

### **The Confusion Assessment Method (CAM) Diagnostic Algorithm**

#### **Feature 1: *Acute Onset and Fluctuating Course***

This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal) behavior fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

#### **Feature 2: *Inattention***

This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

#### **Feature 3: *Disorganized thinking***

This feature is shown by a positive response to the following question: 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?

#### **Feature 4: *Altered Level of consciousness***

This feature is shown by any answer other than "alert" to the following question:

Overall, how would you rate this patient's level of consciousness? (alert [normal]), vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable]

**The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.**

Figure s1: The Confusion Assessment Method Diagnostic Algorithm.

**MONTREAL COGNITIVE ASSESSMENT (MOCA)**  
Version 7.1 Original Version

NAME :  
Education :  
Sex :

Date of birth :  
DATE :

VISUOSPATIAL / EXECUTIVE							POINTS
<p style="text-align: center;">[ ] [ ]</p>	<p>Copy cube</p>	<p>Draw CLOCK (Ten past eleven) (3 points)</p> <p style="text-align: center;">[ ] [ ] [ ]</p> <p style="text-align: center;">Contour      Numbers      Hands</p>				___/5	
NAMING							
<p style="text-align: center;">[ ]</p>	<p style="text-align: center;">[ ]</p>	<p style="text-align: center;">[ ]</p>	___/3				
MEMORY							
Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.	FACE	VELVET	CHURCH	DAISY	RED		No points
1st trial							
2nd trial							
ATTENTION							
Read list of digits (1 digit/ sec.). Subject has to repeat them in the forward order	[ ] 2 1 8 5 4					___/2	
Subject has to repeat them in the backward order	[ ] 7 4 2						
Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors [ ] FBACMNAAJKLBAFAKDEAAAJAMOF AAB							___/1
Serial 7 subtraction starting at 100 [ ] 93 [ ] 86 [ ] 79 [ ] 72 [ ] 65 4 or 5 correct subtractions: <b>3 pts</b> , 2 or 3 correct: <b>2 pts</b> , 1 correct: <b>1 pt</b> , 0 correct: <b>0 pt</b>							___/3
LANGUAGE							
Repeat : I only know that John is the one to help today. [ ] The cat always hid under the couch when dogs were in the room. [ ]						___/2	
Fluency / Name maximum number of words in one minute that begin with the letter F [ ] _____ (N ≥ 11 words)						___/1	
ABSTRACTION							
Similarity between e.g. banana - orange = fruit [ ] train - bicycle [ ] watch - ruler						___/2	
DELAYED RECALL							
Has to recall words WITH NO CUE	FACE [ ]	VELVET [ ]	CHURCH [ ]	DAISY [ ]	RED [ ]	Points for UNCUEd recall only	___/5
Category cue							
Multiple choice cue							
Optional							
ORIENTATION							
[ ] Date [ ] Month [ ] Year [ ] Day [ ] Place [ ] City							___/6
© Z.Nasreddine MD      www.mocatest.org      Normal ≥ 26 / 30      TOTAL      ___/30 Administered by: _____      Add 1 point if ≤ 12 yr edu							

Figure S2. The Montreal Cognitive Assessment Test (MoCA)

Table S1. Patient characteristics from each of the sites.

		Cardiff	North Bristol	Paisley	Central Manchester	Aberdeen	Total
		(n=77)	(n=92)	(n=45)	(n=51)	(n=146)	411
Sex	Women	37	45	28	28	74	212
	Men	40	47	17	23	72	199
Age,	mean (SD)	78.2 (8.5)	78.6 (9.1)	76.8 (7.9)	75.2 (7.6)	76.7 (7.4)	77.3 (8.1)
Frailty	Not Frail	51	54	26	45	119	295
	Frail	24	37	19	5	27	112
Operation	No	72	69	27	39	117	324
	Yes	5	23	11	12	28	79
Haem	Normal	49	44	23	24	88	228
	Low	48	48	22	27	58	183
Albumin	Normal	39	33	17	26	125	240
	Low	30	59	28	25	21	171
Diabetes	No	56	77	39	38	120	330
	Yes	19	15	6	13	26	79

Table S2. Length of Hospital stay categorised by the presence of delirium.

Length of Hospital stay (days)	Not Delirious	Delirious	Total
1-2	78	1	79
3-6	149	14	163
7-13	80	8	88
14+	60	12	73
Total	367	36	403