Cognitive impairment in hospitals – what does it mean?

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Identifying risk factors, is this helpful?

- ?Pre-existing Dementia
- ? Mild Cognitive Impairment?
  - many delirium studies list dementia as an exclusion criterion, potentially resulting in an underestimation of the true incidence of delirium
  - Less than ½ of MCI/Dementia is listed/known/diagnosed at the community level (NZ data incomplete)

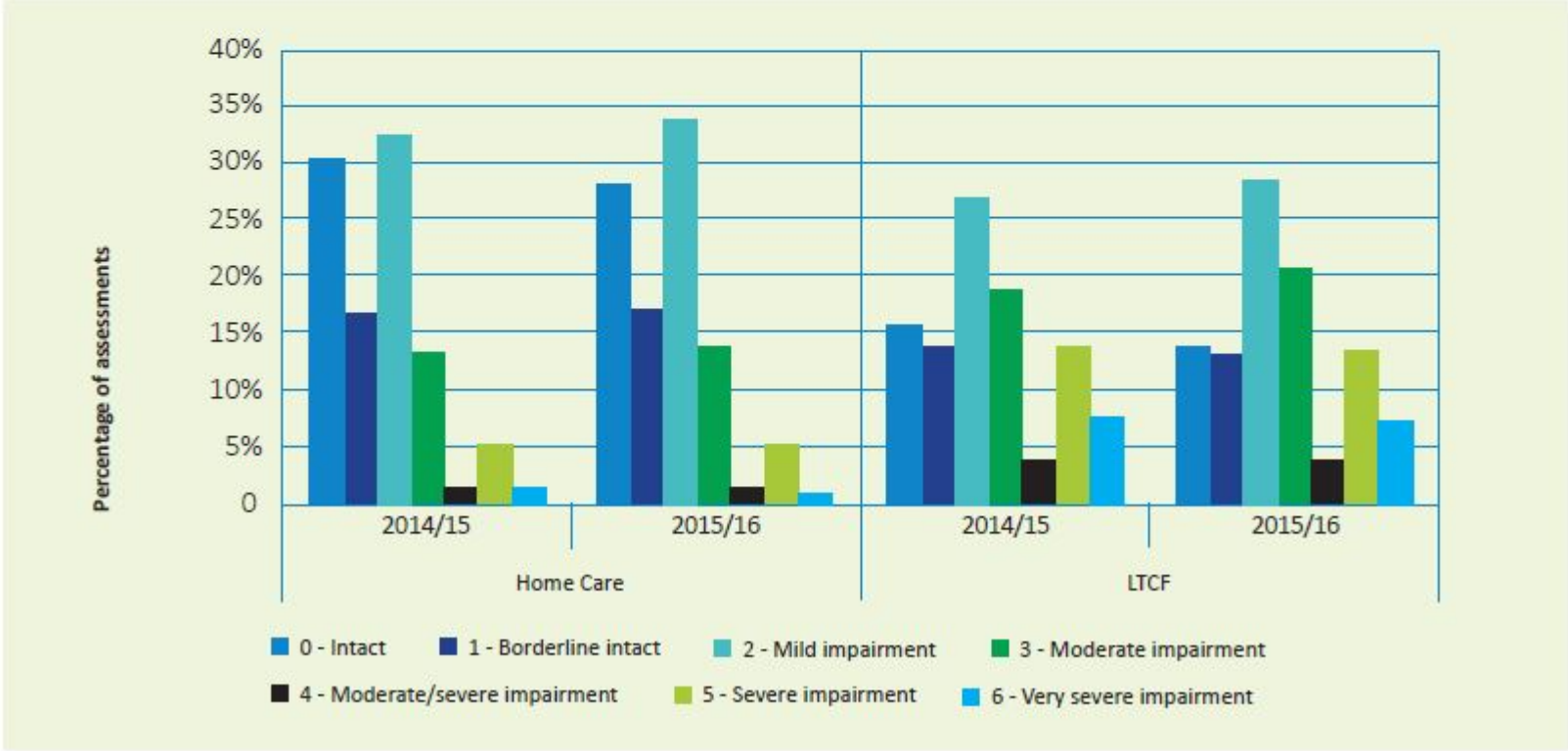
How common is '(loss of) Cognitive Function' in an at risk population? What does InterRAI tell us?

Cognitive Performance Score (CPS)

This scale combines information on memory impairment, level of consciousness and executive functioning. The scores range from zero to six with intact (0) and very severe impairment (6). The higher the score, the worse the cognitive impairment.

As expected, 24 percent of LTCF residents had moderate/severe to very severe cognitive impairment compared to 7 percent of Home Care clients.

Figure 36: CPS scores by assessment type, 2014/15 and 2015/16



DSM-5 Delirium (whew!)

- A. Disturbance in attention (i.e., reduced ability to direct, focus, sustain, and shift attention) and awareness (reduced orientation to the environment).
- The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.
- An additional disturbance in cognition (e.g., memory deficit, disorientation, language, visuospatial ability, or perception).
- The disturbances in criteria A and C are not explained by another pre-existing, established, or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal, such as coma.
- There is evidence from the history, physical examination, or laboratory findings that the disturbance is a direct physiologic consequence of another medical condition, substance intoxication or withdrawal (i.e., because of a drug of abuse or to a medication), or exposure to a toxin or is because of multiple aetiologies.

Does is matter what we call it? From a practical perspective…..

Delirium

- Acute confusional state
- Acute on Chronic Confusion
- BPSD

Dementia

- Alzheimer's
- Multi-Infarct
- Significant cognitive impairment
- Lewy Body Disease
- Etc etc etc

What do we do with the ‘diagnosis?

- Improve patient outcomes
- Coding, case mix….
- Teaching
- “confidence” and communication
- $
- Change our plan, nursing ratios (?)
- Intervene
- Expect there to be a LOS issue
- Look at support options post discharge

- Complicate
- Mask / obscure / waste
- Keep jobs in the wrong place
- Get together Multidisciplinary teams
- Have special ‘delirium units’?
- Contribute to poly-pharmacy?
- Struggle with Discharge planning

Keep as much detail is strictly necessary
Maintain simplicity
Avoid over concentration (Staff burnout, ‘Bedlam’Effect, etc)

Are our facilities fit for purpose?

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Article

Impact of Hospital Design on Acutely Unwell Patients with Dementia

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Hospital ‘Interventions’ How many really do this?

- Safe / secure access
- low hospital beds;
- individual night light;
- falls modification in the toilet with movement-activated sensor lighting;
- large wall clock;
- calendars
- headboards indicating sensory impairments (if present), patient's favourite hobbies or activities to aid in individualised activity sessions.
- adequate lighting, panic button to ensure staff safety, a central space for group activities.
- 1 trained nursing staff to 2.5 patients + other support.

What would an ‘optimal’ approach be?

1.	**No mechanical restraints and where possible, no pharmacological restraints. After trying all non-pharmacological methods and patient proves to be a danger to himself and others, then antipsychotics and sedative-hypnotics are used carefully at the lowest possible dose and to tail down the dose and remove the pharmacological agent once not required.**
2.	Thrice daily patient orientation via reality orientation board
3.	Early mobilization with the help of therapists and trained nurses
4.	Provision of visual aids (such as eye glasses) if available
5.	Providing adequate hearing aids/earwax disimpaction where necessary with the use of portable audio amplifier
6.	Oral volume repletion/feeding assistance with scheduled oral intake schedule
7.	Sleep enhancement using non-pharmacological sleep protocol of warm milk, relaxation tapes or music. Sedative-hypnotic agents will again be the last line management.
8.	Bright light therapy from 6-10 pm
9.	Thrice daily therapeutic activities program for cognitive stimulation and socialization
10.	Minimizing immobilizing equipment like intravenous drip, urinary catheter, oxygen tubing
11.	Daily visitor program by family to encourage communication and social support
12.	Pain management

Keep an eye on ‘streaming’:-

- The admission criteria
- Have delirium… (sensitivity vs specificity)
- ? Only 65 years old
- Exclusions?
  - medical illnesses which require special monitoring (e.g. telemetry for arrhythmias or acute myocardial infarction);
  - dangerously ill, in coma or had terminal illness;
  - uncommunicative patients or patients with severe aphasia;
  - severely combative behaviour with high risk of harm; and patients with mania or other severe eye disorders and other contraindications to bright light therapy (such as patients on photosensitising medications).
  - patients with respiratory or contact precautions,
  - verbal refusal by family/patient/physician-in-charge.

Education:-

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Delirium

AAA SHARE PRINT

Overview | Clinicians

Delirium is a confused mental state that causes disorientation (confusion). It starts suddenly and can come and go. It is common in older people and people with other health conditions.

Key points

- Symptoms include quickly changing mental states, problems with attention, awareness, thinking, memory, feelings or sleep.
- It usually has an underlying cause. Many people make a full recovery once this has been treated.
- Risk factors include being over 65 years old, having dementia, a hip fracture or severe illness, and being elderly and in hospital.
- Getting help early limits its longer-term effects.

What causes delirium?

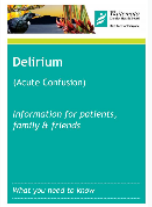
Delirium is caused by:

- infections, especially, of the bladder (UTI), chest or skin
- medication, especially if several types are being used
- surgery or serious injury, including broken bones
- heavy alcohol use or withdrawal
- strokes
- diabetes that is not well controlled
- heart, kidney or liver failure
- dehydration, lack of sleep or constipation
- unrelieved pain or stress

Resources

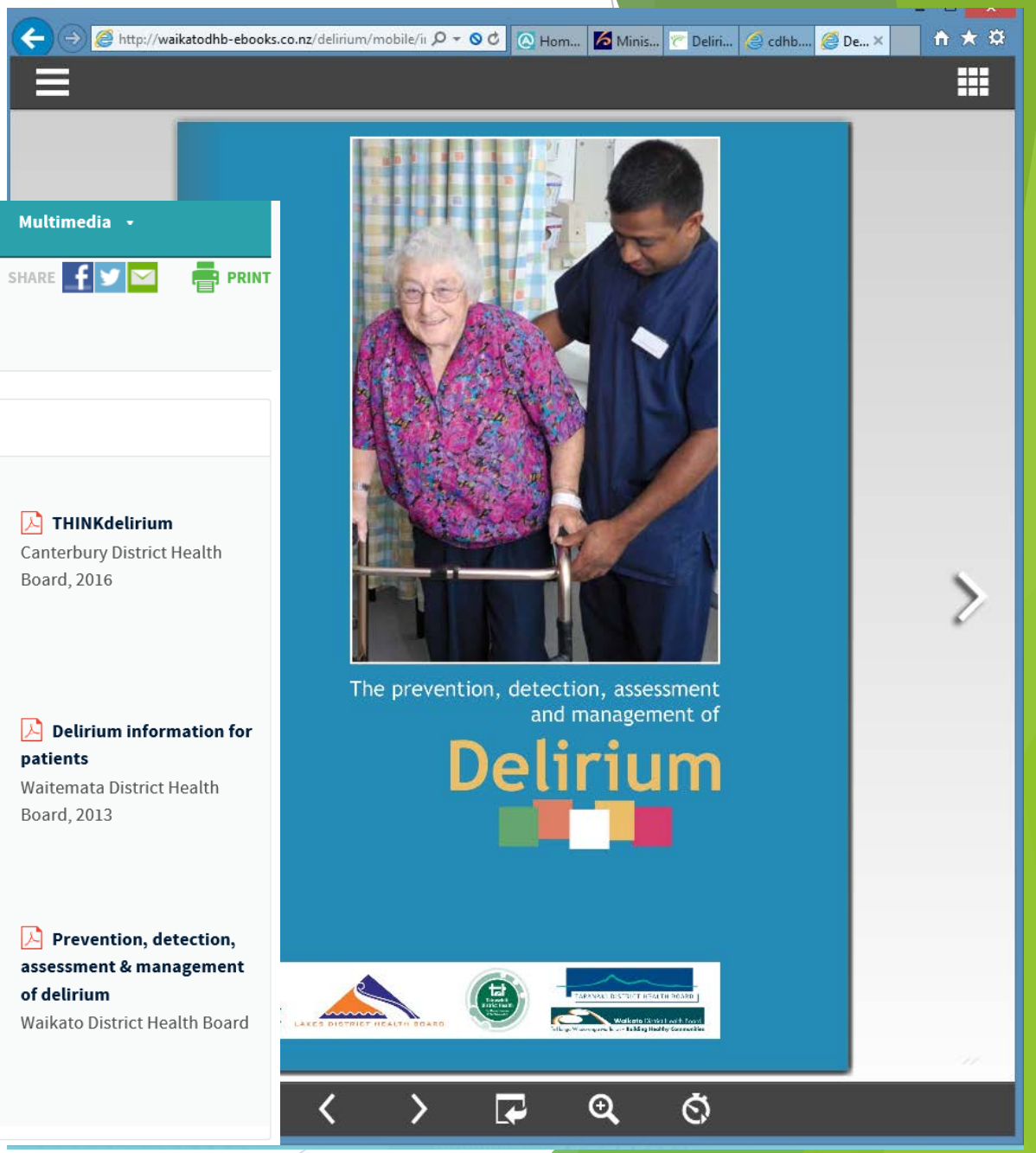
Brochures

THINKdelirium
Canterbury District Health Board, 2016

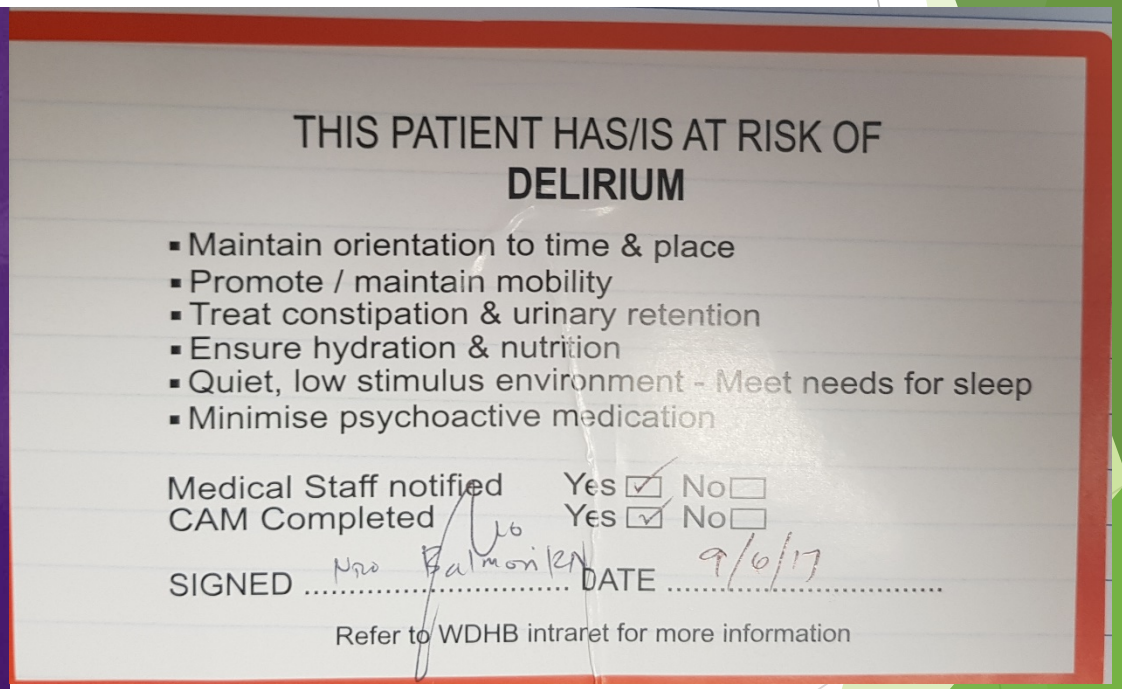


Delirium information for patients
Waitemata District Health Board, 2013

Prevention, detection, assessment & management of delirium
Waikato District Health Board



On the wall of an Orthopaedic Ward



What is it like?
What about a video game?

- http://www.ijsfontein.nl/en/projecten/delirium-experience-2