Handbook for improving safety and providing high quality care for people with cognitive impairment in acute care:

A Consultation Paper
Suggested citation


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**Terminology**

**Advance care planning**: The process of preparing for likely scenarios near the end of life. This includes discussion of a person’s understanding of their medical condition and prognosis, values, preferences and personal and family resources. It may or may not include the development of documents such as advanced care directives.  

**Carers**: People who provide care and support to family members and friends who have a disability, mental illness, chronic condition, terminal illness or general frailty. Carers include parents and guardians caring for children.  

**Clinical practice guidelines**: Clinical practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific circumstances.  

**Cognitive impairment**: Cognitive impairment is an overarching term referring to deficits in one or more of the areas of memory, problems with communication, attention, thinking and judgment. Dementia and delirium are common forms of cognitive impairment seen in older hospitalised patients.  

**Competency-based training**: An approach to training that places emphasis on what a person can do in the workplace as a result of training completion.  

**Cultural competency**: A set of behaviours, attitudes, and policies that integrate culture into the delivery of health services through valuing diversity, understanding the dynamics of cultural interactions and adapting service delivery to reflect the diversity between and within cultures.  

**Dementia**: Dementia is defined as the progressive decline in cognitive function that affects memory, judgment, attention, language and problem solving. It is usually gradual, progressive and irreversible, leading to impaired functioning. The most common types are Alzheimer’s disease, vascular dementia, dementia with Lewy bodies, frontotemporal dementia, or a combination of these.  

**Delirium**: Delirium is an acute disturbance of consciousness, attention, cognition and perception that tends to fluctuate during the course of the day. It is a serious condition that is able to be prevented in thirty to forty percent of cases and should be treated promptly and appropriately.  

**Informed consent**: A process of communication between a patient and their medical officer that results in the patient’s authority or agreement to undergo a specific medical intervention. This communication should ensure the patient has an understanding of all available options and the expected outcomes such as the success rates and/or risk of side effects for each option.  

**Palliative care**: Care focused on the relief of symptoms, such as pain and breathlessness, and other problems associated with life-limiting illness. Palliative care is not limited to care of the dying; it may be necessary and useful well in advance of a person’s death. The primary goals of palliative care are to improve quality of life, optimise comfort and dignity and provide support to the person, their family and carers.  

**Policy**: A set of principles that reflect the organisation’s mission and direction. All procedures and protocols are linked to a policy statement.  

**Procedure**: The set of instructions to make policies and protocols operational and are specific to an organisation or system.  

**Protocol**: An established set of rules used for the completion of tasks or a set of tasks.  

**Substitute decision maker**: A substitute decision-maker makes healthcare decisions for a person who is unable to do so for themselves. Substitute decision-makers have legal authority to make these decisions, though the relevant legislation varies from state to state. Preferred decision-makers may be nominated by a person in a document, such as an advance care plan, but this of itself does not grant legal authority.  

**System**: The resources, policies, processes and procedures that are organized, integrated, regulated and administered to accomplish the objective of the Standard.  

**Training**: The development of knowledge and skills.
Executive Summary

Nearly one in three people over 70 years of age admitted to hospitals will have some form of cognitive impairment. Approximately 20 percent of these patients will have dementia, 10 percent are admitted with delirium and a further 8 percent will develop delirium during their hospital admission.

Patients with cognitive impairment admitted to hospital are at a significantly increased risk of preventable complications and adverse outcomes. This increased risk is often associated with deficits in one or more of the areas of memory, problems with communication, attention, thinking and judgment. For these patients, adverse outcomes include being twice as likely to fall and experience pressure injuries, being readmitted to hospital and having longer length of stays (6-30 days). The preventable complications for these patients include urinary tract infections, sepsis and significant functional decline. They are also three times more likely to die in hospital than patients without cognitive impairment.

The development of delirium is an added significant risk. Patients older than 65 years are three times more likely to develop delirium than younger patients, with rates increasing to five times for patients over 80 years. Patients with dementia are five times more likely to develop delirium during their hospital stay. The prevalence of delirium in medical-surgical hospitalised patients with pre-existing dementia is greater than 50 percent. Delirium may alter the clinical course and trajectory of cognitive decline and is associated with poorer long-term outcomes in people who already have both physical and cognitive impairments. Up to 44 percent of patients will have unresolved delirium at the time of discharge. Up to 50 percent of patients with delirium in hospital will die.

Despite the added risks patients with cognitive impairment face, this condition is poorly recognised in Australian hospitals. Failure to identify and act to reduce the risks of cognitive impairment creates significant safety and quality issues for these patients. There is strong evidence that early identification and provision of specific evidence-based care for patients who have cognitive impairment is the most important strategy to improve safety and reduce the risk of harm for these patients.

Implementation of the National Safety and Quality Health Service (NSQHS) Standards provides the local framework for reducing the risk of unsafe care of all patients in acute health services, including those with cognitive impairment. Patients with cognitive impairment have additional specific risks of harm whilst in hospital, requiring targeted strategies to manage these risks.

This Handbook is an evidence-based resource developed for clinicians and managers of acute health services. The Handbook outlines the key mechanisms and strategies linked to the NSQHS Standards that can be implemented to reduce the risk of harm and improve the quality of health care for patients with, or at risk of, cognitive impairment.

The Handbook has been developed to apply across the diverse range of acute care facilities that exist in Australia, from major tertiary teaching hospitals to small rural multipurpose services, to which the NSQHS Standards currently apply. Whilst the Handbook focuses on the acute care setting, there is recognition that people with cognitive impairment are also managed in primary care, community and residential care and for the best possible outcome, these services need to be linked and seamless. As such, the Handbook includes strategies to be effected at the point of transitions in care, addressing information exchange and communication between hospitals and general practice, primary care, aged community and residential care.

The Handbook is structured in the following way:

Patient Journey – the Handbook follows the journey of a patient with cognitive impairment from presentation at the hospital, to admission, to treatment, through to transfer of care in order to
improve the safety and quality of that journey. The patient journey is divided into the following sections:

A. Identification and Assessment of Cognitive Impairment
B. Effective Management of Cognitive Impairment
C. Seamless Care Transitions for People with Cognitive Impairment

Each section of the patient journey provides the following information:

- Overview of the patient journey and context
- Presentation of the safety and quality issues
- Evidence-based practice
- Patient stories describing safety and quality issues faced by patients with cognitive impairment. Each patient story includes exemplars of what did not go well, what went well and what could have been done better.

Safety and Quality Mechanisms – each section of the patient journey is further divided into the three mechanisms required for the implementation of safety and quality improvements across the patient journey. These mechanisms will:

1. Establish Responsive Systems
2. Ensure Skilled and Informed Staff
3. Enable Patient and Carer Participation

The Handbook includes information about: what can be done to improve care; how to make improvement happen; a link to the NSQHS Standards; examples of evidence that could be used at accreditation; and resources to assist clinicians and managers and health services to achieve each mechanism.

A supporting document: Evidence for the safety and quality issues associated with the care of patients with cognitive impairment in acute care settings: a rapid review, accompanies this Handbook. The Literature Review provides the evidence supporting the strategies described.

The Handbook will be the subject of a national consultation including an online survey and forums with consumers and health professionals. The consultation will be conducted by the Australian Commission on Safety and Quality in Health Care from October to December 2013. The results of the consultation will inform the revision of the Handbook which is planned for release in March 2014.

For further information on the consultation process, visit the web page on the Commission’s website. Please note that text that is underlined in blue in the Handbook denotes a hyperlink.
1. Introduction

1.1. Background
In 2012, all Health Ministers committed to improving the health care of people with dementia through the adoption of Dementia as the 9th National Health Priority. The second National Framework for Action on Dementia 2013 – 2017, currently under development recognises the significance of these conditions. The need to improve the health care experience for people with dementia whilst in hospital is being addressed through program commitments in the ‘Tackling Dementia’ stream of the Living Longer Living Better aged care reforms that commenced in 2012.

A National Acute Care Forum held in November 2012 identified a number of options to improve hospital care for people with dementia, including the use of the National Safety and Quality Health Service (NSQHS) Standards. As a consequence, the former Department of Health and Ageing (the responsibility for this portfolio is now with the Department of Social Services) provided funding to the Australian Commission on Safety and Quality in Health Care to work with consumers and health care providers to deliver nationally coordinated improvement in the care of patients with cognitive impairment in acute health services.

The first phase of this work has included the development of this Handbook, which uses the NSQHS Standards as its framework for use by clinicians and health service managers and health services in the acute care setting.

1.2. Rationale for action
Cognitive impairment is common in hospitalised older people. Approximately 20% of people over 70 years who are admitted to hospital have dementia, the rate increasing with increasing age. Another 10% are admitted with delirium and a further 8% will develop delirium during their hospital episode. However, patients with cognitive impairment are currently under recognised in Australian hospitals, leading to significant safety and quality issues in the care of people with cognitive impairment.

Dementia and delirium are common forms of cognitive impairment seen in older, hospitalised patients. People with cognitive impairment have deficits in one or more of the areas of memory, problems with communication, attention, thinking and judgment. These deficits place a patient with cognitive impairment at increased risk of harm to their health, daily functioning and future wellbeing whilst in hospital.

The prevalence of dementia is also particularly high amongst Aboriginal Australians and is approximately three times the general Australian rate. Dementia may develop at a younger age in Aboriginal Australians than the general adult Australian population. Aboriginal Australians with dementia are most commonly diagnosed with Alzheimer’s disease, followed by mixed dementia, vascular dementia and dementia associated with head trauma.

Patients with cognitive impairment are at greater risk of adverse outcomes than people who do not have cognitive impairment. They are more likely to fall (OR 2.1, CI 1.7-2.7) to experience significant functional decline, and to develop complications such as pressure injuries (RR 1.61), pneumonia (RR 1.37) and urinary tract infections (RR 1.79). Additionally, they are more likely to have increased hospital length of stay (16.5 days versus 8.9 days), require new residential care placement following their stay (adjusted RR, 9.3, 95% CI 5.5-15.7) and are two to three times more likely to die while they are in hospital than those without cognitive impairment.

An older person with dementia has a fivefold risk of developing delirium while in hospital compared to those without dementia. Although delirium is common in older hospitalised
patients, the rate of prevalence vary across the different populations studied. For example, rates of delirium in older people after orthopaedic surgery are reported to be 47 – 53\%\textsuperscript{21}, after cardiac surgery up to 41\%\textsuperscript{22} and within an intensive care environment prevalence rates range from 16-89\%\textsuperscript{23}. A recent, large study has confirmed that patients in medical and surgical ICUs are at high risk of long term cognitive impairment following their survival from a critical illness.\textsuperscript{24} What we do know is that delirium is common in older vulnerable patients exposed to hospital related events.

Patients with an existing cognitive impairment, such as dementia, are at the greatest risk of developing delirium during their hospital stay.\textsuperscript{17,25} Delirium may alter the clinical course and trajectory of cognitive decline and is associated with poorer long-term outcomes in people who already have both physical and cognitive impairments.\textsuperscript{19,26} It is essential that health care staff are vigilant in recognising, investigating the cause of and managing delirium, as it is a potentially reversible condition, even when superimposed on a dementia. The outcomes of patients with persistent delirium are consistently worse than the outcomes of patients who recover from delirium.\textsuperscript{27}

“Delirium is a potent and well recognised indicator of [poor] health-care quality…addressing delirium provides a highly practical and effective strategy to improve outcomes, decrease costs and raise the quality of health care system wide…” Inouye 2013 \textsuperscript{6}

Research from a diverse range of settings worldwide shows that delirium is preventable in 30-40\% of cases, where multi-component non-pharmacological interventions are successfully implemented. As a framework, the NSQHS Standards provide a mechanism for systematically addressing many of the safety and quality issues affecting this patient population in an integrated manner. These interventions include reorientation, therapeutic activities, reduction in psychoactive drugs, early mobilisation, adequate hydration and nutrition, and provision of hearing and visual aids.\textsuperscript{26} These interventions also represent good patient centred care. In addition, partnerships with family and carers and modifications to the physical environment can also improve outcomes for patients with cognitive impairment.\textsuperscript{28}

Whilst hospitalisation may be necessary for the care and wellbeing of a person with cognitive impairment there is also and increased risk of poor safety and quality outcomes resulting in harm. For patients with cognitive impairment, many of the poor safety and quality outcomes are preventable and harm could be minimised if cognitive impairment is identified early and risks acted upon.\textsuperscript{20} Therefore, earlier and accurate identification of cognitive impairment can trigger further investigation, treatment and/or appropriate care and management where necessary, leading to better outcomes. These outcomes include: reduced mortality, functional decline and complications, greater patient, carer and family satisfaction and increased likelihood of returning home. Timely interventions with evidence-based care strategies will enhance patient safety and minimise adverse events.

Despite its seriousness, cognitive impairment is currently under-recognised. A NSW study of all people admitted to hospital during 2006-2007 found that almost half (47\%) of patients with dementia did not have a dementia diagnosis recorded during a hospital episode.\textsuperscript{9} A recent US study identified that nurses failed to recognise delirium 75\% of the time.\textsuperscript{29} Similarly emergency department physicians recognised delirium in only one third of the patients who actually had a delirium.\textsuperscript{30}

Identifying the presence of cognitive impairment early is essential in order to manage the safety and quality risks, reduce harm and improve the health care outcomes for these patients following a hospital stay.
1.3. The National Safety and Quality Health Service Standards

The NSQHS Standards provide a framework for health service organisations to deliver safe and quality care. The NSQHS Standards primary aims are to protect the public from harm and to improve the quality of health service provision. The NSQHS Standards are a critical component of the Australian Health Services Safety and Quality Accreditation Scheme. All acute health services in Australia are required to implement the NSQHS Standards.

The NSQHS Standards provide the safety and quality framework for all patients accessing health care in the acute setting including those with cognitive impairment. Patients with cognitive impairment have specific risks of harm whilst in hospital requiring targeted strategies to manage these risks. This Handbook describes how clinicians, managers and health services can use the NSQHS Standards as a framework to focus specific quality improvement strategies to reduce harm and improve care for patients with cognitive impairment.

Using the NSQHS Standards as a framework for implementing safety and quality improvement strategies for patients with cognitive impairments can lead to greater systems efficiency, effectiveness and appropriateness. It can also provide support for clinicians and other staff providing care of these patients. There is strong evidence that identifying patients who have cognitive impairment early and subsequently providing appropriate evidence-based care is the most important strategy to improve safety and reduce the risk of harm for these patients.

This Handbook is based on work which identified the safety and quality issues faced by cognitively impaired patients across their journey in hospital. Evidence-based improvement strategies were then identified to enable and support clinicians to identify and provide the appropriate management of the healthcare of these patients. The strategies were then linked to NSQHS Standards highlighting how the Standards provide support for the implementation of targeted strategies to reduce harm and improve outcomes for patients with cognitive impairment.

The key strategies presented in the Handbook aim to:

- Facilitate assessment and identification of cognitive impairment. The identification of cognitive impairment should trigger further investigation, identification and treatment of delirium and the provision of appropriate management and targeted, individualised care for all those with cognitive impairment in hospital. Health service organisations can do so through the following mechanisms:
  
  - Creating responsive systems - these include governance arrangements, management of risk, operational policies and protocols, infrastructure for data collection, information exchange and feedback mechanisms, training systems and environmental design.
  
  - Ensuring skilled and informed staff.
  
  - Enabling patients and carers to participate in care.
2. Improving safety and providing high quality care for patients with cognitive impairment

2.1 Purpose
This Handbook is an evidence-based resource outlining the key mechanisms and strategies linked to the NSQHS Standards that health services can undertake to reduce the risk of harm and improve the quality of health care for patients with, or at risk of, cognitive impairment.

The Handbook has been designed for a range of purposes, including:

- Supporting the implementation of safety and quality improvements for people with cognitive impairment, by:
  - Supporting health services to undertake a gap analysis of existing practice compared to evidence-based practice
  - Identifying strategies for improvement
  - Providing clinicians with access to resources and teaching material, in the form of case studies and implementation tools.

- Demonstrating compliance with the NSQHS Standards during accreditation by:
  - Recognising cognitive impairment as a high risk patient group
  - Providing evidence of implementation of strategies and compliance with the actions required in the standards.

2.2 Intended audience
This resource has been developed for:

- Clinicians and managers who are responsible for providing healthcare.
- Planners, administrators and policy makers responsible for effecting strategic change and developing programs and projects to make ongoing improvements to safety and quality.

2.3 Scope
The scope of the Handbook includes patients with cognitive impairment in acute care services. Dementia and delirium are common forms of cognitive impairment seen in older hospitalised patients and are the primary focus of the Handbook. Patients with cognitive impairment have deficits in one or more of the areas of memory, problems with communication, attention, thinking and judgment. These deficits put patients with cognitive impairment at additional risk of harm whilst in hospital and are the focus of the safety and quality improvement strategies in the Handbook.

Depression is also common in hospitalised older patients and may present as cognitive impairment. People may be cognitively impaired due to drug use or psychiatric disorders such as schizophrenia or bipolar affective disorders and these should also be considered when investigating causes and ensure that appropriate referrals are made. Whilst not the focus of the resource, people with other conditions associated with cognitive impairment, such as acquired brain injury and intellectual disability, will benefit from the actions and strategies outlined in the Handbook.
The Handbook has been developed to apply across the diverse range of acute care facilities that exist in Australia, from major tertiary teaching hospitals to small rural multipurpose services. Whilst the Handbook focuses on the acute care setting, there is recognition that people with cognitive impairment are also managed in primary care, community and residential care and for the best possible outcome, these services need to be linked and seamless. As such, the Handbook includes strategies to be effected at the point of transitions in care addressing information exchange and communication between hospitals and general practice, primary care, aged community and residential care.

The recommended strategies in the Handbook are based on available evidence. They are not an exhaustive list but focus on what is achievable. They are linked to the processes of implementation of the NSQHS Standards. As a framework, the NSQHS Standards provide a mechanism for systematically addressing many of the safety and quality issues affecting this patient population in an integrated manner.

It is intended that the actions and strategies suggested in this Handbook are adapted and implemented locally to reflect available resources and in a way that is sensitive to the diversity of cultural, economic and social backgrounds of the populations that are served. Providing individualised, tailored care should be the key object to enable health care organisations to respond appropriately to “diversity within diversity.”

The implementation of the strategies described in this Handbook would have the following outcomes for patients, carers, clinicians, health services and the health system:
What does safe and high quality care mean to:

<table>
<thead>
<tr>
<th>Person with cognitive impairment</th>
<th>When I go to hospital, my cognitive impairment is identified and I receive the care I need. My care is provided in a safe and supportive environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carer</td>
<td>I am supported and recognised as an active participant when decisions are made about the management of the person I care for.</td>
</tr>
<tr>
<td>Clinicians and other staff</td>
<td>I am skilled and competent in recognising and responding to cognitive impairment. The system supports me to provide the right care to patients with cognitive impairment.</td>
</tr>
<tr>
<td>Health Service</td>
<td>The systems and resources are in place to recognise and respond to the needs of patients with cognitive impairment, carers and clinicians to improve patient outcomes and experience of care. The facility is designed to support the needs of patients with cognitive impairment and enhances even ‘flow of the day’ concepts.</td>
</tr>
<tr>
<td>Health system</td>
<td>Mechanisms are in place to: • Support the delivery of quality care to patients with cognitive impairment • Promote the use of hospital substitution and community based services for patients and their carers with cognitive impairment • Health service organisations improve safety and the quality of care for patients with cognitive impairment by ongoing monitoring, evaluation and change processes • Develop and use nationally consistent coding and reporting systems for patients with cognitive impairment • Record and monitor incidence and prevalence of patients with cognitive impairment.</td>
</tr>
</tbody>
</table>

2.4 Structure
The Handbook outlines the key actions and evidence-based strategies that clinicians, managers and health services can undertake to reduce the risk of harm and improve the quality of health care for patients with, or at risk of, cognitive impairment. The Handbook is structured in the following way:

Patient Journey
The Handbook follows the journey of a patient with cognitive impairment from presentation at the hospital, to admission, to treatment, through to transfer of care in order to improve the safety and quality of that journey. Figure 1 summarises the pathway and key steps in
the patient journey. The Handbook is divided into the following three sections of the journey:

A. **Identification and Assessment of Cognitive Impairment** - identifying cognitive impairment means an initial and early detection of the impairment followed by specific delirium and/or dementia assessments. This is the most important step as it enables optimal care.

B. **Effective Management of Cognitive Impairment** - targeted, individualised care should be put in place for all patients with cognitive impairment: to adapt to their cognitive difficulties; reduce anxiety; keep people safe; and prevent harm. Appropriate physical environments can also have a significant positive impact on quality care.

C. **Seamless Care Transitions for People with Cognitive Impairment** - transitions to and from home or residential care are also important. The communication between primary health care providers, community and residential care providers are crucial aspects of promoting safety and quality.

**Safety and Quality Mechanisms**

Each of these three sections of the patient journey is further divided into the three mechanisms required for the implementation of safety and quality improvements across the patient journey. These mechanisms will:

1. **Establish Responsive Systems** - a responsive system is well organised, integrated and administered to achieve the healthcare required and improvements for patients with cognitive impairment.

2. **Ensure Skilled and Informed Staff** - quality care is dependent on clinicians and other staff who have the right knowledge, skills and attitudes. All clinicians and other staff have a role in providing safety and good quality care and creating a person centred culture, which requires targeted education and training.

3. **Enable Patient and Carer Participation** - carers can provide history, current care needs and can alert staff to changes to the person’s condition which can guide understanding, diagnosis, treatment and care plans. There is strong evidence that patient-centred care can lead to improvements in health care quality and outcomes by increasing safety, cost effectiveness and patient, family and staff satisfaction.14

The Handbook includes information about:

- **Patient journey:**
  - Overview of the patient journey and context
  - Presentation of the safety and quality issues
  - Evidence-based practice
  - Patient stories describing safety and quality issues faced by patients with cognitive impairment. Each patient story includes exemplars of what went wrong, what went well and what could have been done better.

- **Mechanisms:**
  - What can be done to improve care
  - How to make improvement happen
  - Link to the NSQHS Standards
  - Examples of evidence which could be used at accreditation
Resources to assist clinicians and managers and health services to achieve each mechanism with hyperlinks to each resource.

A separate resource: Evidence for the safety and quality issues associated with the care of patients with cognitive impairment in acute care settings: a rapid review, accompanies this Handbook. The Rapid Review provides the evidence supporting the strategies described.

The key elements of the Handbook are summarised in the two following Figures.

**Figure 1: The evidence-based safety and quality pathway for patients with cognitive impairment**

The pathway outlines the necessary elements to enable a safe and improved patient journey through the acute care setting. It reinforces the importance of cognitive impairment identification, assessment and management to improve care and minimise adverse outcomes. It highlights that any change in a person’s condition or behaviour should trigger reassessment.

**Figure 2: Cognitive impairment safety and quality matrix**

The matrix summarises the key strategies and actions required along the patient journey. The matrix is divided into the three mechanisms and each linked to the key NSQHS standards, which require an additional focus.
Evidence Based Safety and Quality Pathway for Patients with Cognitive Impairment

For all patients on PRESENTATION

Examine Patient for the likelihood of:
► A physical injury or illness
► A cognitive impairment

Key informants:
- Patients and Carers
- General practitioners
- Other health professionals

Known to have Cognitive Impairment
Dementia +/- Delirium

AGED OVER 65 YEARS and / or CONCERN RAISED about cognitive function

AGED UNDER 65 YEARS and NO CONCERNS with cognitive function

Treat Presenting Condition

Assess using validated tool

IDENTIFY COGNITIVE IMPAIRMENT

Cognitive impairment IDENTIFIED

Delirium Testing
- Changes in behaviour or physical or mental condition

Cognitive impairment NOT IDENTIFIED

Treat presenting condition

Patient and Carer participation

Delirium NOT IDENTIFIED

Baseline cognitive testing
Treat presenting condition

Delirium IDENTIFIED

Manage delirium
Find and treat causes of delirium
Treat presenting condition

EFFECTIVE MANAGEMENT OF COGNITIVE IMPAIRMENT through individualised, targeted prevention and management

Patient and Carer participation

SEAMLESS CARE TRANSITIONS FOR PEOPLE WITH COGNITIVE IMPAIRMENT through information exchange, transfer of care and appropriate follow up care

Patient and Carer General practitioner
Other health professionals
# COGNITIVE IMPAIRMENT

## SAFETY AND QUALITY MATRIX

### RESPONSIVE SYSTEM

<table>
<thead>
<tr>
<th>Implementing Systems</th>
<th>Staff Education and Training</th>
<th>Carer Informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish and implement system for routine identification of cognitive impairment, assessment, re-assessment; documenting and communicating results.</td>
<td>Provide staff education and training in identification, assessment and re-assessment.</td>
<td>Consult carers are as key informants on patients with cognitive impairment.</td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.1.1, 1.8.1, 1.1.5</td>
<td>NSQHS Standard Actions: 1.3.1, 1.3.2, 1.3.3</td>
<td>NSQHS Standard Actions: 1.17.3, 1.18.2</td>
</tr>
<tr>
<td>Link with: 1.5.2, 1.9.1, 6.1.1, 6.2.1, Std 8,10</td>
<td>Routine Testing</td>
<td>Carers Notify Changes</td>
</tr>
<tr>
<td>Monitoring and Reporting</td>
<td>Undertake routine cognitive testing for patients over 65 years.</td>
<td>Enable carers to alert staff to changes in condition.</td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.6.1</td>
<td>NSQHS Standard Actions: 1.4.1, 1.4.3, 1.4.4</td>
<td>NSQHS Standard Actions: 9.7.1</td>
</tr>
<tr>
<td>Link with: 1.14.1, 1.15.1, 1.16.1</td>
<td>Delirium Assessment</td>
<td>Information for Patients and Carers</td>
</tr>
<tr>
<td>Systems Improvement</td>
<td>Undertake delirium assessment for all patients with cognitive impairment.</td>
<td>Enabling patient participation through the provision of information</td>
</tr>
<tr>
<td>Ongoing improvement of the systems that support the identification, assessment and re-assessment of cognitive impairment.</td>
<td>NSQHS Standard Actions: 1.1.1, 1.8.1, 1.8.3</td>
<td>NSQHS Standard Actions: 1.18.1, 1.18.3</td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.1.1, 1.6.2, 1.8.3</td>
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<td></td>
</tr>
</tbody>
</table>

### SKILLED AND INFORMED STAFF

<table>
<thead>
<tr>
<th>Evidence Based Care</th>
<th>Tailored Care</th>
<th>Partners in Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSQHS Standard Actions: 1.7.1, 1.7.2</td>
<td>NSQHS Standards Actions: 1.8.2</td>
<td>Involve cares in case conferencing / handover.</td>
</tr>
<tr>
<td>Models of Care</td>
<td>Education and Training</td>
<td>NSQHS Standards Actions: 1.18.1, 1.18.3, 6.5.1</td>
</tr>
<tr>
<td>Adopt evidence based models of care.</td>
<td>Provide staff education and training on evidence based management.</td>
<td></td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.8.1</td>
<td>NSQHS Standards Actions: 1.12.1</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Provide staff education on advanced care planning and end of life care.</td>
<td></td>
</tr>
<tr>
<td>Implement evidence based environmental design.</td>
<td>NSQHS Standards Actions: 2.8.1</td>
<td></td>
</tr>
<tr>
<td>NSQHS Standard Actions: None related</td>
<td>Expert Support</td>
<td></td>
</tr>
<tr>
<td>Investigate, Treat and Reassess</td>
<td>Provide access to expertise in cognitive impairment.</td>
<td></td>
</tr>
<tr>
<td>Investigate underlying conditions, treat causes and reassess when changes occur</td>
<td>NSQHS Standards Actions: 1.10.5</td>
<td></td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.8.3, 9.5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and Reporting</td>
<td>Information Systems</td>
<td>Partners in Decision Making</td>
</tr>
<tr>
<td>Monitor and report on implementation.</td>
<td>Develop information exchange systems</td>
<td>Consult patients and carers in transition decisions.</td>
</tr>
<tr>
<td>NSQHS Standard Actions: 1.6.1</td>
<td>NSQHS Standards Actions: 6.1.1</td>
<td>NSQHS Standards Actions: 6.5.1</td>
</tr>
</tbody>
</table>

### PATIENT AND CARER PARTICIPATION

<table>
<thead>
<tr>
<th>Partners in Decision Making</th>
<th>Education and Training</th>
<th>Advanced Care Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involve patients and carers in transition decisions.</td>
<td>Provide staff education and training on obtaining timely and sufficient information to complete advanced care plans.</td>
<td>Encourage the identification of substitute decision maker and advanced care plans.</td>
</tr>
<tr>
<td>NSQHS Standards Actions: 6.5.1</td>
<td>NSQHS Standards Actions: 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.18.4</td>
<td>NSQHS Standards Actions: 1.18.4</td>
</tr>
<tr>
<td>Advanced Care Plans</td>
<td>Provide targeted, individualised care and implement delirium prevention and management strategies.</td>
<td></td>
</tr>
<tr>
<td>Provide systems to prepare, receive and transfer advanced care plans.</td>
<td>NSQHS Standard Actions: 1.8.2</td>
<td></td>
</tr>
<tr>
<td>NSQHS Standards Actions: 9.8.1, 9.8.2</td>
<td><strong>Programs for Transition</strong></td>
<td></td>
</tr>
<tr>
<td>Facilitate access to transition programs.</td>
<td>NSQHS Standards Actions: 10.8.1</td>
<td></td>
</tr>
</tbody>
</table>

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**Note:** The above table and diagram outline the mechanisms for implementing systems, staff education, and patient and carer participation in the context of cognitive impairment management. Each section is supported by specific NSQHS Standard Actions and links to related standards for monitoring and reporting, systems improvement, evidence-based care, models of care, environment, and expert support. The table also highlights the importance of tailoring care, ensuring access to advanced care plans, and involving patients and carers in decision-making processes.
A. Identification and Assessment of Cognitive Impairment

Identification and Assessment

Identifying cognitive impairment means an initial detection of the impairment followed by specific delirium and/or dementia assessments. It is essential that investigations for the cause/s of the delirium are identified and treated. Hospital clinicians need to be alert to the possible development of incident delirium in older hospitalised patients and consequently the need for assessment or reassessment if there is any change in the patient’s behaviour or mental status. The trigger for change and response must be incorporated into clinical handover and practice.

Introduction

Cognition affects someone’s ability to remember, communicate relevant information, make decisions and function independently. Despite increasing prevalence rates, cognitive impairment in older patients is still poorly recognised or thought to be clinically not relevant. This perception consequently impacts on care and increases the risk of adverse outcomes. Cognitive impairment may impede a patient’s ability to provide informed consent and be associated with increased risk of accidents in hospital and following discharge.

Identification of cognitive impairment will benefit the patient as this identification will assist to identify risks and to trigger a response to their specific needs. Patients with cognitive impairment may have difficulties with information comprehension and/or relaying information including pain or discomfort (wanting to go to the toilet). For example, if a patient without cognitive impairment informs clinicians that they have no pain then a clinician’s response may be not to offer pain medication. However, if a person is identified as having a cognitive impairment and states that they have no pain then it may alert a clinician to look at incorporating other pain identification strategies such as patient behaviours or expressions.

Safety and Quality Issues

Missed identification of cognitive impairment can put the patient at risk of adverse events and impact on the provision of safe and high quality care. Many issues may contribute to the missed identification of cognitive impairment including obtaining an inadequate, or incomplete, history as the person may be unable to communicate or understand questions and instructions. This would be exacerbated if carers are not involved in the information gathering process. Additionally, a lack of governance systems to maintain and improve identification and assessment of cognitive impairment along with any knowledge and skill deficits of clinician will significantly impact on the provision of safe and high quality patient care.
Evidence-Based Practice

It is important that patients with cognitive impairment are identified and appropriately assessed early in the patient journey to ensure safe and high quality care is implemented.

The Australian Charter of Healthcare Rights states that everyone has: “A right to safe and high quality care”.

There are a variety of simple, validated and clinically appropriate tests available that can be used as an initial assessment of cognitive function. These tests alone are not sufficient to diagnose a delirium or dementia but are a useful first step in the identification of a cognitive impairment. The tests should be undertaken in partnership with carers and include a detailed history, incorporating functional and social status, and a thorough examination undertaken at the outset of the patient journey.

If cognitive impairment is identified then more comprehensive assessments for delirium and then dementia need to be undertaken. If delirium is identified, it is essential that further investigations are undertaken to try and find and treat the cause(s). If delirium is not identified in a person with cognitive impairment, a dementia diagnostic process should be initiated; this can be undertaken following discharge from hospital.

It can be difficult to distinguish between delirium and dementia and some people will have both conditions. If clinical uncertainty exists over the diagnosis, the person should be managed initially for delirium.6

It is crucial to recognise if a patient with dementia has an acute change in their mental status or behaviour as they may have a delirium superimposed on their pre-existing dementia. Delirium, even in the presence of an underlying dementia, is a potentially reversible condition. This assessment will be best undertaken with family and/or carers.

Further cognitive assessments, including delirium assessments, should be undertaken if there is:

- A sudden of abrupt change in the patient’s behaviour or mental status
- A deterioration in the patient’s general condition
- A sudden decline in the patient’s ability to perform activities of daily living.

To enable reliable and valid cognitive testing processes, a structured training program in the use of the testing tools and carer engagement programs must be available. Cognitive testing needs to be undertaken respectfully and carers need to be involved in the testing process so comprehensive information is available.

Social circumstances and relationships may also need to be quickly identified. A critically ill person may also be a carer of someone at home who cannot manage on their own. Sometimes clinicians and other staff may find that a spouse who is visiting the patient may also show signs of cognitive impairment. Strategies need to be in place to also support carers and where applicable, provide support to the dependent of the patient if they are the principal carer.

Identification of cognitive impairment is only beneficial to the patient if appropriate risk management and evidence-based care strategies are then implemented. This requires a system response (See Section B: Effective Management of Cognitive Impairment).
Safety and Improved Quality Outcomes

The expected outcome of integrating effective assessment and identification of cognitive impairment into a responsive system, having skilled and informed clinicians and having patients and carers participating in the process, include:

✓ Cognitive impairment is formally identified, assessed and investigated and responded to
✓ Any changes in condition trigger re-assessment
✓ Clinicians have the necessary skills and knowledge to identify and assess cognitive impairment
✓ There are integrated systems of governance to safely and actively provide evidence-based management for patients with cognitive impairment
✓ Patients and carers are involved in the identification process
✓ Monitoring and evaluation processes for cognitive impairment identification and assessment are in place in all acute facilities.
<table>
<thead>
<tr>
<th>What does effective identification and assessment mean to:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person with cognitive impairment</strong></td>
</tr>
<tr>
<td>I am supported to understand and participate in my own care, and the causes of my impairment are investigated.</td>
</tr>
<tr>
<td><strong>Carer</strong></td>
</tr>
<tr>
<td>I have cognitive impairment explained to me.</td>
</tr>
<tr>
<td>I am asked to provide information to enable assessment.</td>
</tr>
<tr>
<td>I am encouraged to report changes in the behaviour, physical or mental condition of the person I care for.</td>
</tr>
<tr>
<td><strong>Clinicians and other staff</strong></td>
</tr>
<tr>
<td>I am trained in cognitive testing and interpretation of results.</td>
</tr>
<tr>
<td>I am informed about the contribution carers can make to my understanding my patient and I seek their input to provide the best possible care.</td>
</tr>
<tr>
<td><strong>Health Service</strong></td>
</tr>
<tr>
<td>Ensures systems and processes are in place for the identification and assessment of cognitive impairment.</td>
</tr>
<tr>
<td>Provide access to training for clinicians to ensure they have the tools, resources and systems needed to effectively identify and assess patients with cognitive impairment.</td>
</tr>
</tbody>
</table>
### Mechanism 1: \_______________

#### 1.1 What can you do to improve the care you provide?

- Assess and identify the cognitive function of all patients over 65 years
- Facilitate the participation of patients and carers in the clinical assessment process
- Monitor and document the results of cognitive function testing
- Develop tailored clinical pathways/management plans for patients with cognitive impairment
- Include cognitive status in structured clinical handovers
- Include cognitive function as a measure when monitoring deterioration of health status
- Include patients and carers in open disclosure process
- Monitoring and evaluation processes for cognitive impairment identification and assessment are in place at all acute health care facilities.

#### 1.2 How can I make improvement happen?

- Implement policies and procedures for the identification and assessment of cognitive impairment by a multi-disciplinary workforce and monitor their use
- Provide access to an integrated patient clinical record to enable retrieval of information, which may include electronic-based records
- Implement policy, procedures and protocols to collect information on patients with cognitive impairment through complaints and incidents systems
- Collect, monitor, report and review organisation wide data on the identification and assessment of patients with cognitive impairment. This may include data on safety and quality risks, the use of restraints and/or psychotropic drugs
- Establish open disclosure processes that are accessible and understandable to patients with cognitive impairment and their carers.
### Mechanism 1: Responsive System

<table>
<thead>
<tr>
<th>1.3 NSQHS Standards</th>
<th>1.4 Evidence you can use at accreditation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implementing systems</strong>&lt;br&gt;Establish and implement system for routine identification of cognitive impairment, assessment, re-assessment, documenting and communicating results.&lt;br&gt;&lt;br&gt;<strong>NSQHS Standards Actions</strong>: 1.1.1, 1.5.1&lt;br&gt;&lt;br&gt;<strong>Link with</strong>: 1.5.2, 1.9.1, 6.1.1 and 6.2.1, Std 8, Std 10</td>
<td>□ Risk register that includes a risk profile and risks associated with identifying and caring for patients with cognitive impairment</td>
</tr>
<tr>
<td><strong>Monitoring and reporting</strong>&lt;br&gt;Monitoring and reporting on the use of systems for identification, assessment and re-assessment.&lt;br&gt;&lt;br&gt;<strong>NSQHS Standards Actions</strong>: 1.6.1&lt;br&gt;&lt;br&gt;<strong>Link with</strong>: 1.14.1, 1.15.1 and 1.16.1</td>
<td>□ Policy, procedure and protocols for the identification of patients with cognitive impairment</td>
</tr>
<tr>
<td><strong>Quality improvement</strong>&lt;br&gt;Ongoing improvement of the systems that support the identification, assessment and reassessment of cognitive impairment.&lt;br&gt;&lt;br&gt;<strong>NSQHS Standards Actions</strong>: 1.1.1, 1.6.2, 1.8.3&lt;br&gt;&lt;br&gt;<strong>Link with</strong>: 1.8.3, 1.1</td>
<td>□ Relevant documentation that includes the monitoring and review of the assessment of patients for cognitive impairment and strategies to reduce their risk of harm.</td>
</tr>
<tr>
<td>□ Audit of patient clinical records to identify patients that have been assessed, identified and reassessed for cognitive impairment.</td>
<td></td>
</tr>
</tbody>
</table>
**Mechanism 2:…………………………….**

<table>
<thead>
<tr>
<th>2.1 What can you do to improve the care you provide?</th>
<th>2.2 How can I make improvement happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify, assess and reassess all patients over 65 years or those with a concern of cognitive impairment at the earliest possible stage of the patient journey</td>
<td>• Make available training, resources and tools for staff in the:</td>
</tr>
<tr>
<td>• Document cognitive status as early as possible during admission and/or hospital stay</td>
<td>○ use of validated cognitive testing and tools and timing for assessment</td>
</tr>
<tr>
<td>• Reassess a patient whenever there is a change or deterioration in their condition</td>
<td>○ documenting cognitive impairment</td>
</tr>
<tr>
<td>• Include carers in the identification of a patient’s cognitive function and in the recognition of cognitive deterioration.</td>
<td>○ recognising and responding appropriately to changes in a patient’s cognitive ability</td>
</tr>
<tr>
<td></td>
<td>• Educate clinicians in the use of evidence-based clinical practice guidelines for assessment of cognitive impairment</td>
</tr>
<tr>
<td></td>
<td>• Support less experienced clinicians responsible for assessing a patient’s cognitive impairment through mentoring and/or leadership</td>
</tr>
<tr>
<td></td>
<td>• Clarify the roles and responsibilities for the identification and assessment of cognitive impairment for the clinical workforce</td>
</tr>
<tr>
<td></td>
<td>• Provide the clinical workforce with cognitive clinical practice guidelines and culturally appropriate validated tools</td>
</tr>
<tr>
<td></td>
<td>• Monitor the use of cognitive clinical practice guidelines and culturally appropriate validated tools.</td>
</tr>
</tbody>
</table>
### Mechanism 2:........................................

<table>
<thead>
<tr>
<th>2.3 NSQHS Standards</th>
<th>2.4 Evidence you can use at accreditation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff education and training</strong>&lt;br&gt;Provide staff education and training in the identification, assessment and reassessment of cognitive impairment.&lt;br&gt;<strong>NSQHS Standards Actions:</strong> 1.3.1, 1.3.2, 1.3.3</td>
<td>□ Mechanisms for collecting feedback from clinicians and other staff on the identification, assessment and reassessment of patients with cognitive impairment.</td>
</tr>
<tr>
<td><strong>Routine testing</strong>&lt;br&gt;Undertake routine cognitive testing of patients over 65 years.&lt;br&gt;<strong>NSQHS Standards Actions:</strong> 1.4.1, 1.4.3, 1.4.4</td>
<td>□ Position descriptions, duty statements and employment contracts that describe the safety and quality roles and responsibilities and accountabilities for clinicians care for people with cognitive impairment.</td>
</tr>
<tr>
<td><strong>Delirium assessment</strong>&lt;br&gt;Undertake delirium assessment for all patients with cognitive impairment.&lt;br&gt;<strong>NSQHS Standards Actions:</strong> 1.1.1, 1.8.1</td>
<td>□ Education resources and records of attendance at training by clinicians and other staff at training on cognitive impairment.</td>
</tr>
</tbody>
</table>

□ Induction checklist and orientation program that addresses systems for identification, assessment and reassessment of people with cognitive impairment.

□ Review of feedback from clinicians on their training needs.
### Mechanism 3: Participation

#### 3.1 What can you do to improve the care you provide?
- Inform patients with cognitive impairment and carers about their healthcare rights.
- Inform carers about their role in 'alert systems' and test their understanding and willingness to use the 'alert system'.
- Involve carers in the identification and assessment of cognitive impairment.
- Treat the patient and carer(s) with respect and dignity and encourage open communication, their participation, and ensure their privacy.

#### 3.2 How can I make improvements happen?
- Adopt or adapt a patient charter of rights that can be understood by carers, and wherever possible, patients with cognitive impairment.
- Educate carers in how they can inform staff of any changes in a patient's behaviour.
- Inform patient and carer of the need for and process of cognitive identification and assessment processes.
- Include the patient and carer in clinical handover to report on any changes in behaviour or in mental or physical condition.
- Ensure informed consent processes and documentation are in place and monitored.
### Mechanism 3: ........................................

<table>
<thead>
<tr>
<th>3.3 NSQHS Standards</th>
<th>3.4 Evidence you can use at accreditation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carer informants</strong></td>
<td>Policies, procedures and protocols on communicating and including information from patients and carers into care processes.</td>
</tr>
<tr>
<td>Consult carers as key informants for patients with cognitive impairment.</td>
<td></td>
</tr>
<tr>
<td><strong>NSQHS Standards Actions:</strong> 1.17.3, 1.18.3</td>
<td></td>
</tr>
<tr>
<td><strong>Carers communicate changes</strong></td>
<td>Patient clinical record reflects assessment the patient and carer needs and support provided.</td>
</tr>
<tr>
<td>Enable carers to alert clinicians to changes in condition.</td>
<td></td>
</tr>
<tr>
<td><strong>NSQHS Standards Actions:</strong> 9.7.1</td>
<td></td>
</tr>
<tr>
<td><strong>Information for patients and carers</strong></td>
<td>Analysis of consumer feedback regarding healthcare rights, participation, communication with clinicians and other staff.</td>
</tr>
<tr>
<td>Enabling patient participation through the provision of information.</td>
<td></td>
</tr>
<tr>
<td><strong>NSQHS Standards Actions:</strong> 1.18.1, 1.18.3</td>
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</tr>
</tbody>
</table>

Information packages or resources available for patients and carers, including on recognition and response systems.
PATIENT STORY No.1: Identification and Assessment

Mrs A is aged 80 years and presents unaccompanied via ambulance to the emergency department (ED) after being found in a garden with a large laceration to her forehead. Handover from the ambulance officer suggested that she has some “confusion”.

She informs the clinicians that she can’t remember the fall. She tells them that she lives alone and does her own cooking, shopping and personal care. She appears somewhat unkempt in appearance but staff put that down to her working in the garden. She is unable to provide staff with contact details of her daughter, who she says “lives a long way away”.

She remembers that she has a “normal doctor” but can’t remember the name. She informs clinicians that the doctor’s name is probably in her handbag and gives permission for them to have a look.

The ED doctor discovers that her medications are in her handbag and include aspirin and amlodipine. The prescribing General Practitioner (GP) is then contacted and informs clinicians that Mrs A is a widow and appears well except for some hypertension, however she hadn’t seen her for many months.

The GP stated that because of Mrs A’s age, she was offered a 75 plus assessment with a view to potentially providing her with some home care assistance but Mrs A refused as she didn’t want other people in her home. Mrs A’s daughter’s contact details were obtained from the GP.

On examination, Mrs A had a significant symptomatic postural hypotension and dehydration, which responded to intravenous fluids. The doctor documented that she had “no confusion now”. Her daughter was advised by the ED doctor that she was being admitted to the hospital to “keep an eye on her suspected head injury and blood pressure”.

Following suturing of her wound she was admitted for overnight head injury and blood pressure observations. A scheduled Computerized Tomography (CT scan) needed to be delayed to the following evening and therefore, she was kept in hospital another night. No cognitive assessments had been undertaken.

During the following day nurses documented that she was “not quite right” and displayed some “confusion”. Consequently her head injury observations were continued. On the second night she kept calling out and couldn’t remember how to use the buzzer. She continued to get “distressed” and climbed out of bed to go to the toilet but fell over and sustained a hip fracture.
<table>
<thead>
<tr>
<th>What did not go well?</th>
<th>What went well?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ No cognitive testing</td>
<td>✓ Prescribing GP contacted</td>
</tr>
<tr>
<td>✗ Because cognitive impairment was not identified the baseline history may be inaccurate. For example, her preadmission ADL ability may have been inaccurate</td>
<td>✓ Daughter contacted and informed of mother’s hospitalisation</td>
</tr>
<tr>
<td>✗ Previous “confusion” may have been an indicator of cognitive impairment (acute or long standing) rather than a possible head injury</td>
<td>✓ Appropriate management of primary presenting problems.</td>
</tr>
<tr>
<td>✗ An underlying delirium may have been missed and consequently the underlying health problem not investigated and treated</td>
<td></td>
</tr>
<tr>
<td>✗ No response to documented deterioration</td>
<td></td>
</tr>
<tr>
<td>✗ No response to Mrs A’s increasing distress, “calling out” due to “not remembering how to use the buzzer” Mrs A may have been becoming more distressed because she wanted to go to the toilet.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What could have been done better?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Early cognitive impairment identification because policies and procedures for cognitive impairment identification were in place and clinicians were trained and informed</td>
<td></td>
</tr>
<tr>
<td>✓ Further investigation of cognitive impairment because there were response triggers in place</td>
<td></td>
</tr>
<tr>
<td>✓ Daughter further engaged in history taking mechanisms</td>
<td></td>
</tr>
</tbody>
</table>
Resources

Mechanism 1: Responsive System

**Cognitive assessments in the elderly: a review of clinical methods.** This publication provides information about an array of cognitive assessment tools. It provides a comparative table that may assist you in identifying an appropriate tool to use for initial cognitive impairment identification. It includes brief tests with a reasonable sensitivity and specificity that detect the presence of cognitive impairment (but do not distinguish between causes). These include the 6CIT, Mini-Cog and SIS.

**Dementia Outcomes Measurement Suite (DOMS).** The DOMs provides access to a variety of cognitive identification and assessment methods including their purpose, validation, administration time, and recommended administration personnel. It provides downloads of the tools in a usable format.

**Recognition of Dementia in Hospitalized Older Adults.** This “try this” paper provides information on dementia recognition in hospitals, including tools or strategies to use when there is no prior diagnosis of dementia.

**Mental Status Assessment in Older Adults: MoCA Version 7.1.** The Montreal Cognitive Assessment (MoCA) is an assessment tool for the identification of Mild Cognitive Impairment and early Alzheimer’s disease.

**Dementia Care in Hospitals Program (DCHP) is an evaluated Victorian hospital program to improve the hospital care experience for people with dementia and their carers. The DCHP is linked to a validated bedside alert called the Cognitive Impairment Identifier (CII) along with education and carer involvement.**

Mechanism 2: Skilled and Informed Staff

**CAM training manual - The Hospital Elder Life Program (HELP).** This site provides access to the Confusion Assessment Method (CAM) training manual for delirium and HELP information.

**CAM-ICU training manual.** The CAM-ICU is a modified version of the CAM intended for use when the patient is only able to provided non-verbal responses.

**Assessing and Managing Delirium in Older Adults with Dementia.** This “try this” paper provides information on assessing delirium superimposed on dementia.

**Why Doctors need to know about Delirium – relevance, implications, screening and diagnosis.** This video on the Confused Hospital Older Persons (CHOPS) website focuses on the role of doctors in screening, assessment and diagnosis of delirium.

Mechanism 3: Patient and Carer Participation

**Working with Families to Improve Care of Hospitalized Older Adults with Dementia.** This “try this” paper provides information on involving carers in health care teams and describes information gathering processes.

**Delirium Superimposed on Dementia.** This article provides information on detecting and managing delirium superimposed on dementia. Links to web-videos and other sources of information.
B. Effective Management of Cognitive Impairment

Introduction

A busy, noisy hospital environment, with unfamiliar faces and different routines, can be overwhelming for many patients, particularly those with cognitive impairment. The hospital environment can exacerbate disorientation and cause distress. People with cognitive impairment often have difficulty communicating their needs and may require additional supervision in order for them to be provided with safe and high quality care. Additionally, patients may lose functional ability and independence in the absence of an enabling approach to care management.

Appropriate management includes: identification and management of clinical risks (such as falls); targeted, individualised care; engagement with carers; appropriate management of behaviour; and delirium management and prevention strategies.

Safety and Quality Issues

Inappropriate management of cognitive impairment can place the person at increased risk of harm and also increase the likelihood of adverse events. Patients with cognitive impairment may have un-identified and therefore, unmet care needs. For example: requiring assistance with toileting, meals and drinking, oral hygiene, difficulty using the buzzer, being unaware of hazards, requiring assistance with mobilising, and not communicating their sensory deficits. The person may not understand instructions; they may be frightened and/or appear uncooperative and may try to leave the hospital.

Between 29% and 64% of all older people in general medical geriatric settings experience delirium. However, it is a potentially preventable and/or reversible condition. Incidence rates of delirium in hospital are suggested to be an indicator of poor care management. Delirium is a multifactorial condition that results from a complex interplay between underlying risk factors in vulnerable patients and hospital related events. For example, someone with multiple underlying risk factors such as existing dementia, taking multiple medications and with sensory impairments, may develop delirium by simply being given a sedative to assist sleep.

Older hospitalised patients with dementia for both medical and surgical care, have significantly higher rates of potentially preventable complications such as urinary tract infections, pressure areas, pneumonia and delirium compared to patients without dementia. These conditions are sensitive to improved clinical care, such as mobilisation, hydration, hygiene, toileting, decreased use of restraints such as bed rails, and catheterisation.

Communication difficulties or delirium can lead to escalating behavioural disturbances. Behaviours such as agitation or sleep disturbance may be inappropriately managed through the use of antipsychotic or sedative medications. These may have only modest benefit and are known to further increase risk of adverse events. For example, there is increased mortality and heightened risk of stroke in patients treated with antipsychotic medications. There is emerging evidence regarding the benefit of non pharmacological or psychosocial interventions as an effective alternative to antipsychotic medications.
Hospital clinicians and other staff frequently encounter aggression from people with cognitive impairment. However, the majority do not feel confident and lack knowledge in relation to managing these behavioral disturbances. Lack of knowledge about cognitive impairment management may be as a consequence of limited availability and/or access to training. For example, a lack of knowledge or confidence may result in behavioural disturbances being managed by one to one supervision in the form of custodial care rather than introducing delirium prevention techniques.

If clinicians feel frustration, it may lead them to take control of a patient’s decision and tasks of daily living to save time, leading to further functional decline. Carers are often stressed about having to leave their family member in an acute care environment where care is not targeted to their needs. Additionally, family members may try to communicate advice on safety and management issues that may be ignored by clinicians, not acted on, or may not have been communicated to members of the health care team.

Policies and protocols based on evidence-based guidelines can be in place but are not implemented or monitored. Alternatively, evidenced-based programs may have been introduced but in a piecemeal fashion, reliant on committed individuals, rather than a systematic, executive sponsored approach.

The physical design of a hospital, ward and rooms can contribute to a patient’s disorientation, hinder appropriate care and increase risk for falls and other adverse events. Alternatively, design can positively contribute to reducing delirium.

It is known that people who progressively deteriorate from conditions such as dementia do not always receive appropriate or timely end-of-life care. This is for a number of reasons including failures to address advance care planning and the difficulties that clinicians and carers may face making end-of-life decisions.

It is important that patients, carers and clinicians have a shared understanding of a person’s prognosis, goals of treatment and preferences of care. Ideally the process of advance care planning should begin as soon as possible after a person is diagnosed with a progressive disease causing cognitive impairment.

It is important that advance care planning and end-of-life preferences for patients with cognitive impairment are considered, documented and a substitute decision maker identified. In the absence of effective advance care planning, patients may receive unwarranted and burdensome treatments that prolong death and cause suffering.

**Evidence-Based Practice**

There is strong evidence that multi-component non-pharmacological interventions to target specific delirium risk factors are effective in significantly reducing delirium incidence in elderly medical patients. These interventions include; orientation activities, early mobilisation, preventing sleep deprivation, minimising the use of psychotropic drugs, use of sensory devices and treating dehydration.

A recent systematic review concluded that there is no evidence to support the use of antipsychotics as a treatment for delirium in older hospitalised adults.

Good design can reduce agitation and distress, support independence and social interaction, promote safety and enable activities of daily living. Good design principles can be applied at facility, ward or room level. Twenty-six case studies,
which improved the physical environment of the hospital to better suit patients with cognitive impairment (e.g. better lighting and signage, the removal of potential hazards and clocks with large faces that are visible from all beds), reported improvements in a number of patient outcomes, including reduced agitation and falls, reduced need for anti-psychotic medication, improved nutrition and hydration and improved clinician morale.  

Dementia education and training for clinicians and other staff can improve knowledge and confidence in interacting with patients with dementia and is recommended in several guidelines. Access to clinical experts can drive quality care, providing leadership, mentoring and role modelling.

Therefore, an environment that considers the physical design of a facility, and supported by a positive and strong culture leadership optimise the opportunity for effective support for patients with cognitive impairment. The Hospital Dementia Services Project found that NSW hospitals that rated higher in the following factors produced better patient outcomes: hospital cultures; staff leadership; the presence of skilled (specialist) staff; and the hospital environment. Hospitals rating higher in these areas produced better outcomes for patients with dementia.  

**Advance care planning and end-of-life care**

Conditions, such as dementia, cause progressive deterioration in a person’s condition and cognition and may limit their ability to participate in future decision-making about their treatment. It is important to consider processes such as advanced care planning and the nomination of a substitute decision maker.

Advance care planning should include talking with people about their values, goals of care and treatment preferences will enable future care to be provided in accordance with their wishes. Carers should be involved in these discussions.
Individualised delirium prevention and management strategies

Clinical Care

☑ Undertake a medication review
☑ Encourage/assist eating and drinking to ensure adequate intake
☑ Ensure that patients who usually wear hearing and visual aids are assisted to use them
☑ Avoid dentures being lost
☑ Avoid constipation
☑ Provide orientation information including name and role of staff members
☑ Encourage and assist with regular mobilisation
☑ Manage discomfort and pain
☑ Promote relaxation and sufficient sleep – can be assisted by regular mobilisation, massage, encouraging wakefulness during the day. Use a non-pharmacological sleep protocol
☑ Minimise the use of indwelling catheters
☑ Avoid the use of physical restraints including IVs
☑ Use interpreters and other communication aids for CALD patient and carers
☑ Use Aboriginal and Torres Strait Islander liaison officers for this population group

Individualised and Targeted Care

☑ Treat patients and carers/families with respect and dignity
☑ Minimise anxiety and distress
☑ Get to know the individual needs and preferences of the patient and carers/families
☑ Involve and support carers
☑ Encourage an even “flow of the day” approach to care
☑ Ensure a quiet environment especially at rest times
☑ Provide a visible clock and calendar
☑ Encourage family/carers to bring in familiar objects from home
☑ Avoid room changes – frequent changes may increase disorientation

Good Design Principles

☑ Provide a calm, safe and secure environment
☑ Ensure good visual access
☑ Provide a safe walking environment
☑ Provide opportunities for both privacy and community
☑ Promote continence (visual signage and access to toilets)
☑ Provide a way-finding orientation design
☑ Engage purposeful and individual targeted activities
☑ Provide lighting that is appropriate for the time of day – windows with a view outside, curtains and blinds open during the day, and minimal lighting at night may reduce disorientation (consider a light dimmer to mimic dusk to night)

Collated from: Australian Health Ministers Advisory Council (AHMAC) Clinical Practice Guidelines for the Management of Delirium in Older People (2006); Fleming, 2003 and The King’s Fund, 2012
Safety and Improved Quality Outcomes

The expected outcome of integrating effective management of cognitive impairment into a responsive system, having skilled and informed clinicians and having patients and carers participating in the process include:

- Patients with cognitive impairment receive targeted and individualised care, responsive to their social and cultural background. They are treated with dignity and respect.
- Carers are engaged to obtain personal history and care information.
- Physical needs are always investigated when behavioural issues arise.
- Any change in behaviour, physical or mental condition always triggers re-assessment.
- Restraint, sedation and use of psychotropic medications are avoided where possible.
- Carers are supported when they choose to be involved in care during the hospital stay.
- Carers' longer term needs are assessed, responded to and referrals made where necessary.
- Delirium is prevented or its duration is reduced.
- Environments are modified to increase safety and support quality care.
- Relevant clinicians are able to recognise a person approaching end of life, are skilled in discussing end of life care and do so in a timely manner.
- Plans of care, limitations on medical treatments e.g. resuscitation plans, are documented and regularly reviewed.

When cognitive impairment is effectively managed:

<table>
<thead>
<tr>
<th>Person with cognitive impairment</th>
<th>I am treated with respect and my care team is competent and caring.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I am asked about my hospital experience to continually improve the quality care provided.</td>
</tr>
<tr>
<td></td>
<td>I am encouraged to discuss my future care preferences when I have capacity to do so.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carer</th>
<th>I am recognised as part of the care team and informed about the care plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I am included in ward rounds and case conferences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinicians and other staff</th>
<th>I am alert to changes in my patient that trigger review or changes in management.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I communicate patient and treatment changes to my team.</td>
</tr>
<tr>
<td></td>
<td>I am supported by the health service systems to provide care and care planning for my patient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Service</th>
<th>The health service ensures wards, signage, walking trails and privacy are appropriately designed to maximise quality of care.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Training programs are in place to respond to the needs of clinicians to manage patients with cognitive impairment.</td>
</tr>
<tr>
<td></td>
<td>Systems are in place to trigger advance care planning.</td>
</tr>
</tbody>
</table>
Mechanism 1: .................................

<table>
<thead>
<tr>
<th>1.1 What can you do to improve the care you provide?</th>
<th>1.2 How can I make improvement happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Involve patients and carers in identifying a substitute decision maker and documenting this information</td>
<td>• Incorporate evidence-based guidelines and pathways into policies and procedures to address the management of:</td>
</tr>
<tr>
<td>• Establishing systematic feedback mechanisms for patients, carers, clinicians and other staff and monitoring this information</td>
<td>• Delirium</td>
</tr>
<tr>
<td>• Consider the involvement of volunteers to support patients, carers and clinicians</td>
<td>• Behaviour management</td>
</tr>
<tr>
<td>• Provide carer support programs that offer practical support to carers that may include access to quiet rooms, parking, tea, coffee, food, accessible information on cognitive impairment and services available.</td>
<td>• Pain management</td>
</tr>
<tr>
<td></td>
<td>• Medications</td>
</tr>
<tr>
<td></td>
<td>• End of life planning and palliative care</td>
</tr>
<tr>
<td></td>
<td>• Establish evidence-based multi-component models of care/programs that incorporates:</td>
</tr>
<tr>
<td></td>
<td>• personal patient information provided by carers into care delivery</td>
</tr>
<tr>
<td></td>
<td>• carer support mechanisms</td>
</tr>
<tr>
<td></td>
<td>• delirium management and prevention strategies into care practices</td>
</tr>
<tr>
<td></td>
<td>• engagement of volunteers</td>
</tr>
<tr>
<td></td>
<td>• make available flowcharts and tools</td>
</tr>
<tr>
<td></td>
<td>• provide equitable care, inclusive of and appropriate to the needs of older patients from culturally and linguistically diverse backgrounds, their families and carers</td>
</tr>
<tr>
<td></td>
<td>• Apply evidence-based environmental design principles at facility, ward and room level. If possible, modification of the immediate environment to encourage way finding, reduce agitation, promote usual routines should be considered as part of minor work upgrades.</td>
</tr>
</tbody>
</table>

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### Mechanism 1: .................. ..................

#### 1.3 NSQHS Standards

**Evidence-based Care**
Implement evidence-based guidelines pathways and protocols.

**NSQHS Standard Actions:** 1.7.1 and 1.7.2

**Models of Care**
Adopt evidence-based models of care.

**NSQHS Standards Actions:** 1.8.1

**Environment**
Adopt evidence-based environmental design.

**NSQHS Standards Actions:** None related

**Investigate, treat and reassess**
Investigate underlying cognitive and physical conditions, treat causes and reassess and respond when changes occur.

**NSQHS Standards Actions:** 1.8.2, 1.8.3, 9.5.1

**Monitoring and reporting**
Monitor and report on implementation.

**NSQHS Standards Actions:** 1.6.1

#### 1.4 Evidence you can use at accreditation

- Policies, procedures and protocols on access and use of clinical guidelines and pathways that reflect evidence-based practice for the management of patients with cognitive impairment.

- Audit of adherence to agreed evidence-based clinical guidelines and pathways using the patient clinical record.
Mechanism 2:..............................

2.1 What can you do to improve the care you provide?

- Encourage the patient with cognitive impairment and support carer to continue activities of daily living and mobilise when appropriate
- Seek advice and support from clinical experts when the management of cognitive impairment is complex or beyond the skills level of responsible staff, that may include geriatricians, psycho-geriatrician and nurse practitioners, clinical nurse consultants
- Obtain consent before prescribing psychotropic medication.

2.2 How can I make improvement happen?

- Provide education and training for clinicians in evidenced based strategies for:
  - individualised care
  - delirium prevention and management
  - non pharmacological management of behavioural and physiological symptoms of dementia
  - risk of administering antipsychotic medications
  - advance care planning and end of life care discussions
- Provide access to flexible training options on communication skills
- Support clinicians to access multidisciplinary geriatric expertise
- Engage bilingual/bicultural clinician or worker, or an interpreter when indicated
- Monitor and document training of clinicians.
### Tailored Care
Provide targeted, individualised care and implement delirium prevention and management strategies.

**NSQHS Standards Actions:** 1.12.1

### Education and training
Provide clinician education and training on evidence-based management.
Provide clinician education on advanced care planning and end of life care.

**NSQHS Standards Actions:** 2.6.1

### Expert support
Provide access to expertise in cognitive impairment.

**NSQHS Standards Actions:** 1.10.5

### 2.3 NSQHS Standards

<table>
<thead>
<tr>
<th>2.4 Evidence you can use at accreditation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Policies, procedures and protocols on training requirements for clinicians managing people with cognitive impairment.</td>
</tr>
<tr>
<td>- Education resources and records of attendance at training by clinicians on cognitive impairment.</td>
</tr>
<tr>
<td>- Resources and materials available to clinicians for the management of people with cognitive impairment.</td>
</tr>
<tr>
<td>- Communication to clinicians and other staff about education requirements and assessment of training needs for the management of people with cognitive impairment.</td>
</tr>
<tr>
<td>- Training curricula that include consumer centred care.</td>
</tr>
<tr>
<td>- Orientation and training programs that include partnerships and consumer perspectives.</td>
</tr>
<tr>
<td>- Protocols on clinical supervision and access to expert advice and support.</td>
</tr>
</tbody>
</table>
Mechanism 3: ........................................

3.1 What can you do to improve the care you provide?

- Encourage patients to mobilise and participate in tasks of daily living
- Consult with patients and carers on clinical planning and delivery of care
- Support carers to be involved in the care
- Assess the carers current and future needs, provide information on supports and referrals for care when required.

3.2 How can I make improvement happen?

- Provide information to clinicians and other staff on the need for patient mobilisation and involvement in activities of daily living, including how to assess risks to patient
- Provide triggers in the protocols and procedures that encourage clinicians to engage patients and carers in clinical planning and delivery
- Provide clinicians with the skills to recognise the needs of carers and mechanisms for taking action.
Mechanism 3: ........................................

<table>
<thead>
<tr>
<th>3.3 NSQHS Standards</th>
<th>3.4 Evidence you can use at accreditation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in decision making</td>
<td></td>
</tr>
<tr>
<td>Consult patient and carers in clinical decisions.</td>
<td></td>
</tr>
<tr>
<td>Involve carers in case conferencing and handovers.</td>
<td></td>
</tr>
<tr>
<td><strong>NSQHS Standards Actions:</strong> 1.18.1, 1.18.3, 6.5.1</td>
<td></td>
</tr>
</tbody>
</table>

- Patient clinical records include information provided to patients and carers; patient and carer involvement in management of care and discharge planning; cases conferences; and consent forms.

- Analysis of patient and carer feedback regarding their participation in care planning.

- Patient and carer information resources available, including their role in handover and escalating care.
Mrs B was an 87 year-old woman with dementia, who has been a resident in an aged care facility for the past eight years. Mrs B had a fall and fractured her right femur and was transferred to the local hospital where she had a pin and plate, an internal fixation of her right femur. She subsequently suffered a slight heart attack about thirty-six hours after surgery.

Mrs B’s daughter had raised concerns postoperatively about her mother’s bed height.

‘I’d been in there to attend to my mother they had the bed up really high, which is normal nursing practice, and I had said to them before I left, “Will I put the bed down low because it’s up high and the cot rails are up?” and they said “No, no, no. We have to go in and attend to her,” and I said “Well I’m a bit worried,” because her room was not in view of the sister station. The door was just down a little bit. And they said “Oh just leave her call bell over her shoulder.” I said “Well that won’t do any good because she’s got dementia and she won’t remember what the call bell’s for.” Besides, she had a morphine infusion running and I said, “Well she’s a bit off her face,” and they said “No, no, no. She’ll be fine.”

During the night, apparently Mrs B climbed over the bed rails and fell to the floor fracturing her left leg femur and re-damaging her right leg. Mrs B then required a hip replacement the following day.

Mrs B’s daughter was not informed about the fall until she was contacted by the anaesthetist the next morning to sign the consent form for the surgery.

Quotes from Daughter

‘The next morning the anaesthetist rang me at home and said, “When are you coming to sign the consent form for theatre?”’ and I said, “Well I’ve already done that. My Mum’s been to theatre,” and the anaesthetist said, “Well that was for the pin and plate. I’m talking about the hip replacement.” I said “Well, what’s gone wrong overnight?” and he said, “Didn’t the staff phone you and tell you your mum fell out of bed?” and I said, “No, they didn’t.”’

Source 100 Patient Stories Project
<table>
<thead>
<tr>
<th>What did not go well?</th>
<th>What went well?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ No falls risk assessment</td>
<td>✓ Daughter informed staff that mother had dementia.</td>
</tr>
<tr>
<td>✗ Change in condition not acted on</td>
<td></td>
</tr>
<tr>
<td>✗ No subsequent delirium assessment</td>
<td></td>
</tr>
<tr>
<td>✗ Use of bedrails</td>
<td></td>
</tr>
<tr>
<td>✗ No low bed</td>
<td></td>
</tr>
<tr>
<td>✗ Daughter (carer)’s safety advice ignored</td>
<td></td>
</tr>
<tr>
<td>✗ False reassurance</td>
<td></td>
</tr>
<tr>
<td>✗ Clinicians not understanding care needs</td>
<td></td>
</tr>
<tr>
<td>✗ Bed not in line of sight</td>
<td></td>
</tr>
<tr>
<td>✗ Daughter not informed of fall.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What could have been done better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Clinicians identified and documented existing dementia</td>
</tr>
<tr>
<td>✓ Clinicians undertook further assessment and developed an individualised care plan to address safety issues</td>
</tr>
<tr>
<td>✓ Individualised care plan implemented e.g. – regular assisted toileting and environmental modification – low bed, closer to nurses station</td>
</tr>
<tr>
<td>✓ Carer engaged and concerns taken seriously.</td>
</tr>
</tbody>
</table>
Resources

Mechanism 1: Responsive System

Delirium guidelines

Delirium: diagnosis, prevention and management; Clinical Guideline 103 (2010). National Institute for Health and Clinical Excellence. This clinical guideline describes methods of preventing, identifying, diagnosing and treating delirium. It focuses on preventing delirium in patients identified to be at risk, using targeted, multi-component, non-pharmacological interventions.

Delirium in Older People - Australian and New Zealand Society for Geriatric Medicine Position Statement 13 (Revised 2012). This position statement provides evidence-based recommendations on the prevention, assessment, treatment and management of delirium.

Australian Health Ministers Advisory Council (AHMAC) Clinical Practice Guidelines for the Management of Delirium in Older People (2006). These clinical practice guidelines for the management of delirium are designed specifically for the Australian health care environment.

Management of Delirium in Older People (2006): Quick reference guide. This guide is a quick reference of information available from the Clinical Practice Guidelines for the Management of Delirium in Older People.

AHMAC, Delirium Care Pathways (2011). This document summaries the above guidelines and provides examples of the patient journey in the community, acute care and in residential care.


Behaviour management

Behavioural Management Advisory Services (DBMAS) provide clinical support for staff and family members caring for persons living with dementia, who present with behavioural and psychological symptoms of dementia (BPSD). Under Living Longer, Living Better, these services are expanding to primary care and hospitals.

Behaviour Management – a Good Practice Guide. This comprehensive guide was designed for clinicians of DBMAS. It outlines psychological, environmental and biological management strategies, backed by supporting evidence and an assessment of the quality of evidence. It also includes a comprehensive description of cultural competency and cultural consideration in working with Aboriginal and Torres Strait Islander people and people from CALD.

NSW Health and RANZCP, Assessment and Management of People with Behavioural and Psychological Symptoms of Dementia 2013. This handbook is for clinicians in Emergency Departments, inpatient units and community settings. Three key principles of care are:
1. Ensure person-centred care
2. Have a multidisciplinary and multi – team approach
3. Meet legal and ethical responsibilities

The stages of care include: Care priorities are:

1. Accept your role, and the expertise and role of others 1. Management of physical needs
2. Assess the person’s needs
2. Behavioural and environmental management strategies
3. Act with others
3. Psychological engagement
4. Re-assess
4. Cautious use of psychotropic medication
5. Care for the carer

Pooles Algorithm: Nursing Management of Disturbed Behaviour in Older People

Pain

Pain assessment in the Nonverbal patient. A position statement with clinical practice recommendations for pain assessment developed by a task force approved by the American Society for Pain Management Nursing.

Pain and Dementia. Help sheet developed by Alzheimer’s Australia

Medication

Potentially Inappropriate Medication use for older adults.

Personal patient information from carers

Top 5 is a program that promotes communication between staff and the carer of a patient who has a cognitive impairment. The carer’s expertise and strategies in communicating with, and caring for the patient are acknowledged, identified, recorded and communicated with the hospital team. The program was developed in the NSW Central Coast Local Health District and is being further trialed across 15 public and five private hospitals in NSW by the Clinical Excellence Commission Patient as Partners Program.

Other examples include a Communication and Care Cues form and “All about me”

Carer involvement tools

1000 Lives Plus is the Welsh national healthcare improvement program. The website includes guides and implementation tools including spreadsheets for monitoring carer involvement. 1000 lives plus program (carer involvement monitoring spreadsheets).

Environmental design

King’s Fund assessment tools and resources.

DoHA funded healthcare environmental design and consultancy service led by NSW/ACT Dementia Training Study Centre during 2013 will consist of a two-day workshop on designing dementia-friendly healthcare facilities in every State and Territory this year, followed by the provision of consultancies to at least 25 hospital-based projects across Australia.

Adapting the Ward for people with dementia is a NSW Health handbook to guide small hospitals in improving the environment and includes design principles and an audit tool.

Volunteer programs

Southern NSW rural volunteer program trained volunteers in person centred delirium and dementia care in two rural hospitals with high level of staff and volunteer acceptance.

System review

Assessing Care of Vulnerable Elders (ACOVE) – Quality indicators for the care of dementia in vulnerable elders.

Acute awareness: improving hospital care for people with dementia is an English document for NHS Trusts and includes key questions for boards when reviewing care provided.
Advance care planning

 Advance Planning for Quality Care at End of Life: Action Plan 2013-2018 is a NSW Health action plan document outlining strategies aimed at normalising Advance Care Planning and improving end of life care by integrating patients' wishes into and throughout the management of chronic life-limiting illness.

Mechanism 2: Skilled and Informed Staff

Royal College of Nursing, Make SPACE for good dementia care
1. Staff who are skilled and have time to care
2. Partnership working with carers
3. Assessment and early identification of dementia
4. Care plans which are person centred and individualised
5. Environments that are dementia friendly.

This website outlines the five principles and commitment to improve the care of patients with dementia in hospitals under the UK national dementia strategy. It includes resources and good practice examples.

How acute care managers can support patients with dementia by June Andrews. This article includes advice on identifying patients' diagnosis on admission, working with carers and encouraging activity, and emphasises the importance of establishing a rapport with patients.

Dementia Training and Study Centres. This is the website for the five dementia training study centres funded by the Australian Government that provide development opportunities for existing and future dementia care health professionals. The site includes links to elearning, education events and resources and to the Australian Journal of Dementia Care. It includes a self directed learning package on Assessment and Management of Confusion in the Acute Care Setting with a Focus on Delirium.

Best Care for Older People Everywhere: The Toolkit is a web based toolkit to assist clinical staff to minimise the functional decline of older patients in hospital. The tool kit is underpinned by the philosophy of person-centred care that emphasises treating older patients with respect and involving them in partnership in the health care relationship. It provides tips, information and resources in the following areas of functional decline: cognition (which includes delirium, dementia and depression); mobility, vigour and self-care; continence; nutrition; and skin integrity. Three additional domains were added due to their potential impact on the functional decline and quality of care of older patients: assessment, person-centred practice and medication.

Care of the Confused Older Persons Website (CHOPS) focuses on the identification and management of patients with cognitive impairment in hospital. Based on a NSW pilot study, it provides tools and links, covering six key areas: Understanding cognitive assessment; risk and prevention; identification and management; environment; transfer of care; and families and carers. The CHOPS website also has delirium education videos from perspective of doctors, nurses and carers.

Dementia Care Resource and Training Network is a website for NSW Health participants in facilitated on-line dementia courses. Others can join to gain access to the resources on the site and to network with members.
C. Seamless Care Transition for People with Cognitive Impairment

Introduction
Transition pathways need to be well planned for patient moves to and from home, or residential care, and through the acute care system. For people with cognitive impairment these transitions include:

- Information exchange and transfer of care processes between primary health care providers and community and residential care, including advance care planning
- Access to hospital substitution, fast track or transition programs.

Safety and Quality Issues
Lack of medical history information on presentation can delay or lead to inaccurate diagnosis and place patients on a poor management pathway.

Lack of access to hospital substitution services mean that patients with cognitive impairment can be admitted to, or have prolonged stays in hospital for conditions that could be more appropriately treated at home or in residential care.

Inadequate use of transition programs may result in patients with unresolved delirium being discharged with inappropriate support, remaining in hospital for extended periods of time or being inappropriately admitted to residential care facilities.

Lack of opportunity to recover from acute illness and lack of advocacy can mean that decisions are made, which have a lasting impact, such as premature entry to residential care. Staff may not understand the benefits and the eligibility of people with cognitive impairment for transition programs. The interpretation of eligibility for the Transition Care Program appears to be variable.

Evidence-Based Practice

Information exchange
Assessment, treatment and use of care plans on presentation, during admission and on discharge are enhanced by access to comprehensive information from general practice, residential care facilities and community aged care providers. Accurate information exchange is crucial for ongoing care and appropriate management.

Programs to improve care transitions
There are many examples of programs to triage and fast track people with cognitive impairment or to avoid emergency departments and provide access to comprehensive assessment and rapid medical and pharmacological review.
There are also programs that enable people with cognitive impairment to leave acute care earlier and return to a familiar environment with therapeutic support to aid recovery. Evidence suggests hospital in the home programs can reduce delirium, behavioural disturbance, sleeping disorders, use of psychotropics and carer stress compared to acute hospital care, with no significant difference in mortality.\textsuperscript{40-41} Other programs, such as Compacks, can provide extra short term support and assist in the transition back to the community.\textsuperscript{9}

**Safety and improved quality outcomes**

The expected outcome of integrating seamless care transitions for patients with cognitive impairment into a responsive system, having skilled and informed clinicians and having patients and carers participating in the process include:

- ✓ Staff have access to patient information on presentation and throughout the episode of care, including advance care plans
- ✓ Transfer of care should be planned to start as early as possible
- ✓ Primary health care aged and residential care providers receive timely and sufficient information on transfer of care
- ✓ A patient with cognitive impairment, whose hospital stay has resulted in functional decline, has the opportunity to recover in a therapeutic environment without hospital related risks and consequences. Ultimately, the patient will return to their usual place of residence.
<table>
<thead>
<tr>
<th>Person with cognitive impairment</th>
<th>My health care information and management plans are available to all relevant health care providers, my carers and me with my consent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carer</td>
<td>I am involved in decisions about my relative going to hospital, while they are in hospital and future care plans.</td>
</tr>
<tr>
<td>Clinicians and other staff</td>
<td>I have the knowledge and skills to obtain timely and sufficient information including advance care plans. I understand the importance and applicability of transition programs.</td>
</tr>
<tr>
<td>Health Service</td>
<td>The health services institute models of care for effective care transitions.</td>
</tr>
</tbody>
</table>
### Mechanism 1:........................................

#### 1.1 What can you do to improve the care you provide?

- Involve patients and carers in the planning for transitions of care
- Facilitate access to transition programs, such as Hospital in the Home, Transition Aged Care Program, day therapy/day hospital for patients’ transitions from hospital
- Formalise communication protocols between acute care; residential aged care; and community care, to facilitate regular seamless interface.

#### 1.2 How can I make improvement happen?

- Implement policies on transition care programs, that addresses planning, implementation and monitoring for people with cognitive impairment
- Include system to prepare and/or receive, record and transfer advance care plans
- Establish information exchange systems with General Practice, residential care facilities and community aged care providers
- Provide triggers for assessing the risks of night or weekend discharge transfers and require the procedure to include amelioration procedures as part of the policy.
<table>
<thead>
<tr>
<th><strong>1.3 NSQHS Standards</strong></th>
<th><strong>1.4 Evidence you can use at accreditation</strong></th>
</tr>
</thead>
</table>

### Information Systems
Develop information exchange systems.

**NSQHS Standards Actions:** 6.1.1

### Advance Care Plans
Provide systems to prepare, receive and transfer advance care plans.

**NSQHS Standards Actions:** 9.8.1, 9.8.2

### Programs for Transition
Facilitate access to transition programs.

**NSQHS Standards Actions:** 10.8.1

- Policies, procedures and protocols on structures clinical handover that include information on cognitive impairment.
- Discharge summary data includes information on a patient cognitive status.
- Transfer guidelines and forms for transferring patients within and between health services includes in the minimum data set information on cognitive status and management.
- Policies, procedures and protocols describe the process for preparing advance care plans in partnership with patients and carers.
- Audit of patient clinical records that show advance care plans and other treatment limiting orders are document in accordance with policies and procedures.
- Discharge plans include information on a patient’s cognitive status.
### Mechanism 2: Skilled and Informed Staff

<table>
<thead>
<tr>
<th>2.1 What can you do to improve the care you provide?</th>
<th>2.2 How can I make improvement happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients and carers are involved in transition planning</td>
<td></td>
</tr>
<tr>
<td>• Patients and carers are involved in and understand the process and intent of advance care planning.</td>
<td></td>
</tr>
<tr>
<td>• Facilitate effective professional relationships with practitioners and organisation receiving patients transferred from hospital care including General Practice, residential care facilities and community aged care providers</td>
<td></td>
</tr>
<tr>
<td>• Provide staff with information on the benefits and eligible criteria for transferring patients into transition programs</td>
<td></td>
</tr>
<tr>
<td>• Provide access to training on preparing and/or receiving, recording and transferring advance care plans.</td>
<td></td>
</tr>
</tbody>
</table>
### Mechanism 2: SKILLED AND INFORMED STAFF

#### 2.3 NSQHS Standards

**Education and Training**
- Provide staff education and training on transition programs.
- Provide staff education and training on obtaining timely and sufficient information to complete advance care plans.

**NSQHS Standards Actions:** 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.18.4

#### 2.4 Evidence you can use at accreditation

- Education resources and records of attendance at training by clinicians on the transition and transfer of patients with cognitive impairment.
- Schedule of training that includes cognitive impairment.
- Resources and material to support clinicians for staff preparing advance care plans.
- Patient clinical records that note information provided to patients on advance care directives.
**Mechanism 3: Patient and carer participation**

<table>
<thead>
<tr>
<th>3.1 What can you do to improve the care you provide?</th>
<th>3.2 How can I make improvement happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Involve patient and carers in transition decisions</td>
<td>• Identify clinicians responsible for discussing end of life care and develop staff competencies in participating in culturally sensitive discussions about end of life care</td>
</tr>
<tr>
<td>• Provide information to carers on guardianship legislation and substitute decision making</td>
<td>• Provide relevant and understandable information to patient and families on advance care planning, palliative care and end of life care</td>
</tr>
<tr>
<td>• Support patients and carers developing advance care plans, which may include providing opportunities for culturally sensitive discussions with skilled and competent clinicians.</td>
<td></td>
</tr>
</tbody>
</table>
### Mechanism 3: Participation in Decision Making

#### Participation in Decision Making
Involves patients and carers in transition decisions.

**NSQHS Standards Actions:** 6.5.1

#### Advance Care Planning
Encourage the identification of substitute decision maker and advance care plans.

**NSQHS Standards Actions:** 1.18.4

### 3.3 NSQHS Standards

### 3.4 Evidence you can use at accreditation

- Information for patients and carers on their roles in handover.
- Analysis of patient experience survey related to clinical handover.
- Patient clinical records that note information provided to patients and substitute decision makers on advance care directives.
- Patient information packages and resources about advance care directives.
PATIENT STORY No. 3: Transition of Care

Mr A was an 83 year-old man who resided in a low level residential aged care facility. His wife had died several years previously. He had moderate cardiac failure, which was well controlled, Non Insulin Dependent Diabetes Mellitus and severe Osteo Arthritis of his knees, leading to very impaired mobility. He had completed an advance care directive (ACD) saying that he did not wish to be admitted to the Intensive Care Unit (ICU) or have “extraordinary treatment” such as assisted ventilation or intubation.

One evening he developed increasing shortness of breath in his residential aged care facility, became quite confused and was calling out. The residential aged care facility staff called an ambulance and he was taken to ED at his local hospital. Here, pneumonia and an exacerbation of his cardiac failure were diagnosed and he was commenced on diuretics and antibiotics.

His condition continued to deteriorate and he was transferred to ICU early the next morning. His family was not notified until later in the morning that he had been admitted to hospital and transferred to ICU. His daughter was upset that staff did not observe her father’s advance care directive. However, the ICU staff were not aware that there was one in existence, although staff at the residential aged care facility were aware that Mr A had completed one. Because of Mr A’s confusion on admission he was not asked about this.

Mr A’s condition continued to deteriorate. His condition was discussed with his family, who requested that he be returned to the ward and receive supportive management, with a view to palliative care if he continued to deteriorate. His family felt that was what he would have wanted.
<table>
<thead>
<tr>
<th>What did not go well?</th>
<th>What went well?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Staff in the Emergency Department did not ask the residential aged care facility if there was an advance care directive or advance care plan in existence</td>
<td>✓ Staff agreed to family’s request once presence of advance care directive was known.</td>
</tr>
<tr>
<td>✗ Residential aged care facility did not provide information about the advance care directive</td>
<td></td>
</tr>
<tr>
<td>✗ Staff in the Emergency Department did not contact family despite Mr A’s obvious confusion.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What could have been done better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Family contacted to participate in information exchange and health care decision making at presentation</td>
</tr>
<tr>
<td>✓ Residential aged care facility contacted at presentation to participate in information exchange regarding advance care directive.</td>
</tr>
</tbody>
</table>
Resources

Mechanism 1: Responsive System

National consensus statement: essential elements of end of life care in acute hospital settings – a document (to be) released by the Commission to guide health services in the delivery of quality end of life care.

The AIHW report, Dementia care in hospitals: costs and strategies provides a summary of a range of strategies including those within, outside and cross-sectoral, aimed at improving outcomes for people with dementia.

Aged Care Emergency (ACE) Program supports staff in residential aged care to manage residents’ non-life threatening acute care within the facility and avoiding an ED presentation as well as enhance the flow and coordination of care of patients who are appropriately transferred to the ED from the residential aged care facility.

It incorporates:
- A telephone consultation process
- Evidenced based algorithms
- Establishing patient and ED goals of care prior to transfer
- Proactive case management in ED

The Aged Care Emergency (ACE) program was successfully implemented at John Hunter Hospital Emergency Department during 2010-11 and 2011-12 and was based on the models previously developed at Hornsby Kur-ing -gai Hospital (Geriatric Rapid Acute Care Evaluation – GRACE) and the Aged Care Triage (ACT) model developed at Concord Hospital.

Residential In-Reach (RIR) services provide an alternative to the Emergency Department, where appropriate and safe, for people living in Residential Aged Care Services. It was successfully piloted and evaluated, demonstrating a reduction in unnecessary admissions without compromising the quality of patient care.

Mechanism 2: Skilled and Informed Staff

Respecting Patient Choices: Advance Care Planning Website. This project is funded under the National Palliative Care Program and is supported by Department of Health and Ageing. The website includes e-learning module on advance care planning.

Planning Ahead Toolkit – each section includes information and resources for health professionals.

Mechanism 3: Patient and Care Participation

Planning Ahead Toolkit is a NSW Government website containing information, tools and resources to enable individuals to communicate their wishes and plan for the future through completing wills, powers of attorney, enduring guardianship and advance care plans. It has sections for individuals, families and carers; legal professionals and health professionals and service providers.

A Plan of Care is a booklet for family members and carers who have to make decisions about the medical and personal care of people who have dementia and have lost capacity.
References


