

# Delirium | Mate kuawa

*The information in this guide is accurate to the best of our knowledge as of June 2023.*

## Definition

Delirium (also known as acute confusion) is a psychiatric syndrome characterised by a change in the person's ability to pay attention, level of consciousness and cognitive function. It has a sudden onset (over 1–2 days) and fluctuating course, with the person experiencing periods of hyperactivity, hypoactivity and normal function over a 24-hour period (Jeong et al 2020; Ramírez Echeverría et al 2022; Wilson et al 2020).

## Key points

- Delirium is not always easy to recognise, and so the experience can be distressing for older people, their **whānau**/family and those caring for them.
- It may not be possible to identify the underlying cause of delirium.
- Hyperactive delirium can be confused with behaviours that challenge in people living with dementia.
- **Hypoactive delirium results in quiet people and so may go unnoticed.**
- In any behaviour change (hypoactivity or hyperactivity), the safest approach is to assume delirium first and follow up other issues after that (Nitchingham and Caplan 2021).
- Minimising the risk of delirium can have a significant impact on quality of life (Aung Thein et al 2020).

## Why this is important

Delirium in older people is **a medical emergency that needs immediate referral and treatment**. People with delirium have a higher mortality rate than those without delirium (Jeong et al 2020).

Traditionally, delirium was considered reversible. However, recent evidence suggests that delirium may become chronic and can cause irreversible decline in cognitive and physical function (Whitby et al 2022). Chronic delirium occurs most commonly in people who have their diagnosis and treatment of delirium delayed, have moderate to severe frailty and have multiple chronic conditions, and in people with cognitive impairment.

## Implications for kaumātua\*

Kaumātua and/or their whānau/family may have a different interpretation of delirium and consider that it may not have a physical cause. This is closely related to the holistic view of

\* Kaumātua are individuals and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

health from a Māori perspective (Ministry of Health 2017). A disruption or disturbance in one dimension of a person's health affects the other dimensions.

From a Māori perspective, the behaviours observed in both hyperactive and hypoactive delirium may be due to a disturbance in the person's **wairua** (spirituality) or a breach of their personal **tapu** (see the *Guide for health professionals caring for kaumātua* | *Kupu arataki mō te manaaki kaumātua* for more information). It is important to acknowledge this cultural perspective and include holistic interventions when considering treatment of delirium.

Kaumātua and whānau/family may place equal importance on addressing wairua disturbance as treating physiological causes of delirium. For accuracy, wairua disturbances should only be interpreted from a Māori world view. In this situation, listening to kaumātua, whānau/family and other sources of cultural knowledge will be vital.

Complementary, culturally informed interventions to address wairua disturbance may include **karakia** (prayer), **pure** (cleansing rituals) and/or **whakanoa** (ritual that lifts or removes tapu).

## Assessment

Everyone living in aged residential care should be considered at risk of developing delirium if they become acutely ill. A sudden change in mental status should always initiate an assessment for delirium. Worsening motor function is an important diagnostic clue for delirium, especially in people living with dementia. Using a tool to support delirium diagnosis is recommended (Morandi et al 2019).

**Note:** If some health providers, whānau/family or friends report witnessing confusion while others do not, the safest approach is to assume this is fluctuating delirium until proven otherwise.

## Delirium assessment tools

### **RADAR: Recognising delirium as part of your routine**

Authors suggest routine use of the RADAR tool (Morandi et al 2019; Voyer et al 2015).

When you gave the patient their medication:

1. was the patient drowsy?
2. did the patient have trouble following your instructions?
3. were the patient's movements slowed down?

The patient is considered positive for delirium when the assessor answers 'Yes' to at least one question.

**Confusion Assessment Method** (Inouye et al 1990)

Confusion Assessment Method	Y	N
<b>1. Acute onset in change of mental state and/or fluctuating course</b> <ul style="list-style-type: none"> <li>Acute change in mental status?</li> <li>Abnormal fluctuating behaviour (ie, comes and goes or gets worse/better) during the day</li> </ul>		
<b>2. Inattention</b> <ul style="list-style-type: none"> <li>Difficulty focusing, eg, being easily distracted or having difficulty keeping track of what was being said</li> </ul>		
<b>3. Disorganised thinking</b> <ul style="list-style-type: none"> <li>Thinking disorganised or incoherent, eg, rambling or irrelevant conversation, unclear or illogical ideas or unpredictable switching from subject to subject</li> </ul>		
<b>4. Altered level of consciousness</b> <ul style="list-style-type: none"> <li>Any of the following: hyperalert (vigilant), drowsy, largely asleep or difficult to rouse or unarousable</li> </ul>		

Delirium is detected when the answer is **yes** to both questions 1 and 2 PLUS either 3 or 4

## The 4AT

This is a quick ( $\leq 2$  minutes) validated screening tool. It measures: **A**lertness, **A**bbreviated Mental Test, **A**ttention and **A**cute change or fluctuating course ([www.the4at.com](http://www.the4at.com)).

### 4AT: Rapid clinical test for delirium and cognitive impairment

#### 1. Alertness

Score

This includes patients who may be markedly drowsy (eg, difficult to rouse and/or obviously sleepy during assessment) or agitated/hyperactive. Observe the patient. If asleep, attempt to wake with speech or gentle touch on shoulder. Ask the patient to state their name and address to assist rating.

Normal (fully alert, but not agitated, throughout assessment)	0
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Mild sleepiness for < 10 seconds after waking, then normal	0
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Clearly abnormal	4
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#### 2. AMT4

Age, date of birth, place (name of the hospital or building), current year.

No mistakes	0
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1 mistake	0
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2 or more mistakes/untestable	4
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#### 3. Attention

Ask the patient: 'Please tell me the months of the year in backwards order, starting at December.' To assist initial understanding, one prompt of 'What is the month before December?' is permitted.

Achieves 7 months or more correctly	0
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Starts but scores < 7 months/refuses to start	0
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Untestable (cannot start because unwell, drowsy, inattentive)	4
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#### 4. Acute change or fluctuating course

Evidence of significant change or fluctuation in alertness, cognition, other mental function (eg, paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hours.

No	0
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Yes	4
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<b>Total</b>	
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4 or above: suggests possible delirium +/- cognitive impairment

1-3: possible cognitive impairment

0: delirium or severe cognitive impairment unlikely (but delirium still possible if '4. **Acute change or fluctuating course**' information incomplete)

## Treatment

### Prevention

The best 'treatment' for delirium is prevention – that is, implementing strategies that reduce the likelihood that the person will experience delirium. While this is ongoing best practice, it is particularly important to do when someone becomes acutely ill.

A tool called 'PINCHES ME kindly' sets out the nine aspects to address to prevent delirium in older people (Gee et al 2016). The acronym stands for: Pain, Infection, Nutrition, Constipation, Hydration, Exercise, Sleep, Medication and Environment (see the next page).

### Treatment

In all cases, diagnosing and treating the underlying cause of delirium (eg, infection, dehydration, adverse effect of medication) is fundamental to potentially reversing symptoms of delirium.

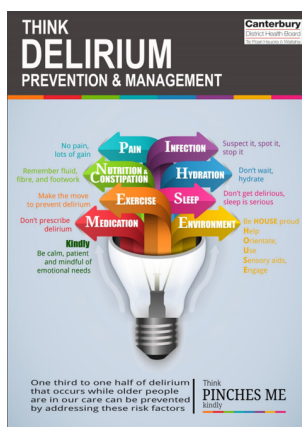
In addition, the delirium syndrome itself needs care and treatment.

- Non-pharmacological approaches are considered best practice. You should try them first and continue to use them even if medication for delirium symptoms is prescribed.
- Pharmacological treatment of delirium includes the use of antipsychotics and benzodiazepines. Medication is reserved for psychiatric symptoms that cause the person distress (eg, hallucination and delusions), and it is used for the shortest possible time (Morandi et al 2019).

## Care planning

Because individuals differ in their experiences of delirium, care planning needs to be individualised and responsive to the older person's needs. The decision-support flowchart on the following page provides a generic approach that can be adapted to an individual's requirements.

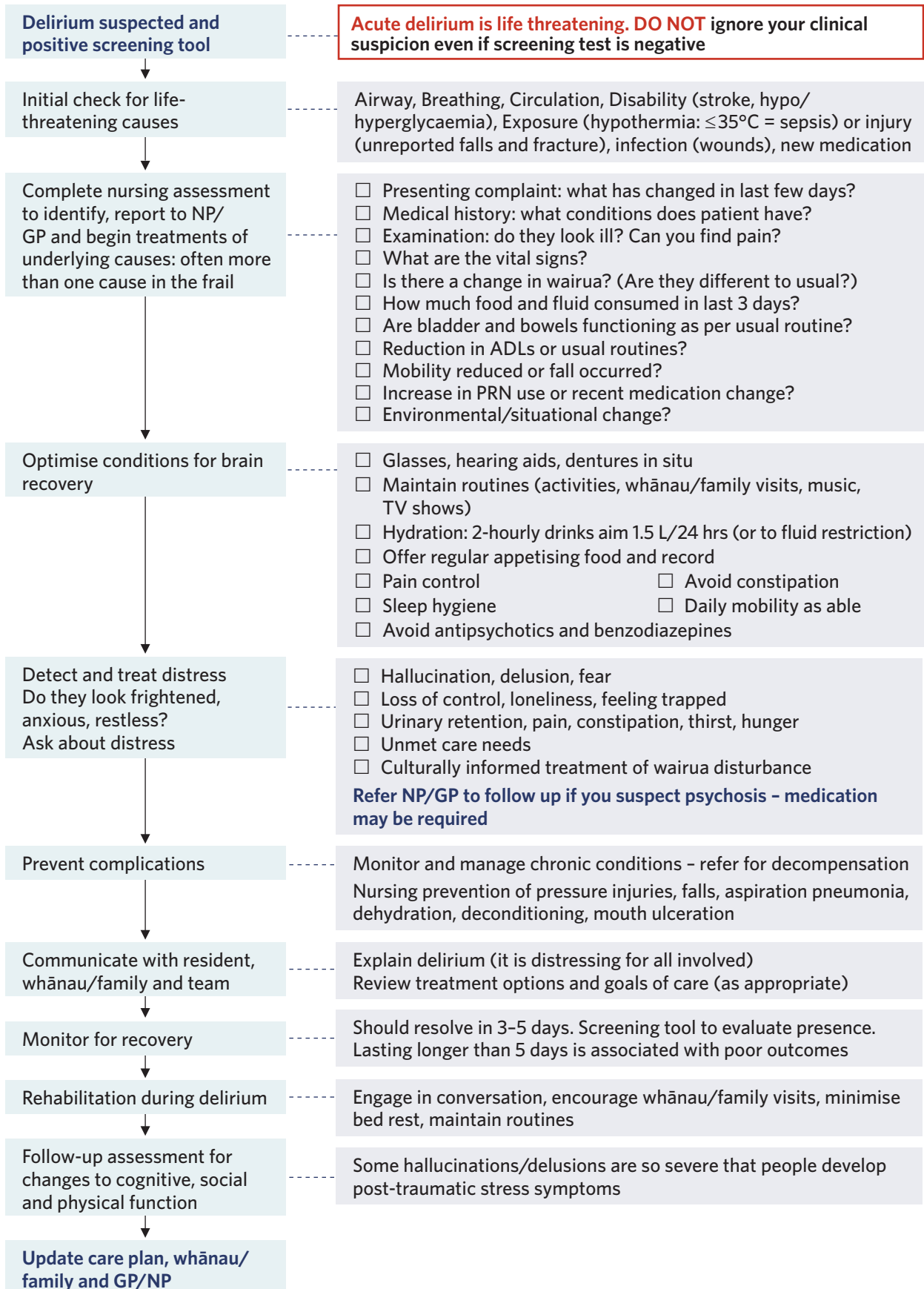
## Delirium prevention resource



Think Delirium prevention project – PINCHES ME kindly Canterbury District Health Board (Gee et al 2016)

[https://www.researchgate.net/publication/303876489\\_THINK\\_delirium\\_Preventing\\_delirium\\_among\\_older\\_people\\_in\\_our\\_care\\_Tips\\_and\\_strategies\\_from\\_the\\_Older\\_Persons'\\_Mental\\_Health\\_Think\\_Delirium\\_Prevention\\_project](https://www.researchgate.net/publication/303876489_THINK_delirium_Preventing_delirium_among_older_people_in_our_care_Tips_and_strategies_from_the_Older_Persons'_Mental_Health_Think_Delirium_Prevention_project)

## Decision support



ADL = activities of daily living    GP = general practitioner    NP = nurse practitioner    PRN = as needed (pro re nata)

Source: Based on 'Delirium 8' (Wilson et al 2020)

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