 2007 Aug;100(8):469–484.
- 82. Australian Commission on Safety and Quality in Health Care. Implementing the Comprehensive Care Standard: develop a single comprehensive care plan. Sydney: ACSQHC; 2019.
- 83. Consumers Health Forum of Australia. About consumer representation. Canberra: CHF; 2016.
- Australian Health Ministers' Advisory Council. Delirium care pathways. Canberra: AHMAC; 2011.
- Health Policy Analysis. Analysis of hospitalacquired diagnoses and their effect on case complexity and resource use – final report. Sydney: Australian Commission on Safety and Quality in Health Care; 2013.
- 86. Carey-Hazell K. Improving patient information and decision making. Aus Health Consum 2005;1(2005-2006):21–22.
- Australian Institute of Health and Welfare. The restriction of an individual's freedom of movement by physical or mechanical means. METeOR Metadata Online Registry: AIHW; 2014.
- Australian Commission on Safety and Quality in Health Care. Safety and Quality Improvement Guide Standard 4: Medication Safety. Sydney: ACSQHC; 2012.
- 89. Australian Pharmaceutical Advisory Council. Guiding principles for medication management in the community. Canberra: APAC; 2006.

- World Health Organization. Palliative care. [Internet] Geneva: WHO; 2021 [cited 17 March] Available from: <u>www.who.int/cancer/palliative/</u> definition/en.
- 91. American Psychological Association. APA dictionary of psychology. Washington DC: APA; 2020.
- 92. Australian Commission on Safety and Quality in Health Care. Hospital accreditation workbook. Sydney: ACSQHC; 2012.
- 93. Australian Commission on Safety and Quality In Health Care. National Safety and Quality Primary and Community Healthcare Standards. Sydney: ACSQHC; 2021.
- 94. Batalden PB, Davidoff F. What is 'quality improvement' and how can it transform healthcare? (editorial). BMJ Qual & Safet 2007;16(1).
- 95. National Patient Safety Agency. Healthcare risk assessment made easy. London (UK): National Patient Safety Agency; 2007.
- 96. Australian Commission on Safety and Quality in Health Care. Safety and Quality Improvement Guide Standard 1: Governance for Safety and Quality in Health Service Organisations. Sydney: ACSQHC; 2012.

- 97. Public Health England. UK Screening Portal. [Internet] London: Public Health England; 2021 [cited 17 Mar] Available from: www.screening. nhs.uk/screening.
- Hoffmann TC, Legare F, Simmons MB, McNamara K, McCaffery K, Trevena LJ, et al. Shared decision making: what do clinicians need to know and why should they bother? MJA 2014;201(1):35–39.
- 99. Dewing J. Special observation and older persons with dementia/delirium: a disappointing literature review. Int J Older People Nurs 2013 Mar;8(1):19–28.
- 100. Independent Hospitals Pricing Authority. Standardised Mini-Mental State Examination (SMMSE). [Internet] Sydney: IHPA; 2014 [cited 17 Mar] Available from: www.ihpa.gov.au/ internet/ihpa/publishing.nsf/Content/ smmse-lp.
- 101. Clinical Technical and Ethical Principal Committee of the Australian Health Ministers' Advisory Council. A national framework for advance care directives. Canberra: AHMAC; 2011.

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