



ACI NSW Agency
for Clinical
Innovation



CHOP
CARE OF CONFUSED
HOSPITALISED OLDER PERSONS

ACI Aged Health Network

Key Principles for Care of Confused Hospitalised Older Persons



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FOREWORD

Confusion or cognitive impairment is a common condition for older people in hospital. More than 30% of older people present with or develop confusion during their admission, most commonly as a result of dementia and delirium.

This confusion affects the experience of care for the older person, their carer and family, as well as for staff working in the health facility.

Confusion is associated with increased risks of medical and surgical complications, falls, institutionalisation following hospitalisation, mortality, increased length of hospital stay, increased readmission rates, and functional decline. Early identification of confusion, treatment of the underlying cause and management of symptoms can prevent these adverse effects and minimise their duration and severity.

The Care of the Confused Older Persons (CHOPs) Program is a collaboration between the ACI and the NHMRC Cognitive Decline Partnership Centre (CDPC) which aims to improve the experiences and outcomes of confused older people in hospital.

The Agency for Clinical Innovation (ACI) is the primary agency in NSW for promoting innovation, engaging clinicians and designing and implementing new models of care.

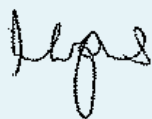
The ACI's Clinical Networks, Taskforces and Institutes provide a forum that brings together clinicians, managers and consumers across the NSW health system to design, deliver and support implementation of effective and sustainable models of care.

The CDPC's aim is to deliver excellence in research and knowledge to improve the quality of care for older people with cognitive decline and their carers, and provide better evidence and information for service providers and decision makers.

Through the partnership between the ACI Aged Health Network and the CDPC, seven key principles of care for the older person with confusion have been identified and a suite of resources developed to support health services to implement these principles.

We are pleased to introduce the Key Principles for Care of Confused Hospitalised Older Persons.

On behalf of the ACI and the CDPC we would like to thank the CHOPs Project Steering Committee and the clinicians, managers, consumers and carers who lent their time, expertise and commitment to develop this model and guiding principles for implementation across NSW.



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EXECUTIVE SUMMARY

Hospitals need to provide for care for an increasing number of people with confusion given the ageing population. The Confused Hospitalised Older Person (CHOPs) Program is designed to address this need by identifying and treating older people presenting with confusion. Confusion is the lay term given to cognitive impairment. The common causes of confusion in older people are dementia, delirium and depression. The main groups of people targeted in this program are those with dementia and/or delirium. Depression and other less common causes of confusion such as anxiety and psychosis are beyond the scope of this program and require referral to specialist services.

The hospital experience can be extremely distressing for older people with confusion, their carers, families and healthcare staff. Older people with confusion may be disorientated, fearful and anxious, may not recognise their carers or families, be either agitated or drowsy, suffer hallucinations, be incontinent and display behaviours that are not usual for them. The older person with confusion may refuse care, attempt to leave, be disruptive or aggressive.

There is strong evidence that poor prevention and treatment of delirium and inappropriate care of people with dementia leads to avoidable functional decline, increased morbidity and adverse events. This in turn results in prolonged hospitalisation and a higher risk of admission to residential care and mortality.

This document describes the seven key principles for the appropriate care of older people with confusion in hospital. It has been developed by the Agency for Clinical Innovation (ACI) in collaboration with the CHOPs Steering Committee, utilising evidence based practice and expert opinion.

This is a dynamic document that will be further refined as feedback is received from participating sites. The outcomes of the Australian Commission on Safety and Quality in Health Care's project to improve the care of patients with cognitive impairment in acute in acute care will also be considered in future revisions of this document.

KEY PRINCIPLES FOR CARE OF THE CONFUSED OLDER HOSPITALISED PERSON



PRINCIPLE 1: Cognitive screening

Patients aged 65 years and over will be screened for confusion on admission or within 24 hours of admission using a validated screening tool.



PRINCIPLE 2: Delirium risk identification and prevention strategies

Older people will be assessed for delirium risk. Interventions will be put in place for prevention of identified risks. Identified risks will be communicated to the older person, their carer, family and staff involved in their care.



PRINCIPLE 3: Assessment of older people with confusion

Older people who are confused will be assessed. The cause of their confusion will be investigated to determine the appropriate management.



PRINCIPLE 4: Management of older people with confusion

NSW hospitals will have programs in place for older people with confusion that align with these principles. The implementation will be in partnership with the older person, their carer and family.



PRINCIPLE 5: Communication processes to support person-centred care

Communication processes and tools will support person-centred care for the older person throughout their hospital journey and at their transfer of care to the community.



PRINCIPLE 6: Staff education on caring for older people with confusion

Staff are supported through training, education and leadership to enable them to deliver skilled, timely and knowledgeable care to the older person with confusion.



PRINCIPLE 7: Supportive care environments for older people with confusion

NSW hospitals will provide a supportive care environment for the older person with confusion.

INTRODUCTION

Confusion or cognitive impairment is a common condition for older people in hospital. More than 30% of older people present with or develop confusion during their admission. This confusion is most commonly due to dementia and /or delirium.

Confusion is distressing for older people. Older people with confusion may be disorientated, fearful and anxious, may not recognise their carers or families, be either agitated or drowsy, suffer hallucinations, be incontinent, and display behaviours that are not usual for them. Caring for older people with confusion in hospital is also distressing for staff, carers and families. The older person with confusion may refuse care, attempt to leave, be disruptive or aggressive.

If left unrecognised and untreated, confusion can result in serious health consequences including increased risks of medical and surgical complications, falls, institutionalisation following hospitalisation, mortality, increased length of hospital stay and readmission rates, and functional decline ^(2, 3). Early identification of confusion, treatment of the underlying cause and management of symptoms can prevent these adverse effects and minimise their duration and severity.

Background

In 2011, the ACI commenced the CHOPs Study to develop a systematic approach to the identification of older people with confusion in hospital; the investigation of the causes of confusion and the implementation of effective treatment and management strategies. The approach was trialled in five NSW hospitals and demonstrated increases in cognitive screening and staff confidence in managing confused older people.

The Clinical Excellence Commission (CEC) Quality Systems Assessment report into *the management of patients with delirium in NSW public health facilities* (2011) found significant variation in the management of delirium as well as in the training and education of staff ⁽³⁾. The CEC report identified a number of challenges for staff in the management of patients with delirium including:

- managing challenging patient behaviours, such as aggression or absconding
- time/workload constraints due to the extra time and effort staff required for dementia patients
- deficits in skill and knowledge by staff, such as a lack of familiarity with dementia assessment/screening tools.

The CEC report made the following recommendations:

- the promulgation, support and monitoring of the Australian Government *Delirium Guidelines* (2006)⁽⁴⁾ and *Delirium Care Pathways* (2010) ⁽⁵⁾
- a review of the need for and development of local procedures for the use of a cognitive assessment tools
- the introduction of routine baseline cognitive screening/assessment of at-risk patients as early as possible after their entry to the hospital system, such as in the Emergency Department (ED) and/or pre-admission clinics
- the provision of training/education to support hospital staff caring for people with delirium
- the encouragement of family/carer involvement in the hospital management of older patients with dementia.

In 2013, the National Health and Medical Research Council (NHMRC) Cognitive Decline Partnership Centre funded further refinement and implementation of the CHOPs Program in line with these recommendations.

Purpose

The overall aim of CHOPs is to improve the experiences and outcomes of confused older people in hospital. This will be achieved by developing and implementing seven key principles of care.

PRINCIPLE 1: Cognitive screening

PRINCIPLE 2: Delirium risk identification and prevention strategies

PRINCIPLE 3: Assessment of older people with confusion

PRINCIPLE 4: Management of older people with confusion

PRINCIPLE 5: Communication processes to support person centred care

PRINCIPLE 6: Staff education on caring for older people with confusion

PRINCIPLE 7: Supportive care environments for older people with confusion

The specific objectives of CHOPs are to:

- design and prioritise principles for best practice care for older confused people in hospital
- tailor implementation to the needs of the older person, carers and families and the hospital teams
- share achievements, innovation and knowledge and embed systems into practice to sustain and spread improvements in the care of older confused people in hospital.

Defining cognition, cognitive impairment, confusion, delirium and dementia

Cognition refers to a person's ability to remember, recall and problem solve. Cognitive impairment refers to an inability to do the above. For the purpose of this document, confusion is used to describe cognitive impairment as the term is commonly understood by the general population and health staff.

Confusion in the older population is not a normal part of ageing. However, older people are at increased risk of developing confusion whilst in hospital. In Australian hospitals, up to 50% of all older in-patients have some form of confusion ⁽⁶⁾. Confusion increases the risk of adverse events including mortality, longer length of stay in hospital, functional and cognitive decline, medical and surgical complications and institutionalisation ⁽⁷⁾.

The most common causes of confusion are associated with dementia and delirium. Other causes of confusion include mental illnesses such as anxiety, depression and psychosis. It is important to identify and treat the underlying cause of the confusion. This may require specialist medical or psychiatric intervention which is beyond the scope of this document.

The care principles for preventing delirium are the same as for managing a patient with confusion related to delirium /dementia. The care principles focus on staff delivering good quality safe care which is based on respect for the values and background of the older person. Non-pharmacological and psychosocial interventions are described, including the importance of getting to know the person and the need to support the older person to maintain their independence and function.

Confusion resulting from Delirium

Delirium is a common clinical syndrome characterised by inattention, disorientation, memory loss and acute cognitive dysfunction ^(2, 4, 8). It is usually a temporary condition. It can be mistaken for and/or be co-morbid with a number of other disorders such as dementia, depression and psychosis. Delirium can affect up to a third of older people admitted to hospital ⁽³⁾. Delirium is one of the most common, potentially preventable adverse events for hospitalised older people ⁽⁹⁾. It is usually caused by an underlying acute illness, which in most cases, can be detected and treated ^(2, 4, 8). Those with dementia and depression are at the highest risk of developing delirium when they are unwell or in an unfamiliar environment ^(2, 5).

Confusion resulting from Dementia

Dementia is an umbrella term for a number of diseases that are characterised by impairments of brain function, including memory, language, perception and cognitive skill ^(10, 11). Dementia is a chronic disease. Older persons with dementia may develop delirium superimposed on dementia. The diagnosis of dementia requires a formal medical assessment and is beyond the scope of this document. Older persons who present with confusion that is unresolved should be formally assessed for dementia. This should be performed after the acute episode in the community.

Aboriginal and Torres Strait Islander People

The prevalence rate of dementia for Aboriginal and Torres Strait Islander People is approximately three times that of the non-indigenous Australians ⁽¹⁰⁾. Aboriginal and Torres Strait Islander People also experience a younger onset of dementia and consequently an increased risk of delirium compared to similarly aged non-indigenous Australians. For the purposes of this document, Aboriginal and Torres Strait Islander people admitted to hospital should be screened for confusion from 45 years and older. Consideration should be given to cultural differences, the use of liaison officers and greater involvement and communication with carers, family and their wider community ⁽¹²⁾.

Specific population groups

It is important to be mindful of the needs of specific population groups within the community who may have distinctly different care needs and requirements for their confusion ⁽¹³⁾. Individuals respond to dementia in different ways and there is diversity in perception and understanding of dementia and confusion across cultures. Some of these groups include:

- Culturally and linguistically diverse communities (CALD)
- Rural and remote communities
- Younger onset dementia
- Intellectual disability
- Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI)
- Dementia in correctional centres
- Non-progressive cognitive impairment.

There is further information on the specific needs of these groups outlined in the NSW Dementia Services Framework 2010 – 2015 ⁽¹³⁾.

HOW TO USE THIS DOCUMENT

The implementation of the seven key principles will considerably improve the care and management of older people with confusion in hospitals.

The principles are interlinked and the number does not indicate a priority order.



There are four clinical principles, Cognitive screening, Risk Identification, Assessment and Management and three principles that underpin the whole program, Communication, Education and Supportive Care Environment.

Each key principle describes:

- an overview of the principle
- how to apply the principle in practice
- the evidence behind the principle
- expected outcomes
- quality measures.

A summary of the evaluation methods is outlined in Appendix A.

Health care facilities wishing to implement the CHOPs Program can utilise all principles within this document or initiate only the principles where gaps have been identified.

Local Health Districts (LHDs) and healthcare facilities should consider how best to:

1. incorporate the key principles in local policies and procedures
2. incorporate the key principles in local initiatives to improve the care of older people in hospital
3. utilise their health professionals with expertise in the care of older people to support these initiatives including geriatricians, old aged psychiatrists, aged care specialist nurses (such as aged care clinical nurse consultants, dementia and delirium clinical nurse consultants) and senior allied health professionals.

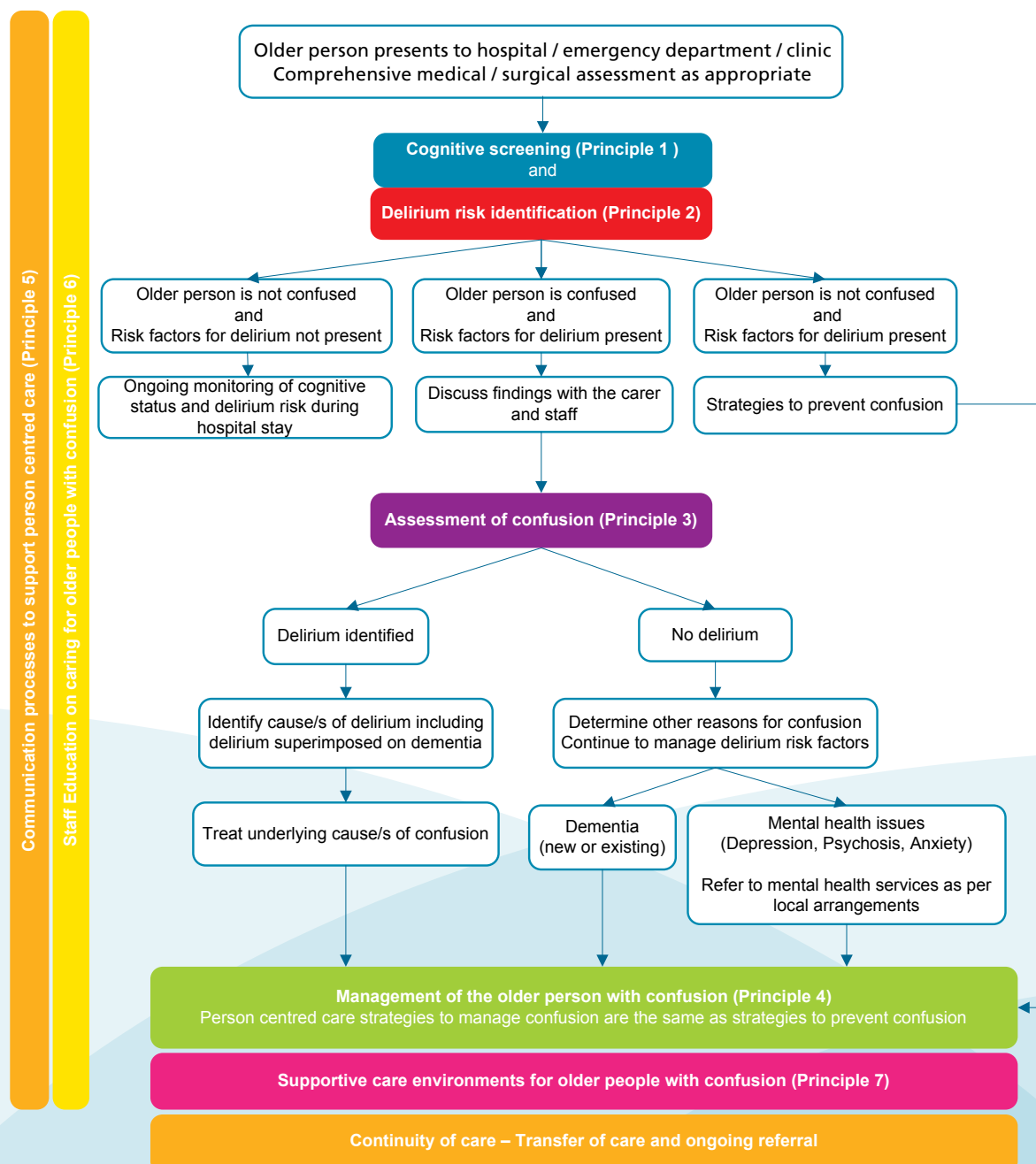


Where this symbol appears, there is access to further information. It will be hyperlinked on electronic versions and the reference will appear at the end of the document for paper based copies.

CARE PATHWAY FOR OLDER PEOPLE HOSPITALISED WITH CONFUSION

The ACI considers the following to be the key principles of care of older people admitted to hospital with or developing confusion. A care pathway incorporating the key principles is presented in figure 1.

Figure 1: Care pathway for older people hospitalised with confusion



PRINCIPLE 1: COGNITIVE SCREENING



Patients aged 65 years and over will be screened for confusion on admission or within 24 hours of admission using a validated screening tool.

Confusion is not a normal part of ageing^(6, 8). Cognitive screening is the first step towards appropriate identification and management of older people with confusion presenting to hospital. Cognitive screening should be performed in conjunction with delirium risk screening (Principle 2).

Cognitive screening should be performed as part of the routine admission to a health care setting. It is useful for determining baseline cognitive status and identifying changes over time. However, cognitive screening cannot diagnose diseases such as dementia^(6, 8).

- a sudden decline in the person's ability to perform activities of daily living (ADLs)
- a carer or family member who expresses concern.



Tip: Consider including/aligning cognitive screening with the healthcare facilities standardised risk assessment tools (falls, medications, mobility).

1.1 Applying the principle in practice

Older people aged 65 years and over should have a cognitive screen completed on presentation to hospital. However, if this is not practical, then cognitive screening should be completed within 24 hours of admission^(2, 4, 7). Older people should also be screened at a preadmission clinic to determine their baseline cognitive status. Cognitive screening should be performed in conjunction with delirium risk screening (Principle 2).

Aboriginal and Torres Strait Islander people have a higher incidence of dementia at a younger age⁽¹⁴⁾. Therefore, cognitive screening should be considered for Aboriginal and Torres Strait Islander people aged 45 years and over⁽⁵⁾.

If the older person is confused and risk factors for delirium are present, then the cause of their confusion should be assessed (Principle 3).

If the older person does not have confusion, then cognitive screening should be repeated when there is:

- any sudden change in the older person's condition (including behaviour and cognition changes)

Cognitive screening tools

There is a range of validated cognitive screening tools available. An agreed cognitive screening tool should be used across the healthcare facility. Healthcare facilities should base their selection of a cognitive screening tool on their target population, time required to complete the tool and ease of use. The Abbreviated Mental Test Score (AMTS)^(15, 16) is recommended and is available on FirstNet.

Other validated cognitive screening tools include the Six Item Screener (SIS)⁽¹⁷⁾, Standardised Mini mental state examination (SMMSE)⁽¹⁸⁾, DRS-R-98 (for older persons with hip fracture)⁽¹⁹⁾, Short Portable Mental Status Questionnaire SPMSQ⁽²⁰⁾ and Rowland Universal Dementia Assessment Scale (RUDAS)⁽²¹⁾.

Rowland Universal Dementia Assessment Scale (RUDAS)⁽²¹⁾ is designed to enable the easy translation of the items into other languages and to be culture fair, it is recommended for use with those from culturally and linguistically diverse backgrounds⁽¹⁸⁾ and can also be useful for individuals with limited education. The Kimberley Indigenous Cognitive Assessment (KICA-Cog)⁽¹⁸⁾ is validated for use with older indigenous adults from remote areas and has been adapted for individuals from rural and urban areas as Modified KICA⁽²²⁾.

Who can do the screening?

Cognitive screening can be performed by any member of the multidisciplinary team. This is usually completed by the doctor, nurse or occupational therapist. They should be trained on the use of the agreed tool⁽⁴⁾.



- ACI CHOPs Website provides useful information and links to cognitive screening tools www.aci.health.nsw.gov.au/chops
- For information on Cognitive assessment for people from Aboriginal and Torres Strait Islander background see <http://www.wacha.org.au/kica.html>
- The Dementia Outcome Measurement Suite (DOMS) website has a range of cognitive screening and assessment tools for health professionals www.dementia-assessment.com.au/cognitive/index.html

1.2 Evidence base

Confusion is often undetected. This is due to poor identification and recognition ⁽¹⁰⁾. Older people with confusion have an increased risk of adverse events including mortality, longer length of stay in hospital, functional and cognitive decline, medical and surgical complications and institutionalisation ⁽⁷⁾.

The Australian Health Ministers Advisory Council's *Clinical Practice Guidelines for the management of Delirium in Older People* recommends that a structured process for screening and diagnosis of delirium should be established in all healthcare settings ⁽⁴⁾.

Early detection may reduce the duration of delirium and length of hospital stay.

In Australian hospitals, up to 50% of all older in-patients have some form of cognitive impairment ⁽⁶⁾.

- 10-15% of older people presenting to hospital have delirium. An additional 5-40% develop delirium during their hospital stay ⁽⁴⁾.
- 47% of people with dementia do not have dementia recorded as a diagnosis ⁽²³⁾.
- Higher rates of delirium are reported in specific patient groups:
 - 40.5-55.9% incidence in hip fracture surgery patients.
 - 70% prevalence in Intensive Care Unit patients 65 years and older ⁽⁴⁾.
 - 15-20% prevalence at time of admission to general medical ward ⁽⁴⁾.

1.3 Expected Outcomes

1. Systems/clinical decision support tools are in place for clinical staff to undertake baseline cognitive screening for all older people presenting to hospital (within 24 hours).
2. Cognitive screening results are used to facilitate clinical assessment, clinical decision making, care planning, preventative interventions and communication.
3. Cognitive screening is aligned with the hospital's key standardised risk assessment tools (falls, medications, mobility, nutrition).
4. Systems/clinical decision support tools are in place for clinical staff to undertake regular cognitive screening of older people if there is a sudden change in behaviour, deterioration in condition or if the older person has been identified "at risk" of developing confusion.
5. In older people, cognitive screening is repeated at regular intervals to provide ongoing assessment or if there is a sudden change in behaviour or deterioration in the older person's condition.

1.4 Quality measures

System measures	Agreed cognitive screening tool is available for staff
Patient measures	Older people aged 65 years and over who have received cognitive screening on admission or within 24 hours (total and percentage)
Staff measures	Staff identified by hospital as responsible for screening are trained in administering and interpreting cognition screen

PRINCIPLE 2: DELIRIUM RISK IDENTIFICATION AND PREVENTION STRATEGIES



Older people will be assessed for delirium risk.

Interventions will be put in place for prevention of identified risks.

Identified risks will be communicated to the older person, their carer, family and staff involved in their care.

Delirium risk screening should be performed in conjunction with cognitive screening (Principle 1). Early identification and management of risk factors (predisposing and precipitating) for delirium may prevent delirium or minimise the duration of the delirium (figure 2). Prevention strategies seek to identify and manage risk factors and promote wellbeing. They should be communicated with the older person (where possible), their carer, family and staff involved in their care.

Strategies to prevent delirium address modifiable risk factors for delirium and aim to reduce the number of precipitating risk factors and their severity⁽⁴⁾. Strategies to prevent delirium are the same as strategies to manage existing dementia or delirium (Principle 4).

Strategies to prevent delirium focus on staff delivering quality care which is based on respect for the values and background of the older person. Non-pharmacological and psychosocial interventions are described in Principle 4. These include the importance of getting to know the person and the need to support the older person to maintain their independence and function.

Figure 2: Delirium risk factors, prevention and communication strategies

Adapted from Innouye's *You Can Help Prevent Delirium* poster⁽²⁴⁾.

Predisposing Risk Factors	Precipitating Risk Factors	Prevention	Communication
<ul style="list-style-type: none"> • Age >70 • Pre-existing dementia • Severe medical illness • History of previous delirium • Visual and hearing impairment • Depression • Abnormal sodium, potassium and glucose • Polypharmacy • Alcohol/ Benzodiazepine use 	<ul style="list-style-type: none"> • Use of physical restraint • Use of indwelling catheter • Adding three or more medications • Multiple bed moves • Pain • Surgery • Anaesthesia and hypoxia • Malnutrition and dehydration 	<ul style="list-style-type: none"> • Identify and manage risk factors • Promote the following: <ul style="list-style-type: none"> • Healthy rest and sleep • Mental stimulation • Orientation • Healthy vision • Healthy hearing • Healthy eating • Physical activity • Bowel management • Environmental factors 	<ul style="list-style-type: none"> • Risk prevention strategies in place and discussed with patient, carers and family • Document risk – flag high risk patients • Handover risk – clinical handover, ward rounds, case conference • Transfer of care • Falls risk

2.1 Applying the principle in practice

The Delirium Risk Assessment Tool (DRAT) (Appendix B) should be used to assess delirium risk for hospitalised older people ⁽²⁵⁻²⁷⁾. The tool identifies key risk factors that predispose an older person to delirium and risk factors that may precipitate delirium and recommends further investigations if there is a change in behaviour.

Once delirium risk factors have been identified, specific strategies should be implemented to minimise the risk. Further investigations should be conducted if there is a change in behaviour to identify and address the cause of delirium.

Other risk assessment tools may be useful to assess risks for older people in hospital such as the Waterlow risk assessment scale ⁽²⁸⁾, Falls Ontario modified STRATIFY Sydney scoring, Falls Risk Assessment and Management Plan (FRAMP) ⁽²⁹⁾. These tools consider mental status/neurological deficit as part of their assessment and complement the DRAT and cognitive screening.

2.2 Evidence base

The Australian Health Ministers Advisory Council's *Clinical Practice Guidelines for the management of Delirium in Older People* recommends:

- Risk of delirium should be assessed in all older persons admitted to a health care setting ⁽⁴⁾.
- Multifactorial prevention strategies involving specialist geriatric medical and nursing intervention have the potential to reduce the incidence of delirium, the duration of delirium and the severity of delirium ⁽⁴⁾.
- The Yale Delirium Trial and Hospitalised Elder Life Program (HELP) reported a reduction in the incidence of delirium, the total number of days with delirium and the total number of episodes of delirium between the intervention and control group. The intervention group consisted of standard protocols to manage the following delirium risk factors non pharmacological protocol to normalise sleep, cognitive stimulating activities, limiting the use of catheters and restraints; encouraging mobilisation and exercises, reorienting the patient, preventing dehydration; use of glasses and hearing aids ^(8, 24).
- A randomised controlled trial showed older hip fracture patients who received care by a geriatrician (preoperatively and then daily postoperative care)

were less likely to develop delirium compared to those who received usual care ^(4, 30).

- A review of the Incident Information Management System (IIMS) in NSW Public Health System for serious harm occurring in older hospitalised people identified confusion as being present in 30% of Severity Assessment Code (SAC) 1 cases (SAC1 serious consequence) ⁽³¹⁾.
- A study looking at SAC events related to falls found that seven out of the 13 SAC1 Falls Root Cause Analyses (RCAs) indicated the patient had confusion/delirium or dementia and that 35% of incidents reviewed for SAC 2 events had documented evidence that the patient had some degree of cognitive impairment ⁽³²⁾.

2.3 Expected outcomes

1. Delirium risk is assessed and the level of risk communicated and clearly outlined in standardised documentation.
2. Older people identified as "at risk" of developing delirium will have primary preventive (environmental/clinical practice) strategies implemented.
3. Cognitive screening will be repeated for at risk individuals if there is a sudden change in behaviour or deterioration in condition of the older person.

2.4 Quality measures

System measures	Delirium Risk Assessment Tool (DRAT) tool in place Evidence of standardised process for identification and management of risk (Principle 5)
Patient measures	Delirium risk assessed, documented and prevention strategies in place
Staff measures	Staff are aware of delirium risk and prevention strategies (Principle 6 Education)

PRINCIPLE 3: ASSESSMENT OF OLDER PEOPLE WITH CONFUSION



Older people who are confused will be assessed.

The cause of their confusion will be investigated to determine the appropriate management.

An older person who is identified as at risk of confusion should be formally assessed to determine the cause of their confusion.

Confusion in most cases is due to dementia, delirium superimposed on dementia, delirium or depression. Differences in the presentation of dementia, delirium and depression are described in figure 3. Identification of the cause of the confusion will determine the most appropriate management options.

Figure 3: Differences between dementia, delirium and depression

Dementia	Delirium	Depression
Chronic condition that does not resolve over time	Hours to weeks in duration	Can last weeks to months or years
Chronic Onset	Acute Onset	Often abrupt onset
Generally normal attention	Impaired/fluctuating attention	Distractible but minimal impairment of attention
Recent and remote memory impaired	Recent and immediate memory impaired	Islands of intact memory
Generally normal alertness	Fluctuates between lethargic and hyper-vigilant	Alert
May have word finding difficulties, judgement may be poor	Disorganised thinking, slow or accelerated	Thinking intact though with themes of helplessness or self-depreciation

3.1 Applying the principle in practice

The Confusion Assessment Method (CAM) (Appendix C) is a validated tool that is recommended to determine whether the confusion is due to delirium. It should be used for any older person who appears to be disorientated /confused or who has any change in behaviour or loss of consciousness. The CAM should be used in conjunction with a cognitive screening tool, good clinical and medical assessment, together with baseline cognition information from carers/family or the community or residential aged care service ⁽²⁵⁾.

If the CAM is positive for delirium, then cause of delirium should be investigated and symptoms managed (Principle 4).

If the CAM is negative for delirium, investigations should be undertaken to identify the cause of the older person's confusion such as dementia (new or existing) or mental health conditions (depression, psychosis, anxiety) ^(2, 33). Person centred care strategies should be used to manage their confusion (Principle 4). For mental health conditions, referral should be made to mental health services as per local arrangements.

When do patients need to be assessed?

Patients need to be assessed for the cause of their confusion on admission and when there is:

- any sudden change in the older person's condition (including behaviour and cognition changes)
- a sudden decline in the person's ability to perform activities of daily living (ADLs)
- a carer or family member who expresses concern.

Who should do the assessment?

CAM can be performed by any member of the multidisciplinary team. This will usually be completed by the doctor, nurse or occupational therapist. They should be trained on the use of the CAM tool ⁽⁴⁾.

A comprehensive bio-psychosocial assessment should be performed to identify and address the cause of the confusion. This should include the following components ⁽⁴⁾:

Obtain History

- Medication
 - Recent changes
 - Prescription and over the counter medications
- Hydration status
- Falls
- Infection
- Bladder and bowel function
- Pre-morbid cognitive and functional status
- Alcohol history
- Past medical history and co-morbidities
- Social history
- History of diet and fluid intake,
- Sensory impairments

Examination

- Vital signs
- Mental state examination
 - Decreased arousal
 - Decreased attention
 - Disorientation
- Neurological examinations
 - New signs
- Chest
 - Auscultating breathe sounds
 - Cough
- Abdomen
 - Palpable faeces/faecal impaction
 - Palpable bladder/urinary retention
- Skin
 - Lesions
 - Signs of dehydration

Investigations to screen for common causes of delirium

- Urinalysis and MSU,
- Full blood examination
- Urea and electrolytes
- Glucose
- Calcium
- Liver function tests
- Chest x-ray
- Cardiac enzymes
- ECG

This information can be obtained from the older persons' carers and families, their General Practitioner (GP), or residential and community care providers. The older person may be an unreliable reporter while they are confused.

Further investigations will be dependent upon clinical features and expert consultant advice.

Documentation

Individual assessments need to be documented using appropriate objective language. Statements such as "pleasantly confused" or "patient aggressive" should be avoided.

Documentation should include the assessment and investigations conducted as well as any findings.

3.2 Evidence base

Health professionals often under recognise confusion and so misdiagnose confusion resulting from dementia, delirium or depression ^(2, 5, 7, 34). Older people are more likely to have a hypoactive delirium (characterised by quiet or withdrawn behaviour) than a hyperactive delirium (characterised by agitation, restless behaviour) making recognition of confusion more difficult.

Confusion (resulting from dementia or delirium) that is not identified early then treated and/or managed appropriately increases the risk of mortality, medical and surgical complications including falls, pressure injury, polypharmacy, medication incidents, poor nutrition/hydration and institutionalisation ⁽⁴⁾. People with confusion are more than twice as likely to experience an adverse event while in hospital as those without, with falls being the most common recorded adverse event ⁽³⁵⁾.

- 10-15% of older people are admitted to hospital with delirium
- Up to 40% of older people develop delirium in hospital
- 33 to 66% of older people with delirium are undiagnosed
- 25% of people with dementia will have at least one hospital stay each year.

3.3 Expected outcomes

1. Hospital teams will engage with the person, their carers, their families, local primary care providers, residential care, home care agencies and their GP to gather information to establish the onset and recent history of symptoms of confusion.
2. Systems / clinical decision support tools are in place for staff which outline a clear process for a comprehensive diagnostic assessment to investigate the cause of confusion.
3. Systems / clinical decision support tools are in place outlining treatment and referral options for patients who have delirium, undiagnosed dementia or other mental health problems.

3.4 Quality measures

System measures	Cognitive assessment Method (CAM) tool available Comprehensive assessment process in place including referral for dementia assessment if necessary Dementia and delirium appropriately coded, coding monitored to reflect activity Carer assessment tool available
Patient measures	Review of care (File Audit) Dementia and/or delirium documented
Carer measures	Carer consulted regarding prior history Carers needs assessed
Staff measures	Knowledge of cause of confusion and distinction between dementia /delirium/ depression Staff able to identify carers Staff able to undertake carer assessment

PRINCIPLE 4: MANAGEMENT OF OLDER PEOPLE WITH CONFUSION



NSW hospitals will have programs in place for older people with confusion that align with these principles.

The implementation will be in partnership with the older person, their carer and family.

The first line management of the older person with confusion is to treat the underlying cause of confusion.

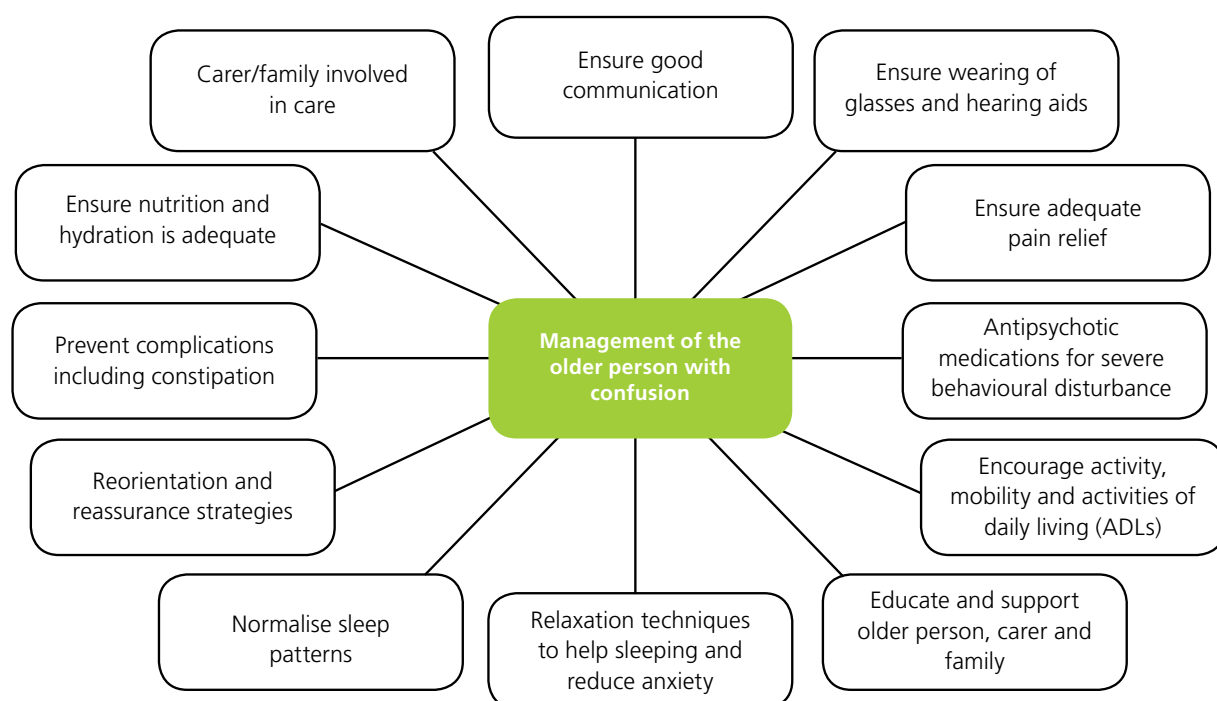
The general management of confusion is multimodal and includes addressing physical, medical, social and psychological needs. The older person (if possible), carer and clinicians should work in partnership to develop a care plan with shared goals based on the person's values and experiences ⁽³⁶⁾. This will ensure the care plan is centred around the physical, medical, social and psychological needs of the confused person.

Management should be designed to meet their specific needs and manage any identified risks ⁽³⁷⁾. Strategies to manage confusion are the same as strategies to prevent confusion (Principle 2).

4.1 Applying the principle in practice

Strategies to manage confusion should be multimodal and include the following elements.

Figure 4: Management of the older person with confusion (adapted from AHMAC, 2000)



1. Carer/family involved in care

- Consult the carer about their role in the care plan and provide appropriate information (i.e. delirium brochure, dementia fact sheets) and training. Refer to formal services as needed
- Ensure that the carers needs are assessed and supported
- Be flexible with visiting hours for carers and family members and consider a family roster

2. Ensure good communication

- Ensure there is thorough documentation and that a handover of behaviour takes place between each shift.

3. Ensure wearing of glasses and hearing aids

- Ensure glasses and hearing aids are clean and working.

4. Ensure adequate pain relief

- Inadequate pain relief can precipitate confusion. Pain should be assessed, monitored and appropriate pain relief administered
- Opiates can precipitate confusion, they should be used as clinically appropriate and the individual closely monitored.

5. Antipsychotic medications for severe behavioural disturbance

- Antipsychotics are not effective in the treatment of confusion. Non pharmacological strategies are more effective
- Antipsychotic medications can be useful for severe behavioural disturbance. They should be used under medical supervision and reviewed.

6. Encourage activity, mobility and Activities of daily living (ADLs)

- Physical Restraints should be avoided and psychotropic medications should be limited and closely monitored
- Consider if the older person is at risk of falls
- Provide success based therapeutic activities based on the individual's likes (music, hobbies, reading games) to reduce boredom and frustration, enhance quality of life and cognition ⁽³⁶⁾. Diversional therapy such as use of rummage boxes are useful for promoting such activities.

7. Educate and support older person, carer and family

- Provide information on confusion, dementia and delirium as appropriate including training for the carer on how to support the older person
- Provide information on services such as support groups, respite services and other carer support services
- Provide information in appropriate language, use translators. Be aware of cultural differences.

8. Relaxation techniques to help sleeping and reduce anxiety

- Consider lighting levels and music.

9. Normalise sleep patterns

- Supportive care environments (Principle 7) are important. Consider natural lighting during day and a quiet environment with lights turned down at night.

10. Reorientation and reassurance strategies

- Involve carers and family in reorientation and reminiscence strategies such as the use of clocks and family photos
- Introduce a “Get to know you” system (see Principle 5)
- Create a quiet environment with reduced activity/ stimulation and soft lighting at night (to assist with reorientation) (Principle 7)
- Tailor care to the needs of the individual, modify activity and adapt according to need as well as likes and dislikes (‘get to know you’ program in place such as Sunflower, Top5 or Patient profile).

11. Prevent complications

- Provide timely interventions
- Closely monitor bowels and use strategies to prevent constipation, manage any signs of constipation early
- Refer to medical staff and relevant nurse with expertise in aged health eg Clinical Nurse Consultant/ Nurse Practitioner if available
- High observation areas can be used to further assess the individual, minimise harm and provide therapeutic care.

12. Ensure hydration and nutrition is adequate

- Encourage oral fluids
- Assist with meals as required, including the setting up of meals and opening any packages
- Assist with ordering meals by assisting with filling in order forms.

Other considerations

For older people with a confirmed diagnosis of dementia, it is important to acknowledge and integrate the diagnosis of dementia into care planning, as dementia impacts on all aspects of care, treatment and planning in hospital ⁽³⁸⁾.

Volunteer programs have been found to maintain function and decrease falls for older people in hospital and volunteers and staff have a high level of satisfaction ⁽³⁹⁾.

i Further details on the above interventions available at www.aci.health.nsw.gov.au/chops

Behavioural and psychological symptoms of dementia (BPSD)⁽⁴⁰⁾

Refers to a collection of observed behaviours and psychological symptoms that can occur with an older person with dementia including:

- Aggression and non-aggressive agitation
- Psychosis including delusions, hallucination and misidentification
- Depression
- Apathy
- Anxiety
- Wandering
- Intrusiveness

i For more information on the assessment and management of BPSD, please refer to NSW Ministry of Health Assessment and Management of people with behavioural and psychological symptoms of dementia (BPSD) A handbook for NSW Clinicians.

i For more information see NSW Health Nutrition Care Policy
http://www0.health.nsw.gov.au/policies/pd/2011/PD2011_078.html

4.2 Evidence base

The Australian Health Ministers Advisory Council's, *Clinical Practice Guidelines for the management of Delirium in Older People* recommends multifactorial prevention strategies involving specialist geriatric medical and nursing intervention have the potential to reduce the incidence of delirium, the duration of delirium and the severity of delirium⁽⁵⁾. There is strong evidence to suggest that patient-centred care can lead to improvements in health care quality and outcomes by increasing safety, cost effectiveness and patient, carer/ family and staff satisfaction^(7, 37).

4.3 Expected outcomes

1. Hospital teams implementing the CHOPS program will have a sound understanding on how to recognise the causes of confusion and subsequent management of confusion (a standardised assessment process should be clearly outlined which includes the specific history, examination and investigations to be undertaken for the management of confusion).
2. Hospital teams will have a clear understanding of how to manage the symptoms of confusion for patients through the implementation of best practice (strategies will be developed locally and may include specific actions as listed below).
3. Care planning will be individualised to the needs of the confused older person and responsive to their needs in relation to nutrition, hydration, comfort, activity and communication. This care will be assessed, planned, implemented and reviewed by nursing and medical staff collaboratively.
4. The needs of carer and family members will be recognised and they will be consulted about their role in the plan of care.
5. Localised 'Getting to Know You' profiles and supporting systems will be implemented by the ward nursing staff to engage with the carers and families of older confused patients to gain information that can be used to personalise the care given by all hospital staff.
6. Confused older people will be engaged in meaningful activities relating to their interests and abilities. The activities should encourage recovery and maintenance of function, and social engagement should be developed in partnership with the patient's family and carers when appropriate.

4.4 Quality measures

System measures	Policies, procedures, guidelines referral pathways and /or protocols in place
Patient measures	Number of ward moves for patients Use of antipsychotics Complication rates - falls, pressure injury Length of stay, mortality
Carer measures	Carer consulted about their role in management Carer involved in the development of a management plan
Staff measures	Referrals to specialist services for confusion and underlying causes Increase in staff knowledge

PRINCIPLE 5: COMMUNICATION PROCESSES TO SUPPORT PERSON CENTRED CARE



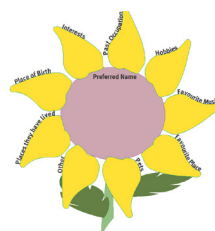
Engagement and involvement of carers and families plays an important role in enhancing the care for older people during their hospital stay⁽³⁸⁾. A key strategy to improving care for an older person with confusion is proactive involvement of the carer and family in the assessment and care planning. This is a partnership between expert health care staff and the carer, who has expert knowledge of the older person requiring care. The information could be from the older person, carer/family member, staff from residential care or a community-based case manager, GP or someone who knows the person well⁽⁴⁰⁾. Clear and succinct communication is required for all transfers of care, as well as between all members of the multidisciplinary team. The method of communication should be appropriate to the individuals and setting eg face to face, telephone, telehealth, written and electronic.

5.1 Applying the principle in practice

Carer and Family

- Person Centred Care
- Care tailored to the needs of the individual.
- Education and referral
- Support and counselling

Get to know you



Transfer of care

- Clinical Handover
- Inter ward transfer
- Patient whiteboards
- Community care
- Residential care
- General practitioners
- Specialist Aged Health Care Services

Person centred care

The older person, carer and health professionals should work in partnership to develop a care plan with shared goals based on the person's values and experiences ^(36, 41). This will ensure the care plan includes a consideration of the physical, medical, social and psychological needs of the confused older person.

“Get to know you” systems

“Get to know you” systems aim to inform those caring for the confused older person with information about the older person, their needs and habits. This can assist healthcare staff in providing person centred care for an older person with confusion. These “get to know you” systems create a social and personal profile of the older person ⁽⁶⁾ and create a mechanism for carers and family to communicate the care needs of the older person with the healthcare team. Examples of “get to know you” systems include:

Sunflower

A summary of an individual's life including likes and dislikes. It can be as an A3 laminated poster at the end of the bed or a smaller A4 version in the bedside notes (Appendix D) ^(26, 34).

Top 5

An approach to gain carer information to personalise care for patients with dementia when requiring hospitalisation, recording of tips for effective communication, behaviour management and supportive care (Appendix E) ^(42, 43).

Patient story

A form that can be filled in by the carer/family member or staff with details of the patients' personal care requirements as well as social and emotional habits and needs and include consultation with the patient where possible. Examples include *Communication and Care Cues Form*, “This is me” or patient profile, social and personal profile.

Individual patient white boards

Individual patient whiteboards are a shared communication tool and play an important role in the delivery of patient-centred care by improving communication among members of the healthcare team (nurses, physicians, allied health and others) and between health care providers and their patients and carers. The type of information displayed on the whiteboard should be determined with sensitivity but also with “consent” of the patient ⁽⁴⁴⁾.

Clinical handover

There are many resources to support improvements to clinical handover ^(40, 45-50). The NSW Agency for Clinical Innovation resource for transferring care from General Practice to Hospitals and Hospitals to General Practice is particularly relevant for this patient group. While the focus of this resource is on general practice ⁽⁴⁵⁾, the principles can be applied to any setting, both within and outside the health sector. It makes five recommendations:

1. The older person, their family and/or carer is involved as a partner in the transfer of care decision making processes.
2. Clear, succinct communication is required for all transfers of care, in many cases electronic communication will be the optimal method. Verbal communication must also occur when; follow-up care is required within 48 hours, there is a concern regarding potential deterioration of a patient, or patient has complex needs.
3. Medication reconciliation should occur at every transition of care. The older person and/or carer should always receive any updated medication list(s).
4. An older person, their family and/or carer must leave the hospital with a copy of their discharge communications, including an ongoing management plan.
5. Infrastructure to enable GPs to have access to electronic patient results in the hospital (e.g. PowerChart) should be developed.

Communicating with older people, carers and family

The confused person and their carer/family can become overwhelmed in hospital. The experience of delirium in particular is very distressing for the patient ^(51, 52). Fear, panic and anger often arise ⁽⁵³⁾ and they often need counselling and education once the delirium resolves. While some people with delirium do not remember the experience, others have vivid memories of the events ^(51, 52) and can be embarrassed or puzzled about what was going on. Carers and families may feel angry and frustrated as well as distressed ^(51, 52) at the change in the patient and good clear explanations and ongoing communication is essential.

Carers and families need to be:

- Involved in decisions while in hospital
- Involved in future care planning
- Encouraged to provide information to enable assessment
- Encouraged to report changes in behaviour, physical or mental condition
- Provided with information about dementia and/or delirium as appropriate in a mode that suits them i.e. Verbal, written, pamphlets, websites, associations
- Given support and listened to
- Part of a health service that is responsive to their needs. ^(37, 54)

5.2 Evidence base

Navigating the complex health system can be a challenging task for patients, their families and carers. Safe clinical handover is essential for the delivery of better patient journeys across the entire health system. An improved patient experience of care is an important outcome from enhanced transfer of care. Effective handover is particularly important for vulnerable patients with complex needs.

There is evidence that the poor exchange or delayed sharing of information between health professionals negatively affects continuity of care ⁽⁵⁵⁻⁵⁸⁾. In turn this may negatively impact patient outcomes through increased medication errors ^(59, 60), higher readmission rates ^(57, 61) and unnecessary delays in diagnosis, treatment and provision of test results ⁽⁵⁰⁾. Issues also remain with both the content and delivery of handover information across care settings. Current evidence

suggests that a significant proportion of hospital discharge summaries are not received by general practice ⁽⁶²⁾. Additionally, health professionals ⁽⁶³⁾, patients ⁽⁶⁴⁻⁶⁶⁾ and carers ⁽⁶⁷⁾ suggest that their information needs are not met by existing approaches to sharing information.

Culture change starts with analysing individual, team or organisational practices to identify areas requiring development. Staff need to listen to the older person, take time to get to know them and engage with them as an equal ⁽³⁸⁾. Person centred practice can make a difference to health outcomes and patient satisfaction and can improve healthcare workers sense of professional worth ⁽⁴¹⁾.

Half of the carers surveyed by Carers NSW in 2012 felt that their mental health had been negatively affected by caring, and many carers felt that services ignored their needs as carers and rarely considered their health and wellbeing ⁽⁶⁸⁾. Carers' needs are the responsibility of the individual staff who deal with them as well as organisations as a whole.

- Person centred practice can make a difference to health outcomes and patient satisfaction
- Effective dementia care involves becoming familiar with the individuals life
- Personalised care is required to meet optimal outcomes for the individual, their carer and family, staff and the organisation
- Debriefing and education for patients, family and carers is essential.

5.3 Expected outcomes

1. The older person, their family and carers, will have access to timely information, education and support that enhances the wellbeing of the older person with confusion and those that support them.
2. Hospital teams will build strong relationships and engage with their local primary care providers, nursing homes, home care agencies and clinics to ensure that adequate information is shared at all stages of the older person's journey and that the older person is discharged to a safe environment with adequate supports in place.
3. Communication at transitions of care at all stages of the older confused person's journey in hospital will be efficient and effective between health professionals.

5.4 Quality measures

System measures	<p>“Get to know you” system developed and promoted</p> <p>Process to communicate information with patients, carers and staff</p> <p>Clinical handover includes cognitive status and any recent changes in cognition</p>
Patient measures	<p>Care plans for confused older persons (total and percentage)</p> <p>Older persons identified with “get to know you” system (total and percentage)</p> <p>Receives education (Patient/ carer survey)</p>
Carer measures	<p>Carer satisfaction with consultation about person care, carers feel they have been included as partners in care</p> <p>Carer satisfaction with clear and consistent communication</p> <p>Staff listen to carers</p> <p>Carer receives education</p>
Staff measures	<p>Consistent communication strategies including clinical handover</p> <p>Staff know how to communicate with, educate and support patient and carer</p> <p>The needs of the carer and their health and wellbeing are considered and supported</p>

PRINCIPLE 6: STAFF EDUCATION ON CARING FOR OLDER PEOPLE WITH CONFUSION



Staff are supported through training, education and leadership to enable them to deliver skilled, timely and knowledgeable care to the older person with confusion

Delivery of high quality care for people with confusion requires a whole organisation commitment ⁽⁶⁹⁾. Hospital-based delirium and dementia management guidelines, accompanied by education and reinforcement during their implementation, can improve the recognition of delirium ⁽⁴⁾ and the overall management of an individual with dementia. When strategies to enable and reinforce changes in clinical practice are used together with education sessions, outcomes for patients are more positive ⁽⁷⁰⁾. Education is most effective when formal teaching is interactive and combined with practice-based enabling and reinforcing strategies, such as modelling and case based discussion.

6.1 Applying the principle in practice

To meet the education principles, hospitals need to design an education approach for all staff.

Awareness	Posters, Lanyards, Flags on patient files
Ward Level	Handover, Mentoring, Inservice, Self directed
Hospital Level	Grand rounds, Hospital wide education days, Awareness weeks
External	Health Education and Training Institute, CHOPs Website, Dementia eLearning ⁽¹⁾ , Dementia Training Study Centre, University post graduate



The DementiaCare Resource and Training Network provides a number of facilitated dementia care eLearning courses for clinicians.

<http://dementiacare.health.nsw.gov.au/>

6.2 Evidence base

- Guidelines alone do not improve practice, implementation needs to be accompanied by education
- Education strategies aimed at increasing knowledge and awareness of delirium can improve hospital staff recognition and documentation of delirium.

Poor staff knowledge and attitudes relating to the care of confused older patients

- A survey of medical nursing and allied health staff attitudes and knowledge around the care of confused older patients in a major teaching hospital in NSW reported 84% of staff reported exposure to confused older patients at least weekly. The majority of staff felt undertrained. There were statistically significant associations between previous training, perceived skills confidence in assessment and management of delirium and actual performance in the knowledge quiz ⁽⁷¹⁾.
- A survey of clinical staff at five NSW public hospitals in 2011 found that only 37% of staff felt confident in recognising delirium in patients, while an even smaller percentage (28%) felt confident in the management of those patients. The majority of staff (85%) felt they had had no training in managing confusion in hospitalised older people, despite the fact that 80% of those surveyed had been exposed to aggression in the workplace ⁽³⁴⁾.

6.3 Expected Outcomes

1. The ACI works collaboratively with key stakeholders and the Local Health Districts (LHDs) to develop CHOPS specific education and packages for adaptation and utilisation within the hospital
2. LHDs and hospital executives identify senior clinical staff and local champions to provide expertise in the development and implementation of quality care for confused older people through the CHOPS program
3. LHDs and hospitals tailor and prioritise the roll-out of the CHOPS program within the organisation
4. LHDs and hospitals recognise and prioritise the need to support staff development in the care of confused hospitalised older people for their staff through the CHOPS program
5. Hospital teams implementing the CHOPS Program will have a clear focus on education for their staff who have contact with and care for older people with confusion.

6.4 Quality measures

System measures	<ul style="list-style-type: none">• Staff knowledge and attitude surveys• Organisational education plan developed and implemented• Access to HETI and other training modules• Dementia elearning facilitators in place
Staff measures	<ul style="list-style-type: none">• Training sessions held (total)• Staff attending training sessions (total and percentage)• Staff satisfaction• Staff confidence• Staff knowledge

PRINCIPLE 7: SUPPORTIVE CARE ENVIRONMENT FOR OLDER PEOPLE WITH CONFUSION



NSW hospitals will provide a supportive care environment for the older person with confusion

An older person's confusion and behavioural disturbance can be exacerbated by an unfamiliar environment. The physical environment of care for an older person with confusion may provide excessive or inappropriate stimulation and result in the older person becoming agitated or withdrawn ⁽⁷²⁾. General hospitals and emergency departments are often designed in a way that makes people with confusion even more confused ^(13, 73). A good environment can, almost by itself, reduce confusion and agitation, improve way finding and encourage social interaction ⁽⁷⁴⁾.

Strategies to orientate the older person with confusion can improve their experience. Orientation strategies might include particular signage or use of colour in the ward area or positioning familiar items around the bed area ⁽⁷³⁾ to create a warm and friendly atmosphere where noise and hustle is minimised ⁽⁶⁹⁾.

Simple measures can help to minimise confusion (e.g. ensuring toilet doors are painted with an identifiable colour and illustrating ward signs with pictures) and may help to prevent falls during the patients stay (eg ensuring contrast between the floor, bed and toilet).⁽¹¹⁾.

7.1 Applying the principle in practice

An audit of the supportive care environment should be conducted to highlight potential risks and identify potential improvements.

The audit should consider aspects such as lighting and signage.

Supportive care environments for older people with confusion should:

1. Promote meaningful interactions between the older person, their carer and family and staff

- The look and feel of the ward is welcoming (clean and tidy, not cluttered) with an obvious reception.
- Social areas with activities encouraged (not just TV) and the provision of activities.
- Staff are able to observe patients in all ward areas unobtrusively.
- Ensure space for carers and family members.

2. Promote well being

- Natural light available.
- Lights that can be adjusted for time of day and care needs, and support sleep.
- Personal items able to be found/reached, ie glasses, toiletries.
- Access to safe outdoor area.
- Views/links to nature maximised (materials, artefacts, colours, artworks).
- Hearing assistance equipment available.
- Single sex bays and toilet/washing facilities.

3. Encourage eating and drinking

- Access to hot and cold drinks for patients and carers/families.
- Access to snacks or finger food.
- Familiar design of glassware and crockery in contrasting colours and textures to tables and trays.
- Space to eat away from bed side.

4. Promote mobility

- Flooring mat, consistent colour (without speckles, pebble effect or multiple colour blocks/stripes), in contrasting colour to walls and furniture and limits shadows/wet look.
- Handrails in corridors that contrast with wall colour and are able to be grasped.
- Space for independent mobility.
- Small seated rest areas available around ward.
- Points of interest along corridors such as photographs, tactile artworks etc.

5. Promote continence and independence

- Toilet signs visible for all patient areas.
- Clear signage with pictures and words.
- Doors painted in single distinctive contrasting colour.
- Toilet seats, flush buttons and rails in a colour that contrasts with walls and floor in the bathroom.
- Design of flushes, taps, basins and fittings are traditional and familiar design.

6. Promote orientation

- Signs use pictures and words and are hung at patient height.
- The name of the hospital and ward is displayed.
- Signs are clear and understandable, in contrasting colours.
- Pictures and objects are placed to assist orientation.
- Large clock face with day and date visible from bed.
- Bedspace that can be personalised – large bed numbers, memory boxes, photographs.

7. Promote calmness and security

- Staff notices should be minimised in ward area.
- Spaces free of clutter.
- Noise absorbent surfaces used eg on floors.
- Low noise levels.
- Exits and 'Staff Only' areas disguised – doors and handles painted same colour as walls.
- Least restrictive environment – restraints and bedrails minimised.
- Safety and security measures in place and as discreet as possible.
- Hazardous materials locked away.^(11, 69, 73-76)



Adapting the ward is a resource that explores the environmental considerations in more detail ⁽⁷⁴⁾.



Dementia Enabling Environments website is a useful website that shows a virtual environment and the needs for people with dementia.
www.enablingenvironments.com.au

7.2 Evidence base

Good design can help prevent some of the behaviour of people with dementia and delirium as it can make the environment less frightening and baffling, which in turn reduces stress for this group of patients ⁽⁷³⁾. Poorly designed wards contribute to greater confusion and stress for the patient as well as increased risk of falls and adverse events ⁽¹¹⁾. The NSW Dementia Services Framework 2010-2015 recommends a local environment that has unobtrusive safety features, a variety of spaces including single rooms with good visual access for patients and staff and safe wandering areas. ⁽¹³⁾

7.3 Expected outcomes

Hospital teams will undertake environmental assessments of their wards and implement improvements (simple and major as appropriate) in the physical environment to create supportive environments for the confused older person.

7.4 Quality measures

System measures

- Environmental Audit available.
- Dementia friendly design principles are considered in any capital works/ refurbishment.

Patient measures

- Plan to address identified environmental issues at individual level.

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APPENDIX A

ABBREVIATED MENTAL TEST SCORE



Cognition Screening for Older Adults

This form incorporates the Abbreviated Mental Test scores (AMTS), Delirium Risk Assessment Tool (DRAT) and Confusion Assessment Method (CAM).

Patient Label

Abbreviated Mental Test Score (AMTS)

Establish baseline cognition by completing the Abbreviated Mental Test OR SMMSE for all presentations 65 years + (45+ ATSI). Repeat with any change in cognition behaviour of LOC. Score 1 for each correct answer.

QUESTION	Time Date	___/___/___	___/___/___	___/___/___	___/___/___
1. How old are you					
2. What is the time (nearest hour)					
Give the patient an address and ask them to repeat it at the end of the test E.g. 42 Market St Queanbeyan					
3. What year is it?					
4. What is the name of this place					
5. Can the patient recognise two relevant persons (eg. Nurse/doctor or relative)					
6. What is your date of birth?					
7. When did the second world war start? (1939)					
8. Who is the current Prime Minister?					
9. Count down backwards from 20 to 1					
10 Can you remember the address I gave you?					
TOTAL SCORE					
Signature					

- A score of 7 or less indicates cognitive impairment
- All patients require a Delirium Risk Assessment using (DRAT) over page

Does the person have a history of any recent / sudden change in behaviour, cognition, loss of consciousness or functional abilities (inc Falls)?

☐

Yes - Please do CAM

☐

No - Please do DRAT

APPENDIX B

DELIRIUM RISK ASSESSMENT TOOL

Delirium Risk Assessment Tool (DRAT)						
Assessment to be completed on admission, pre & post op. and when there is a change in behaviour						
Pre morbid RISK factors Tick & add score				Precipitating factors		
<input type="checkbox"/> ≥ 70 yrs PLUS <input type="checkbox"/> Visual impairment (unable to read large print on newspaper with glasses) <input type="checkbox"/> Severe illness (nurses' opinion including mental illness/depression) <input type="checkbox"/> Cognitive impairment AMTS <7/10 or MMSE < 25/30 or past history of memory or cognitive deficit <input type="checkbox"/> Dehydration (scanty, concentrated urine; fever, thirst, dry mucous membranes or raised creatinine/urea)				WARNING: these factors increase risk ★ Mechanical restraint ★ Malnutrition ★ 3 new medications added in 24hrs ★ IDC ★ Iatrogenic event (procedure, infection, complication, fall etc)		
If your patient is ≥ 70 yrs and has at least one of the above risk factors = RISK of Delirium <input type="checkbox"/>						
IF CHANGE IN BEHAVIOUR -RECOMMENDED INVESTIGATIONS						
<input type="checkbox"/> CAM	<input type="checkbox"/> Medical review	<input type="checkbox"/> History (incl. family)	<input type="checkbox"/> Physical Exam	<input type="checkbox"/> Medication Review	<input type="checkbox"/> Bloods	<input type="checkbox"/> MSU

APPENDIX C

CONFUSION ASSESSMENT METHOD

Delirium Screening Tool

CONFUSION ASSESSMENT METHOD (CAM)

The CAM is a validated tool to be used in assisting with the differential diagnosis of Delirium. It should be used for any older person who appears to be disorientated / confused or who has any change in behaviour or LOC. It is important that the CAM is used in conjunction with a formal cognitive assessment (eg AMT/ SMMSE), good clinical and medical assessment, together with baseline cognition information from carers/family or the community or residential aged care service

1	Acute onset and fluctuating course	No	Yes	Uncertain, <i>Specify:</i> _____	Is there evidence of an acute change in mental status from the patient's baseline? If so, did the abnormal behaviour fluctuate during the day?	E.g. tend to come and go, or increase and decrease in severity
2	Inattention	No	Yes	Uncertain, <i>Specify:</i> _____	Did the patient have difficulty focussing attention during the interview?	E.g. being easily distracted, or having difficulty keeping track of what was being said?
3	Disorganised thinking	No	Yes	Uncertain, <i>Specify:</i> _____	Was the patient's thinking disorganised or organised?	E.g. Rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from one subject to another?
4	Altered level of consciousness	No	Yes	Uncertain, <i>Specify:</i> _____	Overall, how would you rate the patient's level of consciousness?	Altered E.g. Vigilant, Lethargic, Stupor, Coma, Uncertain.

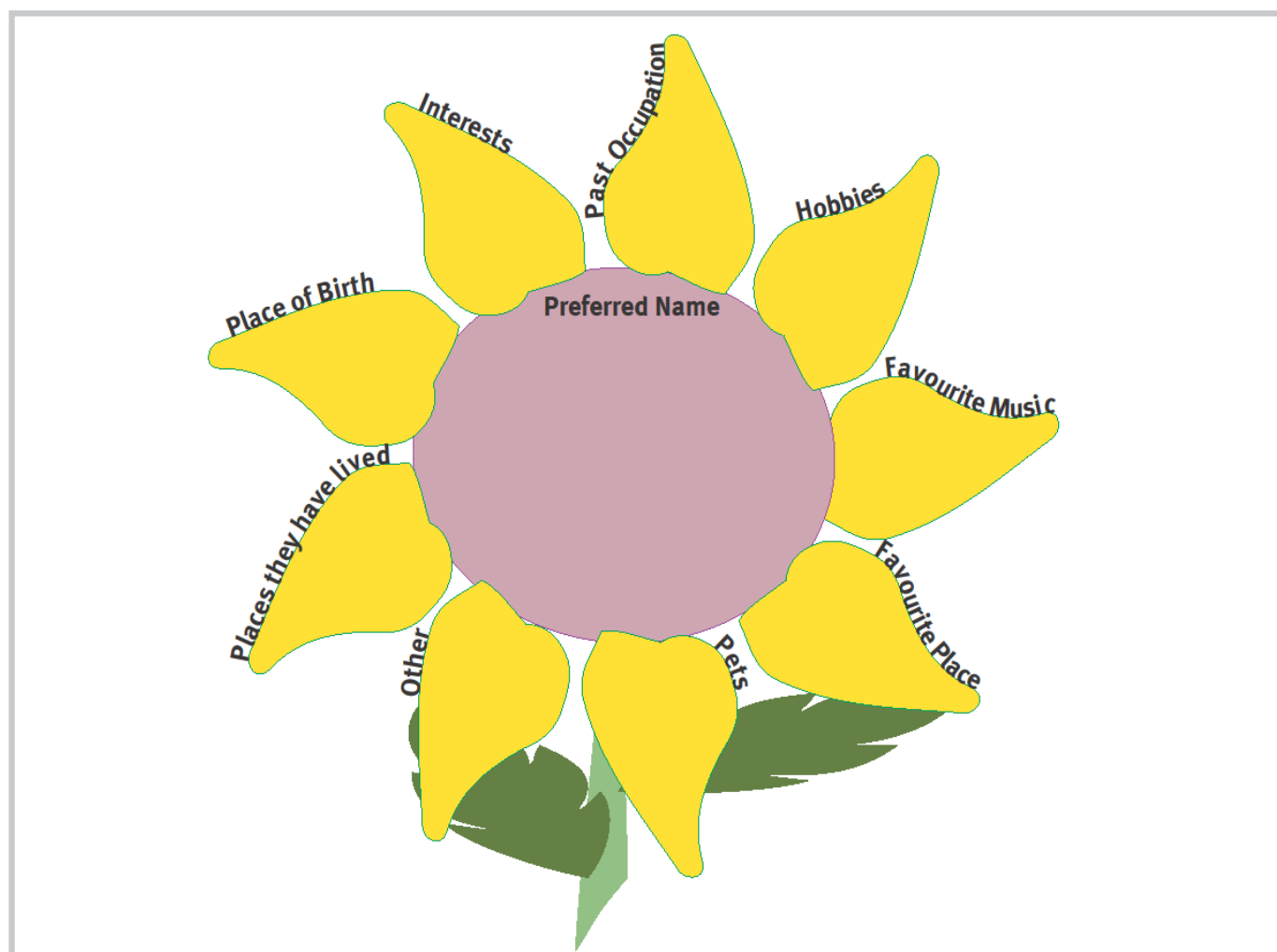
Delirium is present if features 1 and 2 AND either 3 or 4 are present

Delirium symptoms: not present / present Date: / /

Medical Officer notified? Yes / No

APPENDIX D

SUNFLOWER TOOL



APPENDIX E

TOP 5



**Partnering
with Patients**



CLINICAL
EXCELLENCE
COMMISSION

TOP 5 Initiative

The Patient Based Care Directorate of the Clinical Excellence Commission (CEC) considers carer engagement as integral to *Partnering with Patients* in promoting safety and quality of health care services across NSW.

The TOP 5 concept was conceived and implemented in the Central Coast Local Health District (CCLHD). The HCF Health and Medical Research Foundation is supporting the CEC in implementing and evaluating the TOP 5 Initiative in 15 public hospitals and five private hospitals in NSW.

T	Talk to the Carer
O	Obtain the information
P	Personalise the care
5	5 strategies developed

The TOP 5 initiative acknowledges the value of carer information about patients who have memory and thinking problems. For this initiative, the focus is on patients with dementia who require hospitalisation.

TOP 5 is an approach to engage with carers to gain information that personalises care. It formalises personal information gathered from the carer which is then available to every member of the team who will interact with the patient, thus improving communication.

Talking to the carer helps staff to understand cues given by the patient, allowing them to communicate better and to allay patient fears. Strategies are developed in partnership with the carer to ensure that they are workable in a hospital environment.

The benefits (as shown by CCLHD) include improved treatment outcomes, reduced length of stay, improved care experience and staff satisfaction.

TOP 5 supports the CEC model of patient based care where each patient is everyone's responsibility from the board to the ward.

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