Emory Department of Neurology, Brain Health Center
Clinical Neuropsychology Rotation

David W. Loring
dloring@emory.edu
Office: 404-727-4116
12 Executive Park, Room 150 L

Overview and Administrative Issues

Rotations are 1 year in duration (interns 6 months) to meet programmatic assessment needs of the Neuropsychology Service.

Clinic cancellations are to be made 90 days in advance to avoid a cancellation penalty. At the beginning of the rotation, please provide all known absences for the entire year to Wilma Fernandez (wilma.fernandez@emoryhealthcare.org).

Although water bottles and snacks are available for in all testing rooms for patients, there should be no eating or drinking by the examiner to maintain professional presentation. In addition, personal texts and emails should be avoided and all other interruptions kept to an absolute minimum unless necessary for assessment completion.

Patient information in EeMR is reviewed prior to meeting with Dr. Loring to discuss patient assessment issues and context. The pre-assessment meeting is typically 30 minutes prior to the patient's scheduled time with the exception of students performing Friday assessments (meeting is @ 7:30, Neurology Rounds are 8:00-9:00, patients are scheduled @ 9:00). Following completion of the testing and scoring, results and interpretation are discussed with Dr. Loring in post-assessment supervision.

Report drafts are saved on the HIPAA compliant Neurology Shared Drive, and should be completed within 1 days of the assessment in order to meet the Emory Healthcare report completion standard. After completion of report draft, notify Dr. Loring by email. Unless he is out of town, he will comment and provide feedback on the report draft within a day after receiving notification that the draft is complete. After final corrections are made, notified Dr. Loring by email notification and he will post the report on EeMR and submit appropriate billing.

Appointment Time. One of the parameters assessed by patient satisfaction surveys is wait time after arrival. It is important to bring the patient back for testing as soon as possible after they arrive.

Bedside Screening Tests

These are measures that are initially administered by Dr. Loring during his clinical interview. Students beginning in the Fall generally assume administration of these tasks by Halloween.

The **Cookie Theft Card** is used to elicit a formal speech sample that is evaluated with respect to:

1. Prosody
2. Fluency rate (100-250 wpm normal; 50 or fewer typical of non-fluent aphasia)
3. Mean rate of utterance (sentence level) should be in the 4-5 range
4. Right left orientation is gauged by allowing patient to describe information in both left and right visual fields (hemi spatial neglect)
5. Presence/absence of anomic word finding difficulty

Fist-Edge-Palm

This task is adapted from Luria as a measure of motor programming. For the "fist" component, patients are asked to put their fist down as if knocking on the table top. Patients failing this task often omit the "edge" portion of the sequence, or in extreme cases, extend their palm upward rather than placing the palm on the testing surface (supination error). Normal performance is completion of 5 sequences without error.

Clock Drawing

Clock drawing is only interpreted qualitatively. In this version, patients are instructed to draw a clock in 3 steps: 1. Draw a circle, 2. Fill in numbers beginning with "12" and then fill in the remaining numbers sequentially, and 3. Have the hands of the clock point to "10 minutes after 11." Patients are not allowed to place numbers in anchored locations (e.g., 3, 6) to permit better neuropsychological characterizing of planning ability.

Education

Education is typically measured in academic years. Exceptions to this may be multiple advanced degrees in which case anticipated years to complete the highest degree is typically used. For patients with GED, the number of years completed prior to stopping formal schooling is used.

Report Conventions and Biases

Reports should be concise summaries of neuropsychological test data integrated with clinical history and other diagnostic information. The goal of the report is not simply to communicate the results so that the can be understood, but also to communicate the results so that they cannot be misunderstood.

Patients have access to their reports as soon as they are posted to EeMR.

There are 2 summary sections for most reports: the first is intended primarily for patient consumption reporting findings in straightforward lay language without jargon. If appropriate, recommendations may include compensation strategies and recommendations to engage in treatment for psychiatric comorbidities.

The Physician Summary includes traditional integration and diagnostic conclusions. This is perhaps the most important section of the report since with few exceptions, these are the only sections that are carefully read by the referring physician. MRI reports provide a good comparison for providing succinct summary and interpretation of results.

LAST NAME, First Name (last name 1st, capitalize last name)

Date should use leading zeros when necessary and hyphens (e.g., 01-13-2016).

Do not use “Mrs.” and use “Ms.” instead.

Proofread your report before sending.

If appropriate for a given patient, there should be an explicit statement stating that the patient has given permission to discuss clinical information with spouse, children, or friend if that information is obtained independently outside the presence of the patient.

Presenting Problem is not the same as a traditional psychological history, and information is generally limited to background pertinent to presenting complaints and referral question. Thus, only relevant medical information should be included – it does not matter if the patient had an appendectomy when in middle school or that they were hospitalized for pneumonia 20 years ago. Similarly, it is generally not relevant where patients grew up or what their birth order was unless that information is relevant for a particular patient (e.g., education outside the United States, reared by older sibling). It is better to err on including too information if unsure. However, the crucial issue is relevance to clinical presentation and diagnosis, and with clinical experience, the distinction between relevant and non-relevant information will become clear. Remember that the information contained in a report is primarily for your use and includes what is needed to form a clinical opinion.

Generally, only medications that have potential psychotropic effects need to be included, and you should be fully aware of the prescribing reasons for all drugs included in your report. As a rule of thumb, do not include drug information (or any other medical information), that you could not explain and defend during qualifying examinations (or during a deposition), that is, don’t just copy drugs from medical records and include them in the NP report in order to appear compulsively complete. Brand names are capitalized; generic names are not.

Occasionally, there will be administration error or a deviation from established assessment procedure. Should this occur, the deviations from administration/scoring protocol are documented in the report, and interpretations may vary from what would be concluded with standard test administration and this is highlighted.

Keep interpretations concise - in other words, brief but comprehensive. The reality of report use is that in most cases, referring physicians will read the summary and impressions quickly before seeing the patient in follow up. This, it is important to avoid adding redundant or superfluous details that may detract from the main points.

Choose words and conclusions wisely, particularly when speculating, and being aware that report that is written and included in the medical record will follow the patient indefinitely (do no harm!).

Use present tense in the history to refer to events directly associated the evaluation (e.g., Mr. Smith reports poor frustration tolerance when performing stressful tasks). Use past tense for older information and more distant history, although if this information was obtained in the interview, present tense may still be preferred (Mr. Smith reports a history of seizures since age 17 years).

Use first person as much as possible. Avoid saying “the patient” (use their name) and avoid “the examiner.”

Avoid using “Of note” to begin a sentence (or anywhere else).

Do not use verbs as adjectives (e.g., declined performance).

Avoid using “per the patient.” In fact, avoid “per” altogether.

Don’t start sentences with “Overall.”

Avoid using too many “quotes” in describing behavioral presentation and self-reported history.

Make sure consecutive sentences do not begin with “she” or “he,” and make sure that it is rare that 2 of 3 sentences do not begin this way.

Orientation is described for each component. If a subject date is off by several days, it is reported as “generally intact” since that does not reflect true “disorientation” as would be the case with a year reported as “1956” or “2003.”

Specific scores for each test are delineated in the report template, which generally include a score (raw or standardized score and a percentile). *Rule of thumb*: All scores require some interpretive statement at a minimum, so do not report a score and leaving it hanging by itself.

<1st percentile is as low as you generally need to report (i.e., no <0.2 percentile).

Performance Descriptors GUIDELINES:

Impaired: <5th percentile
Borderline: 6-9th percentile
Low normal: 10-24th percentile
Normal/Average: 25-74th percentile
Above average/high normal: 75+ percentile

These are guidelines since performance interpretation may be adjusted based upon relationship to other scores in the evaluation. Thus, sometimes a “low normal” score is interpreted as a relative impairment based upon estimates of premorbid ability.

Don’t report that a construct ranged from “low normal to high normal” (or similar variability). Acceptable terms include generally intact, variable, etc.

When describing performance validity scores, avoid referring to them as “effort measures” since these scores can be lowered due to genuine neurologic disease (and because successful deception requires considerable effort). The term “task engagement” is preferred. Do not use “optimal” in this context since optimal performance is rare (e.g., Olympic athletes). When performance validity is suspect, use phrases such as “memory performance was in the impaired range” rather than “memory was impaired” to distinguish between ability and obtained test scores (note: the oral version of the WMT is administered to epilepsy patients and the computerized version of the WMT is administered to all other patients; scores for ACS measures are also included).

The term “average” rather than “normal” is generally reserved for well-normed psychometric measures such as WAIS-IV, Achievement Tests, TOPM and have good dimensionality. Even though there will be some discrepancy for other measures, use WAIS descriptors for WAIS summary scores (e.g., superior, high average, average. etc.).

For follow-up neuropsychological evaluations, scores from the original assessment should be referenced. Ideally, specific scores will be available for contrast, although sometimes only qualitative comparisons can be made since the initial neuropsychological evaluations may not always include specific scores. When contrasting results from the 2 different evaluations, differences are typically reported as interval change if there has not been surgical intervention. A separate Previous Neuropsychological Evaluation header is added to the report and a concise summary of that evaluation is included.

In report summary, percentiles should rarely be reported.

Summary and Impressions sections generally include the following (although this will vary based on evaluation goals and patient presentation):

- Correspondence/comparison between current level of functioning and premorbid estimates
- General description of performance in each cognitive domain
- Highlight any material-specific memory performance discrepancies if present, particularly for epilepsy surgery evaluations, and their relevance to the patient’s medical history
- Mood and risk assessment

PROOFREAD REPORT AND SPELLCHECK PRIOR TO SUBMISSION

Articles in support of the tests as well as many test forms are available in the Neurology Neuropsychology share drive.