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# NATIONAL ACADEMY OF NEUROPSYCHOLOGY

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## PARENT'S GUIDE TO PEDIATRIC NEUROPSYCHOLOGICAL ASSESSMENT

### **What is a Pediatric Neuropsychologist?**

Neuropsychology is a specialty within the field of Psychology that focuses on brain-behavior relationships. A Pediatric Neuropsychologist uses standardized tests and observes behavior to define a child's pattern of cognitive development. The child's performance is compared to what is expected at the child's age-level. The child's individual pattern of strengths and weaknesses is defined based on this comparison. The pediatric neuropsychologist uses knowledge of brain development, brain organization, and the effects of various forms of brain injury on development to guide this assessment and to interpret the results.

### **How does neuropsychological assessment differ from the testing provided by a clinical psychologist or school psychologist?**

The pediatric neuropsychologist and the clinical or school psychologist may use some of the same tests. The pediatric neuropsychologist differs from other psychologists in what they do with the test results. The clinical or school psychologist is primarily interested in the score that the child obtains. The neuropsychologist is interested in how the child obtains a specific test score as well as in the pattern of scores across different tests. Skills are broken down into component parts, attempting to define a pattern of strengths and weaknesses. For example, a child may have difficulty following a direction because he/she did not pay attention to the direction, did not understand the direction, or did not remember the direction. The pediatric neuropsychologist works to understand where the child is having trouble and why.

The pediatric neuropsychologist may look at a broader range of skills, evaluating skills not usually tested by the clinical or school psychologist. A neuropsychological assessment may include tests of the child's ability to:

- ◆ File information in memory and to retrieve this information once learned (memory skills).
- ◆ Interpret what the child hears, sees, and touches (auditory, visual and tactual processing skills).
- ◆ Coordinate what the child sees with his/her hand movements for activities such as drawing, writing, and manipulating objects (visual motor and fine motor control).
- ◆ Understand what people say to the child and put words together to share information, thoughts and feelings with others (receptive and expressive language).
- ◆ Initiate work, turning directions into a plan of action for doing the task, modifying the plan if it doesn't work and keeping track of materials needed to do the task (organizational skills)
- ◆ Pay attention, focusing attention on what is important for doing a task, and remaining attentive until the task is completed (attention skills).

Like the clinical or school psychologist, the pediatric neuropsychologist will use tests to document the child's rate of intellectual development (intelligence – IQ) and his/her level of mastery of academic skills (achievement). The pediatric neuropsychologist may ask parents and the child to complete questionnaires about how the child acts and how he/she feels.

The pediatric neuropsychologist interprets the pattern of results in the context of information regarding brain organization, the child's medical history, and the child's developmental stage. An intervention plan is developed to support the development of weak skills and/or to use the child's strengths to compensate for weak skills. The pediatric neuropsychologist can use assessment results to help parents plan for their child's future.

### **When should I consider a neuropsychological assessment?**

Every child experiencing school problems or behavior problems does not need a neuropsychological assessment. Neuropsychological assessment can help if your child has:

- ◆ A neurological condition such as hydrocephalus, cerebral palsy, epilepsy (seizures), neurofibromatosis, tuberous sclerosis, or a brain tumor.
- ◆ A brain injury as a result of an accident, a stroke, or an infection of the brain.
- ◆ Other medical problems that place him/her at an increased risk of brain injury such as diabetes, chronic heart or respiratory problems, certain genetic disorders, or treatment for childhood cancer
- ◆ Been exposed to toxins such as lead, street drugs, inhalants or was exposed to these substances or to alcohol prior to birth.
- ◆ Had an assessment by a clinical psychologist or the school multi-disciplinary team, but interventions resulting from that assessment failed to help your child.

Your physician may recommend a neuropsychological assessment to:

- ◆ Assist in establishment of a diagnosis
- ◆ Document your child's current skills prior to a planned medical intervention such as a change in medications, a surgical treatment or treatment for cancer. After the medical intervention, testing can be repeated to determine if the treatment has had an effect on his/her continued development of skills. Your physician may refer to this process as "baseline testing."
- ◆ Document your child's cognitive developmental pattern over time so that medical treatments, family expectations, and school programming can be adjusted to your child's changing needs.

### **How will neuropsychological assessment help my child and me?**

The neuropsychological assessment and report will provide you with:

- ◆ A description of your child's strengths and weaknesses
- ◆ Suggestions for what you can do to help your child.
- ◆ Recommendations for educational programming. This will include suggestions to help your child improve weak skills and suggestions on how to use your child's strong skills to get around problems created by the weak skills.
- ◆ Help in knowing what is fair to expect from your child at this point in time
- ◆ Help in knowing what your child's needs may be in the future, so that you can plan for the future.
- ◆ Suggestions for improving your child's behavior. In addition, the pediatric neuropsychologist may refer you to a clinical psychologist or social worker for ongoing help with your child's behavior.

### **Will assessment be covered by my health insurance?**

- ◆ Neuropsychological assessment is typically covered under the medical coverage of your insurance plan when your child is referred by a physician. The services from other psychologists are included in your mental health coverage.
- ◆ Neuropsychological assessment is usually covered if testing is being conducted to establish a diagnosis as the basis for medical treatment, to evaluate the functional impact of a medical treatment (baseline testing) or to assist in selecting a treatment. For example, for some children, the use of medication may

be the best approach when behavior problems occur, while for other children, the use of a behavior plan or psychotherapy is the best approach.

- ◆ Neuropsychological assessment is usually covered if your child is having learning or behavior problems and has a history of brain injury or has a current medical problem that may be affecting brain development.
- ◆ Many insurance plans will require a letter from your child's physician indicating the medical necessity of the assessment. Medical necessity means that the physician needs the information to help him/her provide care for your child.
- ◆ Most insurance plans will deny coverage for assessment used to establish an educational diagnosis (e.g. learning disability). Medical insurance carriers view this as the responsibility of the patient's school. However, coverage will often be provided if the question prompting testing is the relationship of the academic problem to some other medical problem or medical treatment

### **What information will the pediatric neuropsychologist need for my child's appointment?**

- ◆ You will need to have your medical insurance information available when you call to schedule the appointment.
- ◆ You will need to provide copies of any previous psychological or neuropsychological assessments that your child has had, and copies of your child's current Individual Educational Plan (IEP) or 504 plan.
- ◆ You may be asked to complete parent report questionnaires and to have your child's teachers complete questionnaires.
- ◆ If your child is being seen because of a medical problem, the pediatric neuropsychologist may have you sign a release for your child's medical records.
- ◆ Since the neuropsychologist will ask you questions about your child's medical history, early development, social history and school history, you will need to bring to the appointment any information that will help you answer these questions.

### **What should I tell my child to prepare him/her for neuropsychological assessment?**

Children sometimes think that visits to a doctor will involve shots. It is important to reassure your child that no shots or painful procedures will be involved in the visit to the neuropsychologist. For school aged children, it is appropriate to describe testing as like school. You can tell your child that he/she will be doing many different activities. Some activities involve listening and talking while other activities involving looking at things, building things and drawing. Parents are not typically allowed to be present during testing. Let your child know that you will be close by while he/she works with the neuropsychologist. Reassure your child that she/he can have breaks to use the bathroom and to eat lunch.

For preschool children, you can describe neuropsychological assessment as playing games involving listening, talking and remembering . Let the child know that the neuropsychologist will have toys like blocks and puzzles that he/she will get to use. Your preschool child may wish to bring a security object along to the appointment. Try to choose an object that will not be too distracting for the child (e.g. a security blanket or small stuffed animal as opposed to an action figure or toy with many small parts).

You can help your child get ready for assessment by making sure that he/she gets a good nights sleep prior to testing. Make sure that you child has eaten so that he/she will not be hungry during testing. Make the assessment day a special day for your child by leaving brothers and/or sisters at home