Neuropsychological Assessments: Answers to Frequently Asked Questions

What is neuropsychology?
Neuropsychology studies behavior in order to figure out how the brain is working. In order to assess behavior, neuropsychologists ask patients to complete a series of tests. The tests measure cognitive abilities such as:

- thinking
- reading
- speaking
- attention and concentration
- memory
- visuospatial reasoning, or what we know and can figure out from seeing objects and the spaces between them
- higher abilities called executive functions which let us apply our knowledge

Changes in understanding and personality can result from illness; head injuries; psychological conditions such as depression and anxiety; medical treatments; or other causes. For example, a stroke in part of the brain can result in not being able to speak or to move part of the body part. More subtle changes in the brain can result in more subtle changes in behavior.

Most of the tests used in neuropsychology are standardized, which means that they are given the same way to everybody. The tests are also said to be norm-referenced, which means that a patient’s performance on those tests will be compared to the performance of other people who are about the same age and, sometimes, people who have the same educational background. The test results are used to answer many types of questions.

Why has a neuropsychological assessment been requested?

To help with diagnosis — Test results are sometimes used to help understand the cause of problems with thinking and understanding. For example, test results might be used to determine if someone’s cognitive changes are due to normal aging, neurological illness, or depression or anxiety. Your health care provider can then use the results of neuropsychological testing along with the results of other tests such as brain scans, EEG, and blood tests to arrive at a diagnosis that will help to guide your health care.

To determine cognitive strengths and weaknesses — In some cases where the cause of cognitive changes is known, testing is used to determine where cognitive ability is weak and where it is strong. For example, a health care provider may order tests for a person who has had stroke to find which cognitive functions have changed and how much they have changed.
People applying for disabilities might also be tested.

**To establish a baseline** — Testing is often the most objective means of finding out if changes have occurred. In some instances, testing is performed before and after a medical or surgical treatment to determine if cognitive abilities were affected by the intervention. In some instances, re-testing after baseline testing can demonstrate how well an individual is recovering from a stroke or traumatic brain injury and whether or not he or she is ready to return to work, resume driving, or take on some other duty.

**To help plan a treatment or other intervention** — Test results can be used to identify which cognitive abilities should be the focus of rehabilitation when a patient has had a brain injury. Neuropsychological testing can also help therapists determine which patient strengths might be able to compensate for weaknesses. The evaluation can provide the basis for making adjustments in school or work programs.

**How will you know if my cognitive abilities have changed?**
Some cognitive abilities tend to be very stable despite neurologic illnesses or injuries. Those abilities often provide an estimate of the level of your other cognitive abilities if no injury or illness had occurred. Your results will be compared to those associated with various illnesses or injuries to help to determine if changes have occurred.

**What will I be asked to do during the testing?**
The neuropsychologist will spend time talking with you to understand your cognitive strengths and weaknesses, your medical history, and educational background. You will also work with a psychometrist, or testing professional, who will give you paper-and-pencil tests, computerized tests, puzzles, and questionnaires. The tests are chosen by the neuropsychologist based on what you can do. Typically, the testing requires a long period of time, which depends on the number of tests given, how quickly you proceed through the tests, and how many breaks are taken during testing. Most people find some of the tests to be quite easy and others to be difficult. It is important to work as hard as possible on all of the tests in order for the results to be most informative. You will also complete questionnaires about mood and psychological symptoms. Parents of children referred for testing often complete questionnaires about their children’s behavior.

**What should I do to prepare for the testing?**
There is nothing to do to prepare for the testing, other than to get a good night’s sleep. You can take brief breaks if you would like, and you will be offered an extended lunch break if your testing will continue into the afternoon. If you use eyeglasses or hearing aids, be sure to bring them with you so that you can do your best. Please bring copies of previous evaluation reports or brain scans if you have them. If your child is undergoing the testing and he or she has completed an intellectual evaluation, psychoeducational evaluation, Multifactor Evaluation (MFE), or Individual Education Program (IEP), please bring along copies of the results of those evaluations.

**Does insurance cover a neuropsychological evaluation?**
Insurance coverage varies greatly, depending on individual insurance plans. Some portion of the evaluation is usually covered. Each part of the evaluation is billed separately. If you want to check with your insurance company before the evaluation, you will need to let them know the following CPT (procedure) codes:

- 96118: Interview, examination and interpretation by a neuropsychologist
- 96119: Test administration

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