NHS
Cornwall Partnership
NHS Foundation Trust

Delirium

Jodie Ley - Consultant Nurse
Dementia and Older People's Mental Health Service

Outstanding care for all

GREAT

1



2

NHS
Cornwall Partnership
NHS Foundation Trust

Objectives

Maintaining a calm approach through the stormy seas

What is Delirium?

Why is it so important?

What causes Delirium?

Risk factors/Vulnerable Brains

Management – what can I do?

What is delirium?

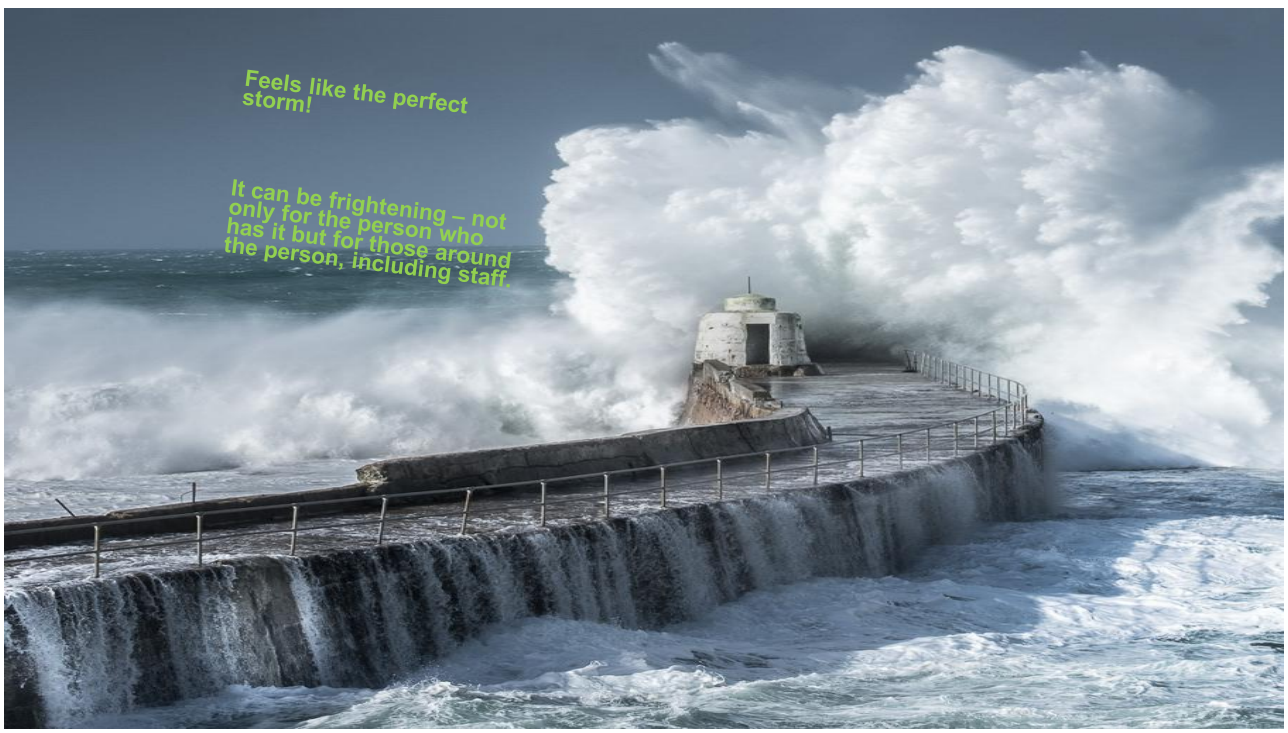
NHS
Cornwall Partnership
NHS Foundation Trust



Delirium is identified by a **SUDDEN** onset of fluctuating altered consciousness with changes to perception and cognitive function. It is a serious condition, associated with poor outcomes, but can be prevented and managed effectively with early assessment, identification, simple interventions and early treatment

(Partridge et al 2017).

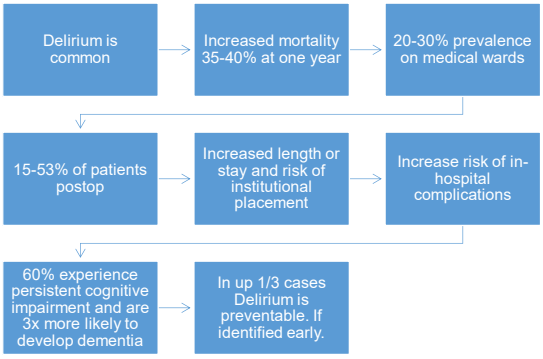
3



4

Why is it important?

Cornwall Partnership NHS Foundation Trust





5

Who is at risk? Any patient can develop delirium

Cornwall Partnership NHS Foundation Trust

Older age - Older people 65 years and over – the risk increases with age.	People living with a long-standing cognitive impairment such as dementia or suspected dementia.	Post general anesthetic/hip fractures	Limited mobility	Constipation / Urinary retention / Bladder catheter
Pain/ Nearing EOL	Environmental change (ward transfer, lack of clock/watch etc)	Sensory deprivation (hearing aid not working, glasses dirty or missing etc)	Polypharmacy	Drug/alcohol withdrawal
Infection	Multiple co morbidities	Malnutrition / Dehydration	People who have had previous episodes of delirium	Poor sleep

6

Core features of delirium

Delirium Awareness Video (#icanpreventdelirium) | Creative Connection - YouTube

NHS
Cornwall Partnership
NHS Foundation Trust

These core features are often used to make the diagnosis, although they are not always easy or obvious to find.

Disturbance of consciousness (reduced ability to focus, sustain or shift attention)

Disturbance of cognition such as a memory problem, disorientation or language problem

Develops over a short period of time and tends to fluctuate

Evidence to support a physical health change



7



8

Your Assessment

NHS
Cornwall Partnership
NHS Foundation Trust

Single question to identify delirium

SQiD

"Is this patient more confused than before?"

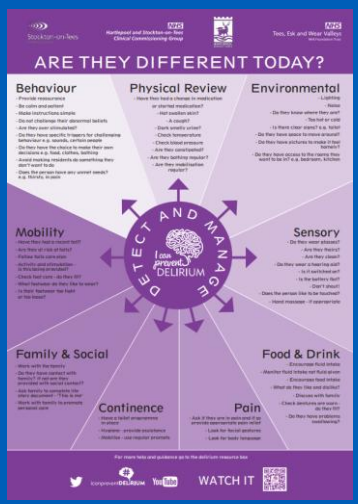


9

The pneumonic PINCH ME SUE can be used as a memory aid to remember the common causes of delirium

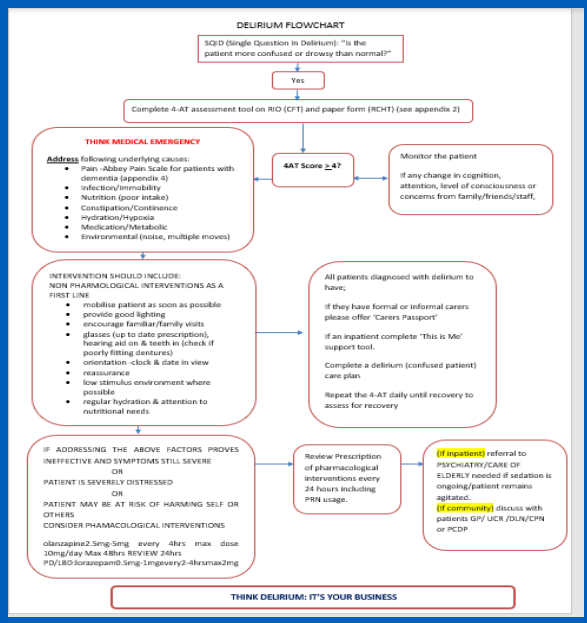
NHS
Cornwall Partnership
NHS Foundation Trust

- Pain
- Infection
- Nutrition
- Constipation
- Hydration/Hypoxia
- Medication – www.medichec.com
- Environment/Electrolytes
- Stroke
- Urinary retention
- Ethanol and substance abuse



10

NHS
Cornwall Partnership
NHS Foundation Trust



11

Next steps……

NHS
Cornwall Partnership
NHS Foundation Trust

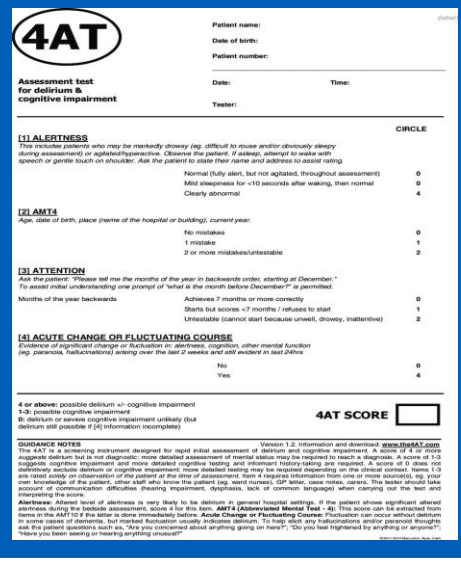


TIME bundle

Practitioner name: Practitioner signature:

Designation:

Initiate TIM within 2 hours (initial and write time of completion)	Assessed/ sent	Results seen	Abnormality found
Think exclude and treat possible triggers			
NEWS (think Sepsis Six)			
Blood glucose			
Medication history (identify new medications/change of dose/medication recently stopped)			
Pain review (Abbey Pain Scale)			
Assess for urinary retention			
Assess for constipation			
Investigate and intervene to correct underlying causes			
Assess hydration and start fluid balance chart			
Bloods (FBC, U&E, Ca, LFTs, CRP, Mg, Glucose)			
Look for symptoms/signs of infection (skin, chest, urine, CNS) and perform appropriate cultures/imaging depending on clinical assessment (see Sepsis Six)			
ECG (ACS)			
Management Plan			**Completed**
Initiate treatment of ALL underlying causes found above			
Engage and Explore complete within 2 hours or if family/carer not present within 24 hours			
Engage with patient, family and carers – explore if this is usual behaviour. Ask: "How would you like to be involved?"			
Explain diagnosis of delirium to patient, family and carers (use delirium leaflet)			
Document diagnosis of delirium			



4AT

Assessment test for delirium & cognitive impairment

Patient name:
Date of birth:
Patient number:
Date: Time:
Tester:

CIRCLE

[1] ALERTNESS
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
Mild sleepiness for <10 seconds after waking, then normal	0
Clearly abnormal	4

[2] AMT4
Age, date of birth, place (name of the hospital or building), current year.

No mistakes	0
1 mistake	1
2 or more mistakes/untestable	2

[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.

Months of the year backwards

Achieves 7 months or more correctly	0
Starts but scores <7 months / refuses to start	1
Untestable (cannot start because unwell, drowsy, inattentive)	2

[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 24hrs

No	0
Yes	4

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: delirium or severe cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

4AT SCORE

GUIDANCE NOTES Version 1.2. Information and download www.the4AT.com
The 4AT is a screening instrument designed for rapid initial assessment of delirium and cognitive impairment. A score of 4 or more suggests delirium but is not diagnostic: more detailed assessment of mental status may be required to reach a diagnosis. A score of 1-3 suggests cognitive impairment and more detailed cognitive testing and informant history-taking are required. A score of 0 does not definitively exclude delirium or cognitive impairment: more detailed testing may be required depending on the clinical context. Items 1-3 are rated *solely on observation of the patient at the time of assessment*. Item 4 requires information from one or more source(s), eg, your own knowledge of the patient, other staff who know the patient (eg, ward nurses), GP letter, case notes, carers. The tester should take account of communication difficulties (hearing impairment, dysphasia, lack of common language) when carrying out the test and interpreting the score.
Alertness: Altered level of alertness is very likely to be delirium in general hospital settings. If the patient shows significant altered alertness during the bedside assessment, score 4 for this item. **AMT4 (Abbreviated Mental Test - 4):** This score can be extracted from items in the AMT10 if the latter is done immediately before. **Acute Change or Fluctuating Course:** Fluctuation can occur without delirium in some cases of dementia, but marked fluctuation usually indicates delirium. To help elicit any hallucinations and/or paranoid thoughts ask the patient questions such as, "Are you concerned about anything going on here?", "Do you feel frightened by anything or anyone?", "Have you been seeing or hearing anything unusual?"

12

How many causes of Delirium can you identify?

Cornwall Partnership NHS Foundation Trust





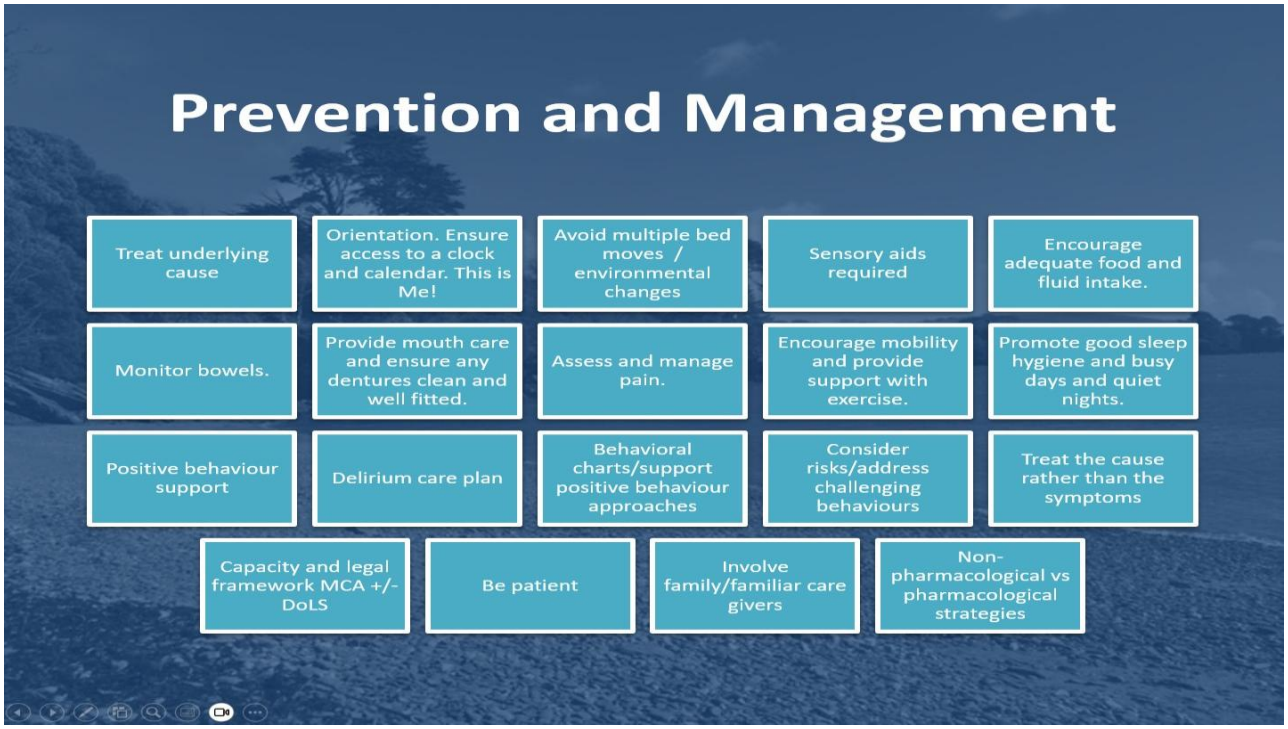
13

Types of delirium

Cornwall Partnership NHS Foundation Trust

Hyper-active Delirium	Hypo-active Delirium
• Restless, agitated • Aggressive • Pacing, rapid mood changes • Hallucinations or paranoia • Disturbed sleep – reversed night and day • Hyper vigilance / heightened arousal • Wandering	• More common • This is often missed by staff as behaviourally not difficult • Unarousable • Lethargic and apathetic • Reduced motor activity • Difficulty in following conversation • Abnormal drowsiness/sleepiness

14



15

Delirium vs Dementia

NHS
Cornwall Partnership
NHS Foundation Trust

	Delirium	Dementia	Depression
Onset	Sudden onset over hours or days	Gradual onset over months to years (> 6 month history)	Variable, weeks to months. May coincide with life changes
Duration	Hours to weeks*	Months to years	Weeks to months
Course	Fluctuating, often worse at night reversible with treatment	Progressive gradual or stepwise decline depends upon subtype	Gradual onset, worsening without treatment.
Attention/Concentration	Markedly Impaired	Preserved	Often poor
Memory	Poor recall for period of illness	Recent and remote impaired*	Can be affected and related to poor concentration and mental slowing (depressive pseudo-dementia)
Orientation	Markedly Impaired	Varies	Usually intact
Sleep-wake cycle	Disturbed, no set pattern, may have day night reversal	May have nocturnal wandering or day night reversal	Early morning wakening or hypersomnia
Mood	Variable, may be irritable, aggressive or fearful	Variable, irritable, labile or apathetic	Low, withdrawn, loss of interest diurnal variation of mood is classic
Perceptions/Thoughts	Hallucinations, misperceptions, delusions, often persecutory content	During some phases of the illness, hallucinations and delusions can be present.	Themes of guilt, hopelessness. Nihilistic delusions and hallucinations in severe illness
Diagnosis	Based on rapid onset of symptoms and fluctuating course CAM and 4-AT	Rule out other causes (see depression and delirium) 6 CIT, Diadem tool, AMTS	Low mood and anxiety may not be obvious or denied. Useful screening tools include PHQ-2 and PHQ-9

16

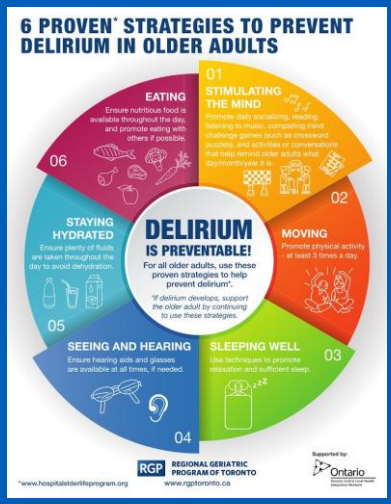
Fragile brains are vulnerable to Delirium.

Timing is everything!

Delirium can persist for weeks, months even.

Normal inflammatory markers doesn't mean no Delirium!

NHS
Cornwall Partnership
NHS Foundation Trust



17

Resources

NHS
Cornwall Partnership
NHS Foundation Trust

- Systemwide Delirium Policy (cornwall.nhs.uk)
- Recognising and preventing delirium | Quick guides to social care topics | Social care | NICE Communities | About | NICE
- Overview | Delirium: prevention, diagnosis and management in hospital and long-term care | Guidance | NICE
- World Delirium Awareness Day (deliriumday.com)
- www.//ihub.scot/improvement-programmes/acute-care-portfolio/older-people-inacute-care/delirium Delirium Awareness Video (#icanpreventdelirium)

18