



# Delirium: prevention, diagnosis and management

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## Introduction

The following guidance is based on the best available evidence.

The following definitions in this guideline:

- ***Hyperactive delirium***: a subtype of delirium characterised by people who have heightened arousal and can be restless, agitated or aggressive.
- ***Hypoactive delirium***: a subtype of delirium characterised by people who become withdrawn, quiet and sleepy.

Be aware that palliative care patients may be at risk of delirium. This can have serious consequences (such as increased risk of dementia and/or death) and, for people in hospital, may increase their length of stay in hospital and their risk of new admission to long-term care. Incidence of delirium has been shown in one study to be 43% of admissions to hospice inpatient units<sup>2</sup>. Delirium can cause distress both for patients and family/carers therefore prompt recognition and treatment is important to minimise this distress.



## 1.1 Risk factor assessment

1.1.1 When people first present to the inpatient unit, assess them for the following risk factors (appendix A). If any of these risk factors is present, the person is at risk of delirium.

- Age 65 years or older.
- Cognitive impairment (past or present) and/or dementia. If cognitive impairment is suspected, confirm it using a standardised and validated cognitive impairment measure (e.g. AMTS).
- Current hip fracture.
- Severe illness (a clinical condition that is deteriorating or is at risk of deterioration)

1.1.2 Observe people at every opportunity for any changes in the risk factors for delirium.

## 1.2 Indicators of delirium: at presentation

1.2.1 At presentation, assess patients at risk for recent (within hours or days) changes or fluctuations in behaviour. These may be reported by the patient at risk, or a carer or relative. Be particularly vigilant for behaviour indicating hypoactive delirium (marked\*). These behaviour changes may affect:

- Cognitive function: for example, worsened concentration\*, slow responses\*, confusion.
- Perception: for example, visual or auditory hallucinations.
- Physical function: for example, reduced mobility\*, reduced movement\*, restlessness, agitation, changes in appetite\*, sleep disturbance.
- Social behaviour: for example, lack of cooperation with reasonable requests, withdrawal\*, or alterations in communication, mood and/or attitude.

If any of these behaviour changes are present, a healthcare professional (medical or nursing) who is trained and competent in diagnosing delirium should carry out a clinical assessment to confirm the diagnosis, by using the Short Confusion Assessment Method ©(CAM).

## 1.3 Interventions to prevent delirium

1.3.1 Ensure that patients at risk of delirium have access to familiar family/friends as much as possible. Avoid moving patients between rooms unless absolutely necessary. It may be necessary, however, to move the patient to a bed closer to the nursing station for closer observation.

1.3.2 Give a tailored multicomponent intervention package:



- Within 24 hours of admission, assess people at risk for clinical factors contributing to delirium.
- Based on the results of this assessment, provide a personalised plan of care to the person's individual needs and care setting.

#### 1.3.3.1 Address cognitive impairment and/or disorientation by:

- providing appropriate lighting, a clock and a calendar should also be easily visible to the person at risk
- talking to the person to re-orientate them by explaining where they are, who they are, and what your role is
- introducing cognitively stimulating activities (for example, reminiscence)
- facilitating regular visits from family and friends.

#### 1.3.3.2 Address dehydration and/or constipation by:

- ensuring adequate fluid intake to prevent dehydration by encouraging the person to drink - consider offering subcutaneous if appropriate

#### 1.3.3.3 Assess for hypoxia and optimise oxygen saturation if necessary, as clinically appropriate.

#### 1.3.3.4 Address infection by:

- looking for and treating infection
- avoiding unnecessary catheterisation

#### 1.3.3.5 Address immobility or limited mobility through the following actions:

- Encourage people to mobilise as they are able
- Encourage all people, including those unable to walk, to carry out active range-of-motion exercises.

#### 1.3.3.6 Address pain by:

- assessing for pain
- looking for non-verbal signs of pain, particularly in those with communication difficulties
- starting and reviewing appropriate pain management in any person in whom pain is identified or suspected.

#### 1.3.3.7 Carry out a medication review for people taking multiple drugs, taking into account both the type and number of medications.



- Such as statins, anti-hypertensives - review if still required

#### 1.3.3.8 Address poor nutrition by:

- Screening for malnutrition using the MUST screening tool and follow as appropriate
- if people have dentures, ensuring they fit properly.

#### 1.3.3.9 Address sensory impairment by:

- resolving any reversible cause of the impairment, such as impacted ear wax
- ensuring hearing and visual aids are available to and used by people who need them, and that they are in good working order.

#### 1.3.3.10 Promote good sleep patterns and sleep hygiene by:

- avoiding nursing or medical procedures during sleeping hours, if possible
- scheduling medication rounds to avoid disturbing sleep
- reducing noise to a minimum during sleep periods.

### 1.4 Indicators of delirium: daily observations

1.4.1 Observe, at least daily, all people inpatients for recent (within hours or days) changes or fluctuations in usual behaviour. These may be reported by the person at risk, or a carer or relative. If any of these behaviour changes is present, complete the delirium risk assessment document. If the risk assessment identifies a patient to be at risk for developing delirium or identifies that the patient has indicators of delirium, a Delirium and delirium prevention care plan (Appendix B) should be commenced. If the risk assessment suggests presence of delirium, a healthcare professional who is trained and competent in the diagnosis of delirium should carry out a clinical assessment to confirm the diagnosis.

### 1.5 Diagnosis

1.5.1 If indicators of delirium are identified, carry out a clinical assessment based on the short Confusion Assessment Method© (CAM) to confirm the diagnosis. If there is difficulty distinguishing between the diagnoses of delirium, dementia or delirium superimposed on dementia, treat for delirium first. If delirium is suspected, treat for delirium until confirmation by the medical team.

1.5.2 Ensure that the diagnosis of delirium is documented in the patient's clinical record.

1.5.3 Commence a delirium care plan



1.5.4 Note on the hourly care rounds any signs of delirium in order to document the fluctuations.

## 1.6 Treating delirium

### Initial management

1.6.1 In people diagnosed with delirium, identify and manage the possible underlying cause or combination of causes.

- Rule out hypoxia
- Ensure bladder and bowels are working well
- Dipstick urine
- Look for signs of pain
- Consider other source of infection - medical review should be considered
- Consider blood tests - to look for infection, electrolyte disturbance (such as hypercalcaemia in malignant disease)
- Consider the presence of brain metastases (in malignant disease)

1.6.2 Ensure effective communication and reorientation (for example explaining where the person is, who they are, and what your role is) and provide reassurance for people diagnosed with delirium. Consider involving family, friends and carers to help with this.

1.6.3 Assess whether the patient is at risk to themselves.

1.6.4 Provide a suitable care environment:

- Well lit environment
- Ensure patient can see a clock
- Consider if requires to be nursed closer to the nursing station
- Photographs of loved ones can help with orientation

### Distressed people

1.6.3 If a person with delirium is distressed, hallucinating or considered a risk to themselves or others, first use verbal and non-verbal techniques to de-escalate the situation. Distress may be less evident in people with hypoactive delirium, who can still become distressed by, for example, psychotic symptoms.

1.6.4 If a person with delirium is distressed or considered a risk to themselves or others and verbal and non-verbal de-escalation techniques are ineffective or inappropriate, consider giving haloperidol or olanzapine. Start at the lowest clinically appropriate dose and titrate cautiously according to symptoms.



1.6.5 Use antipsychotic drugs with caution or not at all for people with conditions such as Parkinson's disease or dementia with Lewy bodies.

#### **If delirium does not resolve**

1.6.6 For people in whom delirium does not resolve:

- Re-evaluate for underlying causes.
- Follow up and assess for possible dementia.

#### **1.7 Terminal Agitation**

Occasionally terminal agitation can present with a delirium that does not resolve, on the background of a globally deteriorating condition. A diagnosis of terminal agitation should be made by a senior clinician (either following their assessment or following discussion) and can only be made when reversible causes have been eliminated. It may be necessary to consider palliative sedation when there is significant intractable distress. This should be discussed with the patient and/or next of kin and the plan of care agreed in the patient's best interests if they lack capacity.

#### **1.8 Information and support**

1.8.1 Offer information to people who are at risk of delirium or who have delirium, and their family and/or carers. A Delirium Information Leaflet may be offered.

#### **References**

1. NICE Clinical Guideline 103; Delirium: prevention, diagnosis and management; July 2010.
2. Rainsford, Rosenberg and Bullen; Delirium in Advanced Cancer: Screening for the Incidence on Admission to an Inpatient Hospice Unit; Journal Pall Med; 2014;17(9);1045-1048.

Confusion Assessment Method. © 1988, 2003, Hospital Elder Life Program. All rights reserved.  
Adapted from: Inouye SK et al. Ann Intern Med. 1990; 113:941-8.



## Appendix A - Delirium risk assessment

### Risk factor assessment

Risk factors
Age 65 or older
Cognitive impairment (difficulty with memory, thinking, concentration and ability to read and write) <sup>1</sup> [past or present] and/or dementia
Severe illness (a clinical condition that is deteriorating or is at risk of deterioration)

If any risk factors apply, the person is considered **at risk of delirium**. Progress to section 2.

If the person has no risk factors, see section 3, outcome 1.

### Indicators of delirium

Behaviour changes (within hours or days)	
Fluctuations in <b>cognitive function</b>	Worsened concentration/ slow responses
	Confusion/ Other cognitive function changes
<b>Perception</b>	Visual or Auditory hallucinations
<b>Physical function</b>	Reduced mobility/movement not related to fatigue
	Restlessness / agitation
<b>Social function</b>	Lack of cooperation with reasonable requests
	Withdrawal / not engaging with outside world
	Alterations in mood / attitude
<b>Other behaviour changes</b>	

If no indicators apply but the person is at risk of delirium, see section 3, outcome 2.

If any indicators apply, see section 3, outcome 3.

### Outcome of assessment

Outcome	Action required
<b>1</b> Person is not at risk of delirium. Person has no indicators of delirium.	<ul style="list-style-type: none"> <li>Observe for changes in risk factors <b>at every opportunity</b>. If person becomes at risk during their stay see outcome 2</li> <li>Observe for indicators of delirium <b>at least daily</b>. If person displays indicators of delirium during their stay see outcome 3</li> <li>Behaviour changes may be reported by the person, a carer or a relative</li> <li>Record and review observations in local documentation</li> </ul>
<b>2</b> Person is at risk of delirium. Person has no indicators of delirium.	<ul style="list-style-type: none"> <li>Develop a delirium prevention package tailored to the person's individual needs and care setting</li> <li>Use the Delirium and Delirium Prevention Care Plan</li> </ul>
<b>3</b> Person has indicators of delirium.	<ul style="list-style-type: none"> <li>Arrange for a healthcare professional trained and competent in the diagnosis of delirium to do a clinical assessment to confirm diagnosis.</li> <li>Use the Delirium and Delirium Prevention Care Plan</li> <li>Antipsychotic medication (e.g haloperidol or olanzapine) may be given as prescribed to alleviate any associated distress.</li> <li>If distinguishing between the diagnoses of delirium, dementia or delirium superimposed on dementia is difficult, treat for delirium first.</li> </ul>



**Appendix B**  
**Delirium and Delirium Prevention Care Plan**  
 INPATIENT DELIRIUM and DELIRIUM PREVENTION CARE PLAN

Patient's name..... DOB..... NHS number.....Care Plan no.....

PROBLEM	OUTCOME	ACTION
<p>.....            has developed a delirium</p> <p>OR</p> <p>.....            is at increased risk of developing a delirium</p>	<p>a. To revert back to/promote normalised cognitive functioning</p> <p>b. To minimise distress</p> <p>c. To promote .....            's comfort and dignity</p>	<p>a. Consider capacity assessment for each significant decision to be made if delirium present</p> <p>b. Look for signs of/administer medication as prescribed for;            Infection (eg urine)            Hypoxia            Pain            Hallucinations/Distress            Poor hearing/sight            Constipation</p> <p>c. Ensure adequate hydration and nutrition</p> <p>d. Encourage mobilising</p> <p>e. If possible avoid bed moves and nurse ..... in a well-lit room with clock/calendar in sight.</p> <p>f. Re-orientate ..... as where they are, who you are, what is happening to them</p> <p>g. Introduce cognitively stimulating activities</p> <p>h. Refer to restraint policy if restraint required</p> <p>i. Consider one-to-one observation or closer monitoring if at risk of harm to self</p> <p>j. Provide Delirium Information leaflet to family/carers</p> <p>k. Document any signs of delirium at each care round</p> <p>l. Consider use of anti-psychotic medication (eg haloperidol) as prescribed to minimise distress.</p>



Appendix C - Short Confusion Assessment Method (CAM) ©

I. ACUTE ONSET AND FLUCTUATING COURSE

BOX 1

a) Is there evidence of an acute change in mental status from the patient's baseline? No \_\_\_\_\_

YES \_\_\_\_\_

b) Did the (abnormal) behaviour fluctuate during the day, that is tend to come and go or increase and decrease in severity? No \_\_\_\_\_

YES \_\_\_\_\_

II. INATTENTION

Did the patient have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said? No \_\_\_\_\_

YES \_\_\_\_\_

III. DISORGANIZED THINKING

Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject? No \_\_\_\_\_

YES \_\_\_\_\_

BOX 2

IV. ALTERED LEVEL OF CONSCIOUSNESS

Overall, how would you rate the patient's level of consciousness?

-- Alert (normal)

--Vigilant (hyperalert)

-- Lethargic (drowsy, easily aroused)

-- Stupor (difficult to arouse)

-- Coma (unarousable)

YES \_\_\_\_\_

Do any checks appear in the box above? No \_\_\_\_\_

If Inattention and at least one other item in Box 1 are checked and at least one item in Box 2 is checked a diagnosis of delirium is suggested.

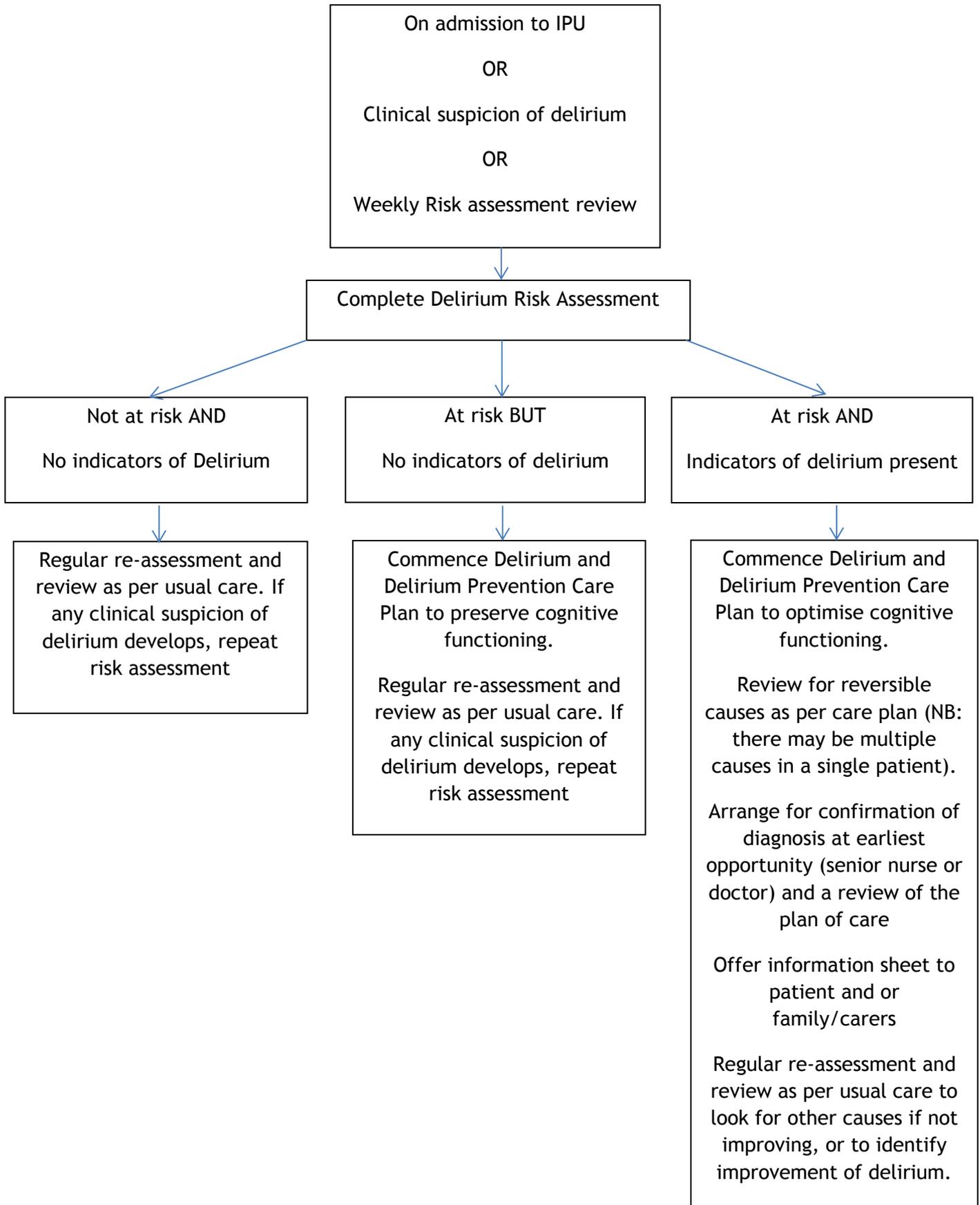
Assessment suggests diagnosis of Delirium? NO \_\_\_\_\_ YES \_\_\_\_\_

Signed.....Name..... Date.....



## Appendix C

### Delirium and Delirium Prevention flow chart





REFERENCES: See Section 1.8				
Lead Author of Policy: Dr Lucy Adcock				
Responsible Sub-group Quality Assurance				
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