

## Assessment of Knowledge: Cognitive Aspects of Communication

1. Describe in one or two pages the neuro-anatomical bases of arousal, attention (focused, sustained, selective, alternating, divided), memory (attention, encoding, storage, retrieval), and executive functions (attention, sequencing, memory types, problem solving) that support communication and participation in activities of daily living. Your description should include models of attention and memory, along with specific brain regions, involved in each cognitive process noted above. (IV.B.1, IV.F.1)
2. In 1-2 pages, a) discuss some common etiologies/causes of cognitive-communication disorders (IV.C.1) and b) describe clinical characteristics related to etiology and onset of cognitive-communicative disorders along with factors influencing severity of the disorder (i.e., mild vs. severe impairment, focal vs. diffuse) (IV.C.1 & IV.C.2)

### 3. Case study:

Client: 38 y/o man, 3 months post TBI  
Education: MBA – Certified Public Accountant

**History:** While riding his motorcycle on mountain roads at a high rate of speed, the patient collided with another motorcycle and experienced a severe head trauma and was rushed to a Trauma Center. He suffered multiple fractures of the skull and face. During his hospital stage, he was initially at Rancho Level III but quickly improved to Rancho Level V. As a result, he was admitted to the inpatient rehabilitation program where he stayed for one month. He was discharged home and is now in your office for Outpatient Speech Therapy.

**Social and Cognitive Behavior:** Lives at home with wife and two boys, one in kindergarten and the other in third grade. He is finding it challenging to socialize with peers (never an issue before). Increased irritability and fatigue since accident. He is often late getting the boys off to the bus stop and calls his parents to come over at the last minute to drive them to school. He is having recurrent headaches. The patient recently attempted to return to work two days per week, but reportedly is unorganized and unable to finish simple filing tasks. Problems with memory and concentration.

Rancho Level: Fluctuates between Level VIII & IX depending on time of day & fatigue level

- a) Describe one appropriate non-standardized assessment procedure for a cognitive-communication function that you would believe would be of significant importance in this patient's case. Describe the results you would expect to obtain, given his Rancho Level. (IV.D.1,3, IV.F.1)
- b) What standardized test instruments would you select to provide a comprehensive evaluation of cognitive-communication functions? Describe three of the most important results you would expect to obtain; you may be subjective, since you do not have the test instrument in front of you for reference. (IV.D.2,3, IV.F.1)

- c) Describe one management procedure that you would use to address one of the cognitive communication problems that you mention in 3.b above (IV.D.5, IV.F.1).
- d) Briefly describe this man's prognosis for returning to work full time, including reference to etiology, the time since onset, and all relevant clinical features. (IV.D.4, IV.F.1)
- e) If your patient spoke a different language and/or had a different cultural background than your own, describe the steps you would take to make sure you account for language and cultural based aspects of performance. (IV.D.5)
- f) Describe one significant way in which your assessment strategies would differ and one way in which the management strategies would differ if your patient had all the same characteristics, including the etiology, but his age were only 13 years and attempting to return to school? (IV.C.2, IV.D.1-5, IV.F.1)