DELIRIUM/DEMENTIA SCREENING TOOLS – CAM AND MSQ

Delirium

1. Approximately 15 - 60 % of elderly patients experience a delirium prior to or during a hospitalization but the diagnosis is missed in up to 70% of cases.

2. Delirium is associated with poor outcomes such as prolonged hospitalization, functional decline, and increased use of chemical and physical restraints.

3. Delirium increases the risk of rest home admission.

4. Risk factors for delirium include older age, prior cognitive impairment, presence of infection, severe illness or multiple co-morbidities, dehydration, psychotropic medication use, alcoholism, vision impairment and fractures.

5. Individuals at high risk for delirium should be assessed daily using a standardized tool e.g. CAM to facilitate prompt identification and management.

6. The presence of delirium as indicated by the CAM algorithm, warrants prompt intervention to identify and treat underlying causes and provide supportive care.

The Confusion Assessment Method (CAM Short Version)

Although completing a CAM score is a quick process, the identification of CAM criteria usually requires a formal cognitive assessment and observations of the patient's behaviour or statements during the interview and during any contact with the patient. A collateral or informant history is often required; this is why it is important to start the assessment process at point of entry to the hospital when family/whanau/carers are usually present.

The part of the Confusion Assessment Method (CAM) nursing will be focussing on assist in screening the patient for delirium is Part two of the CAM -

Questions 1-4 as below. These were found to have the greatest ability to distinguish delirium or reversible confusion from other types of cognitive impairment. (The extended version of the CAM includes questions 5-9 and is still often used to fulfil the entire DSM IV definition for delirium.)

1. **Acute onset and fluctuating course**
   a) Evidence of an acute change in mental status from the patient's baseline
   b) The abnormal behaviour fluctuates during the day, tends to come and go or increase and decrease

2. **Inattention**
   The patient has difficulty focusing attention, for example, easily distracted or having difficulty keeping track of what is said.

3. **Disorganised thinking**
   Patient thinking is disorganised or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject.

4. **Altered level of consciousness**
   Overall the patient's level of consciousness fits one of the below descriptors:
   a) Vigilant (hyperalert)
   b) Lethargic (drowsy, easily aroused)
   c) Stupor (difficult to arouse)
   d) Coma (not able to be aroused)

A positive CAM score requires the patient to feature 1 <u>and</u> 2 and either 3 or 4

- If the patients score is positive the medical team must be alerted whereby the team will consider performing a brief structured interview that will includes the Mini Mental Staus Examination (MMSE) to verify a delirium diagnosis.

- In addition the nurse will perform the short Mental Status Questionnaire MSQ and document these results.

- An OT referral is required if the patients functional ability has changed due to this new cognitive deficit.

Mental Status Questionnaire (MSQ)

1. The Mental Status Questionnaire (MSQ) provides a brief, objective, and quantitative measurement of cognitive functioning of older adults.
2. The ten items in the MSQ cover orientation in time and place, remote memory, and general knowledge.
3. It is an initial brief screening tool only
4. If cognitive impairment is identified should be followed with complete investigation and history of cognitive function including a more comprehensive cognitive assessment tool (e.g. Mini Mental Status Examination (MMSE) or Modified Mini Mental Status Examination (3MS) and Occupational therapy referral
5. It is a verbal assessment and the examiner asks the patient the ten test items in order and scores 1 for each correct response
6. The Confusion Assessment Method (CAM) is not validated for use with the MSQ and ideally the 30 point MMSE (or the 3MS) should be used

Administration and Scoring:

1. Ask each question using standard/suggested format
2. Allow a maximum of 30 seconds for each response
3. No prompting from the examiner or other people is permitted.
4. Score 1 for each question answered correctly (i.e. no half scores)

MSQ

1. Age

Q "What is your age?" Or
Q "How old are you?"
- Allow one year error

2. Time to nearest hour

Q "What time is it?
Q Or what is the time?"
- Allow looking at clock/watch and error up to 1 hour

3. Address (for recall at end)

Q "Please repeat this address after me, 201 Queen Street".
- Patient to repeat address to ensure registration

Q "I want you to try and remember this address, as I will ask you to repeat it at the end of the assessment"

4. Year

Q "What year is it now?"
- Allow previous year

5. Name of hospital or home address

Q "What is the name of this hospital" or
Q "What is your home address?"
- Street number and name for home address

6. Recognition of two people

Q "Who is this person?"
- Indicate e.g. nurse/other patient /doctor/family member
- Person indicated must be present and visible to the patient

7. Date of Birth

Q "What is your date of birth? or
Q When is your birthday?"
- Date and month only

8. Years of Second World War

Q When was World War 2?"

- Allow anything from 1939-1945

9. Name of Prime Minister

Q "Who is the current Prime Minister of New Zealand?"

- Surname required

10. Count backwards from 20 to 1

Q "Please count backwards from 20 to 1"

- No prompting or errors permitted

3. Address recall

Q "Can you remember the address I gave you at the beginning of the assessment?"

- Score for criteria 3

Score __/10

- A score of below 7 indicates impaired cognition (this can be compared to future scores)