APPENDIX A

Annotated Psychological Report

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Downtown, CA 23184

Confidential Patient Information

Patient: Mr. Joe Neuropsych
Date of Birth: 1/1/65
Dates of Evaluation: 6/15/10 and 6/20/10
Evaluated by: Mary Assessment, PhD, ABPP (neuropsychology)
Referred by: Wilbur Jones, MD

Referral Question

Mr. Neuropsych is a 45-year-old, European American, right-handed single male with 12 years of education who sustained a severe, diffuse head injury on 5/15/2008. Self-reported complaints include headaches, problems with coordination, slowed thought processes, distractibility, trouble understanding other people, problems finding the right word, and problems with reading, writing, and following conversations. My understanding is that you would like to have him evaluated to answer the following questions:

1. What is the nature and extent of his deficits?

Referral question includes demographic information, a listing of symptoms, and a listing of referral questions.

Core strategy 1 (numbering referral questions): The referral questions are numbered; later in the summary these questions are answered and organized according to the numbers that were originally used in the Referral Question section.

2. What is the likelihood he would experience further improvement?
3. Can he return to any form of employment?
4. What is the type and extent of care that would be required for him?

Evaluation Procedures

Assessment procedures are listed with the name of the test written out followed by its acronym.

Clinical interview, Wechsler Adult Intelligence Scale IV (WAIS-IV), Wechsler Memory Scale-IV (WMS-IV), Rey Auditory Verbal Learning Test (RAVLT), Bender Visual Motor Gestalt Test–II (Bender-II), Bender Memory, Aphasia Screening Test, Finger Tapping Test, Controlled Oral Word Association Test (COWAT), Trail Making, Beck Depression Inventory–II (BDI-II), Patient Competency Rating Form (Patient and Relative Forms), Millon Clinical Multiaxial Inventory–III (MCMI-III), Neuropsychological Symptom Checklist, Neuropsychological History Questionnaire, Sickness Impact Profile, and medical records by L. Chang, MD (7/15/2008), Frank Baum, MD (9/22/2008), and F. Fareley, MD (10/15/2009). Total evaluation time was 5 hours.

Behavioral Observations

Mr. Neuropsych arrived on time to both his appointments and was oriented to person, place, time, and reason for the assessment. Although he needed to be driven to both assessment sessions by his father, he was able to walk to the consulting room unassisted. However, he limped and, as he walked, his head was shaking back and forth. On many occasions he struggled to pronounce words correctly. He often drifted from one subject to the next and required continual reminding to keep focused on a topic. In addition, he continually repeated the events of the accident even though he had previously provided the information. He also continually spoke of how frustrated he felt at being unable to do simple things that he felt he should be able to do without difficulty. His test

As much as possible the client's actual behavior is described with minimal use of interpretive statements.

and deliberate. For example, he took approximately 12 minutes to read and complete a self-report test having 21 items. Although there was a tendency to minimize some of his difficulties, particularly those related to psychosocial problems, he was generally cooperative and appeared to give his best effort to the tasks presented to him. Given the above observations combined with his test results, the results of the evaluation represent an accurate assessment of his current level of functioning.

A statement summarizing the validity of the assessment is provided at the end of the Behavioral Observations.

Background Information

Personal/Social

Core strategy 2 (readability): Readability is enhanced by use of subheadings.

Mr. Neuropsych was a poor historian and, as a result, the following history was derived from a combination of an interview with his brother, medical records, and with some information provided by the patient. Mr. Neuropsych was born and raised in Ruraltown, California, and at age 20 moved to Midcity, California, where he has lived for the past 25 years. His parent's medical history was unremarkable. Mr. Neuropsych was married for 2 years between the ages of 28 and 30. At the time of his 5/15/2008 injury he was in a 5-year-long de facto relationship. Mr. Neuropsych's brother explained that the relationship did not survive the stress of the injury and subsequent hospitalization. He does not have any contact with either of his previous partners. Mr. Neuropsych is currently living with various family members who take turns caring for him. His brother reported that Mr. Neuropsych is able to perform basic tasks around the property such as mowing the lawn, sweeping, and straightening up the house. However, he needs continual reminding even when doing simple, repetitive tasks. Mr. Neuropsych's brother also explained that Mr. Neuropsych is easily distracted, frequently misplaces things, and tires easily. Prior to the injury he used to enjoy fishing and working on his car. His only activities now are socializing with his family and

Clarification provided when necessary related to where the information came from.

Academic/Vocational

Information provided by Mr. Neuropsych's brother indicated that he had been an "average" student in school. He was evidently required to repeat fourth grade because he "had not grasped fundamental concepts." He did manage to complete high school although his grades in the past 2 years were mainly C's with some D's. Mr. Neuropsych has been employed doing various jobs such as driving trucks, cleaning houses, and mowing lawns. His most successful and long-term employment was between the ages of 38 and 42, when he worked as a plant operator. At the time of the accident he was employed cleaning offices.

Medical

Medical history prior to the 5/15/2008 accident was generally unremarkable with the exception of having poor nutrition as an infant, and some difficulties with coordination. Mr. Neuropsych's brother stated that, prior to the 5/15/2008 injury, he had not had any previous head injuries, strokes, learning disabilities, substance abuse, tumors, unusually high fevers, or exposure to toxic materials. On 5/15/2008 Mr. Neuropsych was a passenger in the front seat of a car that overturned, resulting in a severe head injury combined with numerous physical injuries. He was initially treated at MidCity Hospital from 5/15/2008 to 6/15/2008 and then transferred to MetroCity Rehabilitation Hospital from 6/15/2008 to 7/15/2008. The medical report by L. Chang, MD (7/15/2008) indicated that, upon intake to Metrocity Rehabilitation Hospital he scored only a 3 or 4 out of 15 on the Glasgow Coma Scale. He was unconscious for a total of 4 weeks. His first memory was seeing his father in his hospital room 6 weeks postinjury. At discharge from Metrocity Rehabilitation Hospital it was noted that ". . . there were still indications of significant cognitive deficits involving his memory, insight, judge-

This information clarifies whether or not there might have been preexisting conditions that could explain the client's current difficulties.

The duration between the injury and the client's first memory is important to obtain, since it provides a general indication of the degree of post-traumatic complications that can be expected.

Emotionally there were still features of mood lability and occasional episodes of agitation" (p. 3).

Mental Health

Mental health history prior to the 5/15/2008 injury was unremarkable. Currently he experiences mood swings approximately one to two times per week. These began approximately 3 months postinjury and are characterized by irritability, anger, a sense of hopelessness, difficulty with sleep onset and maintenance, and an exacerbation of the cognitive difficulties described previously.

This information describes the onset, nature, frequency, and severity of the client's behavioral/emotional difficulties.

Impressions and Interpretations

General Level of Intellectual Functioning

Overall level of intellectual functioning was in the Extremely Low range or the lower 1% of the population when compared with his age-related peers (Full Scale IQ = 62). There was little difference among his various scores, suggesting an overall lowering in his abilities. Given his history and pattern of test scores, I would estimate that his premorbid level of functioning would have been in the average to low average range or the lower 20% of the population.

Core strategy 2 (readability): Again, subheadings are used to enhance readability.

Verbal Abilities

Verbal abilities were in the Borderline to Extremely Low range or the 2nd percentile when compared with his age-related peers (Verbal Comprehension Index = 70). Despite these low scores, he can adequately comprehend spoken information, and he has an adequate fund of vocabulary words. However, he needs to absorb this information slowly, particularly if the infor-

Core strategy 3 (use of functional domains): Interpretations are organized according to functional domains, rather than test by test.

Core strategy 4 (minimal use of test scores): Although test scores are used, these are balanced by expanding what

descriptions of abilities and (later) connecting the scores with behavioral observations). (This also illustrates core strategy 5 [integrate interpretations with all sources of data]).

One particular difficulty is being able to come up with the correct word. For example, when given 60 seconds to come up with as many words as possible beginning with the letter "F," he was only able to come up with "fish" and "fox."

Perceptual Reasoning

Interpretations are expanded by not only describing the client's cognitive level and types of difficulties, but making the difficulty more easily understood by providing an example of a behavior illustrating it (qualitative description of behavioral observations).

The patient's perceptual reasoning (nonverbal ability) was in the Borderline range or the 3rd percentile when compared with his age related peers (Perceptual Reasoning Index = 71). For example, he had difficulty assembling simple puzzles or reproducing basic designs. The designs he did draw were characterized by line tremor; overlapping, mild distortions; and drawing circles instead of dots. This test-related difficulty is consistent with the frustration he expressed when he was unable to drive a truck through three consecutive gates on his brother's farm. He stressed that it was a simple task and he knew that he should have been able to perform, but he felt he was unable to do so.

Core strategy 5 (integration of interpretations): Interpretations are connected with additional sources of data as well as connected to the client's everyday world.

Attention and Concentration

Core strategy 2 (readability) and core strategy 4 (minimize/clarify test-oriented language): Although test scores are used, they have been clarified by using everyday examples of how the client might have difficulties.

The patient's ability to attend to and concentrate on information was in the Extremely Low range or the 1st percentile when compared with his age-related peers (Working Memory Index = 63). This means that only one person in 100 would have scored this low. This also means he is moderately impaired

able to repeat a maximum of four numbers that were read to him. His brother also noted that he needs to be constantly reminded in order to complete something. The above indicates he would have a difficult time paying attention during a conversation, recalling phone numbers, or doing two things at the same time.

Core strategy 5 (integrate interpretations/connect to client's world): This sentence illustrates the implications the client's poor performance is likely to have in his everyday life.

Processing Speed

The speed that Mr. Neuropsych can process information was in the Extremely Low range or the 1st percentile when compared with his age-related peers (Speed of Processing Index = 65). This suggests he would need extra time to learn new information or have difficulty quickly finding things in a room.

Memory

Short-term memory was in the extremely low range or the .02 percentile when compared with his age-related peers (Immediate Memory Index = 56). This means that only 2 people in 1,000 would have scored this low. Thus, Mr. Neuropsych's memory and learning functions were similar to his other cognitive abilities, in that they were in the moderately to even severely impaired range. For example, he was unable to accurately reproduce from memory any of nine simple designs, even though he had worked with these designs for approximately 7 minutes. Even quite impaired persons can usually reproduce one or two designs from memory (and the average person will be able to reproduce four to five designs). Similarly, he could only recall 4 out of 15 simple words that were read to him. Even after practice trials his recall only increased to 5 out of the 15 words. In addition, his recall for words was easily interfered with by previous information

Core strategy 6 (connect interpretations to client's world/behavior): The behavioral observations help to anchor the expression of the client's poor memory into actual behaviors

Executive Functioning

History and behavioral observations indicate further difficulties in initiating, monitoring, sequencing, and having awareness over his behavior. As stated previously, Mr. Neuropsych needs continual reminding to stay focused on a task. Informal clinical assessment indicated that he has a difficult time sequencing fairly simple behaviors (alternating between fist-palm-back of hand). In many areas, Mr. Neuropsych minimized the impact of his injuries. For example, he felt that he himself could "do with ease" the following: remembering what he had for dinner the night before, staying involved in work activities, participating in group activities, and scheduling daily activities. In contrast, Mr. Neuropsych's brother rated each of these areas as Mr. Neuropsych being "unable" or "very difficult" for him to do. Thus he appears to have not only poor initiating and monitoring of his behavior, but his awareness of his deficits is quite poor.

Personality

Review of personality suggests a general minimization or underreporting of psychological difficulties. For example, he endorsed items that indicated that he did not feel sad, depressed, angry, does not get any more tired than usual, and that he doesn't look any different than he did previously. I believe this is in part due to an optimistic outlook combined with a supportive, tolerant, patient family who are committed to taking care of him. Minimization of his difficulties is also due to little awareness of his deficits. Both minimization and poor awareness are adaptive in that they help to reduce the pain associated with fully attending to his difficulties. He also adapts by perceiving himself as being important and therefore more deserving of the care that is given to him. However, there were other indications that he has underlying but more hidden depression and anger.

Client Strengths

Mr. Neuropsych has developed a reasonably good level of adjustment at least in part by minimizing, denying, and having poor awareness over his difficulties. In addition, he has a supportive, tolerant, patient family who are committed to caring for him. Under their direction he is able to con-

as mowing the lawn and feeding the pets. Additional strengths are that he has a reasonable fund of vocabulary words, understands basic information, and can recognize relevant from irrelevant details in his environment.

Including client strengths helps to balance out the high emphasis on deficits that typically appears in reports. This can help with client morale. In addition, treatment planning might be developed in part by using these strengths.

Summary

Mr. Neuropsych is a 45-year-old, European American, right–handed, single male with 12 years of education who sustained a severe, diffuse head injury on 5/15/2008. His overall level of functioning is in the lower 1% of the population or the Extremely Low range. I would estimate his premorbid level of functioning was in the lower 20% of the population. His reading level is at the fourth-grade level, and he can spell and perform arithmetic at the fifth-grade levels. He has developed a reasonable level of emotional adjustment by minimizing his complaints, having poor awareness of their severity, and developing a sense that he should be attended to. An important client strength is that he is surrounded by a supportive, tolerant family who is committed to caring for him.

Core strategy 1 (corresponding numbers): The numbers/content of questions used in the Referral Question section correspond with the numbers/content of the answers to these questions in the Summary.

1. *Nature and extent of deficits:* Mr. Neuropsych is experiencing a wide range of moderate to severe deficits related to word finding, verbal fluency, spatial reasoning, reproduction of designs, coordination, attention, processing speed, short-term memory, and initiating, monitoring, and completing plans. While simple tasks such as dressing himself, mowing lawns, or checking on animals are within his capability, more complicated ones would be beyond his capability. For example, it would be unsafe for him to cook for himself since he would be likely to leave the burners on. Similarly, he would not be able to focus on financial tasks such as balancing a checkbook, paying bills, or responding to postal inquiries related to his finances. This is in contrast to his premorbid level of functioning when he could work independently, drive, take

or marriage-type relationships. Any of the above would now be extremely difficult or impossible for him to manage.

2. *Likelihood he would experience further improvement:* Given the pattern and severity of his deficits, combined with the amount of time that has elapsed since his injury, I would not expect additional significant improvement. This is further complicated by his poor awareness of the extent of his deficits.
3. *Return to employment:* It is unlikely that he would be able to return to work other than within the context of a sheltered workshop with close supervision. However, his poor executive abilities suggest that even this may be problematic.
4. *Type and extent of care that would be required:* Given the extent and pattern of Mr. Neuropsych's deficits he would need extensive care. At the most he might be able to live in a carefully supervised home for disabled persons. His current situation with his family is ideal, in that they provide much of the day-to-day supervision for someone with his degree of impairment. However, this depends on their continued good will as well as their financial, physical, and emotional resources.

RECOMMENDATIONS

Core strategy 6 (broad/relevant recommendations): recommendations are connected to the client's world and derived from the assessment results. They are also focused on the main issues the client is confronting, which in this case are optimizing his daily functioning and exploring the possibility of an additional placement.

1. Treatment should mainly consist of working with the family to optimize his living arrangements and should include:
   - Consult with family to determine what steps they might take to protect the patient from harming himself or others because of poor insight (e.g., locking up power tools and car keys).
   - Due to the patient's deficits in memory and organization, his environment should be highly structured. A regular schedule in which Mr. Neuropsych's chores are performed at the same time every day can be helpful. The provision of a large and simple calendar, as well as a list of tasks to be accomplished, with a system for checking off each task as it is completed, may be useful in the home
   - Organize communication to ensure understanding (remove environmental distractions, simplify instructions, repeat information, allow extra processing time).
   - Compensate for attentional difficulties by breaking down complex tasks into simple ones, avoid multitasking, limit distractions (noise, television, music, people talking, other nearby activities).
   - Confront with concrete experiences of failure or error combined with support and overcoming such problems through retraining.
2. Mr. Neuropsych and his family would benefit from learning about resources for brain injury survivors and their family (Brain Injury Association; www.biausa.org).

Self-help resources are included as one of the recommendations.

3. The client should continue to be in a stable, supervised environment, which his family currently provides.
4. Consider placement in an adult day center program in order to provide stimulating recreational and social activities for him as well as some respite for the family.
5. Develop external reminders such as tying a string around Mr. Neuropsych's finger, posting a note, asking someone to remind the patient, using a tape recorder to record important information, using a chart that summarizes important information, as well as using checklists, medication organizers, medication alarms, cue cards, and/or Post-It notes.
6. Due to his poor problem-solving ability, forgetfulness, lack of appreciation for his problems and other cognitive problems, Mr. Neuropsych is not likely to exercise sound judgment in real life situations. As a result exploring the possibility of conservatorship is suggested.

Signature:

Name of examiner: Mary Assessment, PhD, ABPP (Neuropsychology)
Qualifications: Licensed psychologist (#0000), American Board of Professional Psychology (Neuropsychology)
Date: