

Confusion Assessment Protocol

Patient Name: _____

Date: _____

Age: _____

Education _____

Handedness _____

Name of Rater _____

TOTART Attentional Subtest (TAS): Now I want you to ...**A. ... count forward from 1 to 20 as quickly as you can.** correct incorrect**B. ... count backwards from 20 to 1. (can cue 20, 19, 18, ...)** correct incorrect**C. ... recite the months of the year.** correct incorrect**D. ... recite the months of the year backwards.** correct incorrect

* TAS Test Completion Codes (circle one): 0 1 2 3 4 5 6 9

CTD Vigilance (V1): I am going to read you a long series of letters. Whenever you hear the letter H, indicate by raising your hand at the wrist (demonstrate) and then putting it back down. Let's try these letters to practice, B H D. Note whether patient follows instructions on this sample and repeat as necessary.

Read the letter list at the rate of one letter per 2 seconds. Put a slash mark through each letter the patient responds to and circle omissions (/ = response, O = omission). Circle form used. Alternate between forms on different administrations.

Form A: H E G H F E H D H F H C B F H A D H C E H I H G D H
 C E B H E G H I H C H E H F C I H E B H G F D H B E

Form B: H B H A E H B H C F A H F H G H C G D H C B A H G D
 E H C H B E H D G H D A F H B I F H E B H D H E H G

CTD Vigilance Score = Hits (correct targets identified) X 2 – Commissions (incorrect targets identified)

*V1 Test Completion Code (circle one): 0 1 2 3 4 5 6 9

***Test Completion Codes:** 0=Standard Administration, 1=Arousal Impairment Code – Inability to complete item/test due to inability to stay alert, 2=Motor Impairment Code – Inability to give ANY motor response or patient was restrained, 3=Visual Impairment Code – Inability to see test stimuli (e.g., blind), NOT perceptual impairment, 4=Phonation Impairment Code – Gives NO speech at ANY time, too dysarthric to give intelligible response, or intubated, 5=Aphasia Code – Profound language impairment that COMPLETELY interferes with ability to participate in task, 6=Agitation Code – Patient extremely agitated and thus non-cooperative with test administration, 9=Test Not Administered.

If more than one applies, use the code that interfered most with administration of the test.

Galveston Orientation and Amnesia Test (GOAT)

Type of Administration: Standard _____ Modified _____

_____ 1. **What is your name?** (2) _____; **When were you born?** (4) _____

Where do you live? (4) _____

_____ 2. **Where are you now?** (unnecessary to state name of hospital) city (5) _____
hospital (5) _____

_____ 3. **On what date were you admitted to the hospital?** (5) _____; **How did you get to the hospital?** (5) _____

_____ 4. **What is the first event you can remember after the injury?** (5) _____;
Can you describe in detail (e.g., date, time, companions) the first event you recall before the injury? (5) _____

_____ 5 **What is the last event you can recall before the injury?** (5) _____;
Can you describe in detail (e.g., date, time, companions) the last event you can recall before the injury? (5) _____

_____ 6. **What time is it now?** ____:____ am pm (1 point for each _ hour off, max of 5 points)

_____ 7. **What day of the week is it?** _____ (1 point for each day off, max of 3 points)

_____ 8. **What day of the month is it?** _____ (1 point for each day off, max of 5 points)

_____ 9. **What is the month?** _____ (5 points for each month off, max of 15 points)

_____ 10. **What is the year?** _____ (10 points for each year off, max of 30 points)

_____ Total error points

*GOAT Test Completion Code (circle one): **0** **1** **2** **3** **4** **5** **6** **9**

***Test Completion Codes:** 0=Standard Administration, 1=Arousal Impairment Code – Inability to complete item/test due to inability to stay alert, 2=Motor Impairment Code – Inability to give ANY motor response or patient was restrained, 3=Visual Impairment Code – Inability to see test stimuli (e.g., blind), NOT perceptual impairment, 4=Phonation Impairment Code – Gives NO speech at ANY time, too dysarthric to give intelligible response, or intubated, 5=Aphasia Code – Profound language impairment that COMPLETELY interferes with ability to participate in task, 6=Agitation Code – Patient extremely agitated and thus non-cooperative with test administration, 9=Test Not Administered.
If more than one applies, use the code that interfered most with administration of the test.

CTD Visual Picture Memory Test – Learning Trial (VPMT-1): I am going to show you pictures of common objects.

Look carefully and try to remember each picture. Name each object as you point to it. Show each picture for 3 seconds. Circle form used.

Form A:	table	car	hammer	cup	key
Form B:	dog	knife	pants	boot	paint brush

CTD Comprehension (Comp): I am going to ask you some questions that can be answered yes or no. If your answer is yes, nod your head or say yes. If your answer is no, shake your head or say no. Read each question twice and circle correct answers. Alternate between forms on serial administrations.

Form 1

<i>Will a stone float on water?</i>	(no)
<i>Can you use a hammer to pound nails?</i>	(yes)
<i>Do two pounds of flour weigh more than one?</i>	(yes)
<i>Will water go through a good pair of rubber boots?</i>	(no)

Form 2

<i>Will a leaf float on water?</i>	(yes)
<i>Is a hammer good for cutting wood?</i>	(no)
<i>Is one pound of flour heavier than two?</i>	(no)
<i>Will a good pair of rubber boots keep water out?</i>	(yes)

Comp: _____/4

*Auditory comprehension Completion Code: 0 1 2 3 4 5 6 9

CTD Visual Picture Memory Test – Recognition (VPMT-2): Now I am going to show you some more pictures. Some you have just seen but others will be shown for the first time. Let me know whether or not you have seen the picture before by nodding your head or saying yes or shaking your head or saying no. Remember indicate yes if you have seen the picture before and no if you have not seen the picture before. (Circle correct answers.)

Form A	<i>Car</i>	(yes)	<i>Key</i>	(yes)
	<i>Glass</i>	(no)	<i>Hammer</i>	(no)
	<i>Lock</i>	(no)	<i>Cup</i>	(yes)
	<i>Table</i>	(yes)	<i>Chair</i>	(no)
	<i>Hammer</i>	(yes)	<i>Saw</i>	(no)
Form B	<i>Fork</i>	(no)	<i>Toothbrush</i>	(no)
	<i>Boot</i>	(yes)	<i>Knife</i>	(yes)
	<i>Paintbrush</i>	(yes)	<i>Shoe</i>	(no)
	<i>Cat</i>	(no)	<i>Dog</i>	(yes)
	<i>Dress</i>	(no)	<i>Pants</i>	(yes)

Recognition: _____/10

*VPMT-1, VPMT-2 Completion Code: 0 1 2 3 4 5 6 9

*Test Completion Codes: 0=Standard Administration, 1=Arousal Impairment Code – Inability to complete item/test due to inability to stay alert, 2=Motor Impairment Code – Inability to give ANY motor response or patient was restrained, 3=Visual Impairment Code – Inability to see test stimuli (e.g., blind), NOT perceptual impairment, 4=Phonation Impairment Code – Gives NO speech at ANY time, too dysarthric to give intelligible response, or intubated, 5=Aphasia Code – Profound language impairment that COMPLETELY interferes with ability to participate in task, 6=Agitation Code – Patient extremely agitated and thus non-cooperative with test administration, 9=Test Not Administered.
If more than one applies, use the code that interfered most with administration of the test.

AGITATED BEHAVIOR SCALE

Patient _____

Period of Observation:

Observ. Environ. _____

From: _____ a.m. ____/____/

Rater/Disc. _____

To: _____ p.m. ____/____/

At the end of the observation period indicate whether each behavior was present and, if so, to what degree: slight, moderate or extreme. The degree can be based on either the frequency of the behavior or the severity of a given incident. Use the following numerical value of every behavior listed. DO NOT LEAVE BLANKS.

1= absent

2= present to a slight degree

3= present to a moderate degree

4= present to an extreme degree

A.M. _____

P.M. _____

1. Short attention span, easy distractibility, inability to concentrate.
2. Impulsive, impatient, low tolerance for pain or frustration.
3. Uncooperative, resistant to care, demanding.
4. Violent and/or threatening violence toward people or property.
5. Explosive and/or unpredictable anger.
6. Rocking, rubbing, moaning or other self-stimulating behavior.
7. Pulling at tubes, restraints, etc.
8. Wandering from treatment areas.
9. Restlessness, pacing, excessive movement.
10. Repetitive behaviors, motor and/or verbal.
11. Rapid, loud or excessive talking.
12. Sudden changes of mood.
13. Easily initiated or excessive crying and/or laughter.
14. Self-abusiveness, physical and/or verbal.

____ Total Score(s)

Clinician Rated Items (DRS-R and Additional Items)**1. Fluctuation of symptom severity**

Rate the waxing and waning of an individual or cluster of symptom(s) over the time frame being rated. Usually applies to cognition, affect, intensity of hallucinations, thought disorder, language disturbance. Take into consideration that perceptual disturbances usually occur intermittently, but might cluster in period of greater intensity when other symptoms fluctuate in severity.

- 0 no symptom fluctuation
- 1 symptom intensity fluctuates in severity over hours
- 2 symptom intensity fluctuates in severity over minutes

2. Sleep-disturbance

Rate sleep-pattern at night using all sources of information, including from family, caregivers, nurses reports, and patient. Try to distinguish sleep from resting with eyes closed.

- 0 not present
- 1 mild sleep continuity disturbance at night
- 2 moderate disorganization of sleep-wake cycle (eg. several brief awakenings during the night with confusion/behavioral changes or very little nighttime sleep)
- 3 severe disruption of sleep-wake cycle (eg. day-night reversal of sleep-wake cycle or severe circadian fragmentation with multiple periods of sleep and wakefulness or severe sleeplessness)

3. Level of Arousal/ Daytime Drowsiness (Note that naps can be of variable duration; few minutes to hours)

- 0 Normal; alert during the day.
- 1 Napping during the day.
- 2 Difficulty staying alert during therapy sessions and naps during day.
- 3 Unable to stay alert at bedside or therapy sessions; persistently hypooroused.

4. Perceptual disturbances and hallucinations

Illusions and hallucinations can be of any sensory modality. Misperceptions are “simple” if they are uncomplicated, such as a sound, noise, color, spot, or flashes and “complex” if they are multidimensional, such as voices, music, people, animals, or scenes. Rate if reported by patient or caregiver, or inferred by observation.

- 0 not present
- 1 mild perceptual disturbances (eg, feelings of derealization or depersonalization; or patient may not be able to discriminate dreams from reality)
- 2 illusions present
- 3 hallucinations present

5. Delusions

Delusions can be of any type, but are most often persecutory. Rate if reported by patient, family or caregiver. Rate as delusional if ideas are unlikely to be true yet are believed by the patient who cannot be dissuaded by logic. Delusional ideas cannot be explained otherwise by the patient's usual cultural or religious background.

- 0 not present
- 1 mildly suspicious, hypervigilant, or preoccupied
- 2 unusual or overvalued ideation that does not reach delusional proportions or could be plausible
- 3 delusional

6. Thought process abnormalities

Rate abnormalities of thinking processes based on verbal or written output. If a patient does not speak or write, do not rate this item.

- 0 normal thought processes
- 1 tangential or circumstantial
- 2 associations loosely connected occasionally, but largely comprehensible
- 3 associations loosely connected most of the time

Delirium Symptom Checklist for DSM-IV Diagnosis:

Patient Name: _____ Rater: _____

Date of Evaluation: _____

- A. _____ Disturbance of consciousness (i.e., reduced clarity of awareness of the environment) with reduced ability to focus, sustain, or shift attention.
- B. _____ A change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a preexisting, established, or evolving dementia.
- C. _____ The disturbance develops over a short period of time (usually hours to days) and tends to fluctuate during the course of the day.
- D. _____ There is evidence from the history, physical examination, or laboratory findings that the disturbance is caused by the direct physiological consequences of a general medical condition.

CAP Scoring Criteria

Name: _____

Date: _____

CAP# _____

1. Cognitive Impairment (CI):

	Correct	Incorrect	CI Score		
TOTART Counting to 20 forward	2	0	_____		
TOTART Counting to 20 backward	4	0	_____		
TOTART Reciting months forward	2	0	_____		
TOTART Reciting months backward	6	0	_____		
CTD Vigilance (hits X 2) - commissions	<u>36</u> 4	<u>30-35</u> 2	<u><30</u> 0	_____	
CTC Comprehension	<u>4</u> 4	<u>3</u> 2	<u>2, 1, 0</u> 0	_____	
CTD Recognition	<u>10</u> 6	<u>9</u> 4	<u>8-7</u> 2	<u>6-0</u> 0	_____
TOTAL SCORE			_____		

Cognitive Impairment (Total possible score = 28. Scores \leq 18 indicate substantial impairment and count as one symptom of post-traumatic confusion.)

2. Disorientation:

(Measured with the GOAT. GOAT error scores $>$ 24 indicate disorientation and count as one symptom of post-traumatic confusion.)

3. Agitation:

(Measured with the ABS. ABS scores $>$ 17 indicate increased restlessness and count as one symptom of post-traumatic confusion.)

4. Fluctuation of Symptoms (DRS-R):

(Clinician Rated Item 1. Scores of 1 or 2 indicate significant fluctuation and count as one symptom of post-traumatic confusion.)

5. Sleep Disturbance:

(Clinician Rated Item 2 as informed by sleep charts and other information. Scores of 2 or 3 indicate significant sleep disturbance and count as one symptom of post-traumatic confusion.)

6. Decreased Daytime Arousal:

(Clinician Rated Item 3. Scores of 2 or 3 indicate significantly decreased daytime arousal and count as one symptom of post-traumatic confusion.)

7. Psychotic Type Symptoms (DRS-R):

(Clinician Rated Items 4, 5, and 6. Scores of 1, 2, or 3 on item 4 or scores of 1, 2, or 3 on item 5, or scores of 2 or 3 on item 6 indicate psychotic type symptoms and count as one symptom of post-traumatic confusion.)

CAP TOTAL SCORE

(Patients showing 4 or more symptoms are confused and patients showing 3 or more symptoms are confused if 1 of the symptoms is disorientation.)

Circle one:

Non-confused

Confused