

MEDICAL POLICY



SUBJECT: NEUROPSYCHOLOGICAL TESTING	EFFECTIVE DATE: 02/01/01 REVISED DATE: 04/25/02, 03/27/03, 02/26/04, 04/28/05, 08/31/06, 06/28/07, 06/26/08, 10/28/09, 08/26/10, 08/25/11, 08/23/12, 08/22/13, 08/28/14
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<ul style="list-style-type: none">• <i>If the member's subscriber contract excludes coverage for a specific service it is not covered under that contract. In such cases, medical policy criteria are not applied.</i>• <i>Medical policies apply to commercial and Medicaid products only when a contract benefit for the specific service exists.</i>• <i>Medical policies only apply to Medicare products when a contract benefit exists and where there are no National or Local Medicare coverage decisions for the specific service.</i>	

POLICY STATEMENT:

- I. Neuropsychological testing is considered **medically appropriate** to establish or confirm the diagnosis of brain damage or brain disease when there has been a *significant* mental status change, behavior change, memory loss or organic brain injury, in a clinically short period of time, under any of the following conditions:
 - A. head injury (open or closed);
 - B. cerebrovascular accident;
 - C. brain tumor;
 - D. cerebral anoxic or hypoxic episode;
 - E. CNS infection (e.g., herpes encephalitis, HIV infection);
 - F. neurodegenerative disorders (e.g., AIDS dementia);
 - G. demyelinating disease (e.g., Multiple Sclerosis);
 - H. extrapyramidal disease (e.g., Parkinson's or Huntington's disease);
 - I. metabolic encephalopathy (associated with hepatic or renal disease);
 - J. exposure to agents known to be associated with cerebral dysfunction (e.g., lead poisoning, intrathecal methotrexate, cranial irradiation); or
 - K. to provide a differential diagnosis from a range of neurological psychological disorders that present with similar constellations of symptoms (e.g., differentiation between pseudodementia and depression) when the diagnosis has been unable to be made by a complete psychiatric and/or psychological assessment.
- II. Neuropsychological testing is considered **medically appropriate** as part of a pre-operative evaluation prior to brain surgery (e.g., epilepsy surgery, tumor resection) to establish a baseline. Neuropsychological testing is considered **medically appropriate** when performed post-operatively to determine if it appears that cognitive dysfunction has occurred.
- III. Use of a computer-based neuropsychological assessment of a sports-related concussion (e.g., ImPACT, CogState Sport®, HeadMinder), in order to determine if an athlete is fit to return to play, is considered **not medically necessary** (*please see Guidelines section also*).
- IV. Use of a computer-based neurological test as the *sole* method performed for a neuropsychological assessment for diagnoses other than a sports-related concussion is considered **not medically appropriate**.
- V. Neuropsychological testing is considered **not medically necessary** for the assessment or monitoring of a chronic disorder (e.g., Alzheimer's Disease, AIDS, and cerebrovascular disease) as there are more suitable approaches available for the assessment and monitoring of these disorders.
- VI. The routine use of neuropsychological testing is considered **not medically necessary** for diagnosing the following conditions, as more suitable approaches are available:
 - A. mental retardation;
 - B. autism spectrum disorders;
 - C. developmental disability;
 - D. learning disability;

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- E. Attention deficit disorder;
- F. Attention deficit hyperactivity disorder; or
- G. Tourette's Syndrome.

However, neuropsychological testing may be considered **medically necessary** for complicated cases when the usual diagnostic techniques (e.g., a careful history, parent/child interview, behavioral observation) are not adequate to provide a diagnosis.

VII. Neuropsychological testing is considered **not medically appropriate** under the following circumstances:

- A. when the patient has a substance abuse background and either of the following apply:
 - 1. the patient continues to use such that test results would be inaccurate, or
 - 2. the patient is not yet 10 or more days post-detoxification; or
- B. when the patient is on certain daily medications (e.g., mood-altering substances or beta-blockers) that may confound interpretation of results, and the drug effects have not been ruled out.

Refer to Corporate Medical Policy # 3.01.02 regarding Psychological Testing

POLICY GUIDELINES:

- I. Neuropsychological testing is usually **not medically necessary** when similar testing has been performed in the last 12 months. However, more frequent testing may be considered **medically necessary** when it is being utilized to assess therapeutic interventions or intercurrent injuries.
- II. Only the following practitioners may initiate a referral for neuropsychological testing: primary care physician, alternative primary care physician or obstetrician/gynecologist, pediatrician, neurologist, neurosurgeon, psychiatrist, psychologist or psychiatrist.
- III. Neuropsychological testing may be performed only by practitioners that are appropriately credentialed to perform this testing.
- IV. Neuropsychological testing, including computer-based testing, when done for any of the following reasons, is usually contractually excluded and **ineligible for coverage**:
 - A. vocational purposes that are primarily related to employment;
 - B. educational purposes in the case of educational assessment and planning;
 - C. performed through a school as part of a sports program;
 - D. court ordered services unless these services would otherwise be covered under the individual's contract in the absence of a court order and only if the Medical Director determines in advance that the services are medically necessary and covered under the terms of the contract.
- V. Neuropsychological testing performed as simple self-administrated or self-scored inventories or screening tests such as the AIMS, Folstein Mini-Mental Status Exam (or similar tests) is considered inclusive of an Evaluation and Management service and is not separately payable as psychological testing.

DESCRIPTION:

Neuropsychological testing uses standard techniques to objectively test behavioral and cognitive abilities comparing the patient's results to established normal results. The need for neuropsychological testing is indicated when there have been notable behavioral and/or cognitive changes associated with severe head trauma or brain disease. Whereas neuro-imaging procedures such as CT scans, PETs and MRIs report on the structural and physiological scope of brain injury, neurological test data provides information on cognitive and intellectual functioning. Cognitive deficits can also have non-organic, transient roots, and may be associated with depressive conditions, anxiety disorders and severe psychological trauma.

Components of neuropsychological testing include:

- I. obtaining information on a patient's cognitive status by providing a clinical assessment of the patient's thinking, reasoning and judgment (neurobehavioral status exam); and/or

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II. having the patient undergo a specific battery of tests that assess attention, language, memory and executive function.

There are many neuropsychological testing batteries. Combinations of evaluation instruments are often utilized to devise a “battery”. Two of the most commonly used neuropsychologic measures include the Halstead-Reitan and Luria-Nebraska battery of tests.

Computerized neuropsychological testing is also referred to as automated or computer-based testing. Computer-based testing can entail either the adoption/translation of conventional paper and pencil neuropsychological tests such as the Wisconsin Card Sorting Test or newly developed computer-based testing to measure unique cognitive functions. There are features in computer-based testing that are absent in the traditional form of neuropsychological testing, including: timing of response latencies, automated analysis of response patterns, transfer of results to a database for further analysis or the ease with which normative data can be collected or compared to existing databases. Computer-based neuropsychological assessment of a sports-related concussion involves an abbreviated test battery, lasting approximately 20-30 minutes. These types of tests are given prior to commencement of a sports season to obtain a baseline and then are repeated as needed after a concussion to guide medical decisions about a player’s return to active participation in the particular sport. They usually provide a measurement of attention, processing speed and reaction time and can be administered by a team coach, athletic trainer or a physician with minimal training. Several of these computer-based tests are available and include, but are not limited to: ImPACT (Immediate Post Concussion Assessment and Cognitive Testing), CogState, MicroCog, and HeadMinder.

Pursuant to New York State law, effective November 1, 2012, each contract providing physician services, medical, major medical, or similar comprehensive-type coverage must provide coverage for the screening, diagnosis, and treatment of Autism Spectrum Disorders when prescribed or ordered by a licensed physician or a licensed psychologist for medically necessary services. Treatment includes services provided by a licensed or certified speech therapist, occupational therapist, physical therapist, and social worker when the policy generally provides such coverage. Therapeutic treatment must include care that is deemed habilitative or non-restorative. The law prohibits the imposition of limitations that are solely applied to the treatment of Autism Spectrum Disorder. However, as long as the visit limit is not imposed solely on services required to treat Autism Spectrum Disorder, a visit limit continues to be permissible, as long as such visit limit also passes the testing requirements under the Mental Health Parity Addiction and Equity Act of 2008.

RATIONALE:

Neuropsychological tests, when used to assess brain dysfunction and cognitive deficits, have proven to be highly accurate with predictive accuracy in the 80%-95% range. Neuropsychological tests provide quantifiable results that indicate the amount of deviation from baseline norms. Through a comparison of patient responses to established norms, the clinician can determine the scope and severity of cognitive impairments, thereby assisting in development of a program/plan of care best suited to the patient’s needs.

Studies demonstrate that neuropsychological testing used as part of a pre-operative evaluation provides important information on the risks for post-operative neuropsychological deficits and also provides confirmatory evidence of seizure onset laterality in patients whose seizures originate in the temporal lobes.

There is no specific diagnostic test for ADHD, but rather its diagnosis is based upon clinical assessment with the parent/child interview being the cornerstone in the assessment of ADHD. Similarly, there are no specific diagnostic tests for autism or Tourette’s syndrome, rather the diagnosis is usually made based upon the clinical assessment and interview process. The American Academy of Pediatrics clinical practice guidelines and the practice parameter from the American Academy of Child and Adolescent Psychiatry related to the diagnosis and evaluation of ADHD state neuropsychological and psychological test batteries are not routinely indicated to make a diagnosis unless there are coexisting conditions that may complicate a routine assessment. Uncomplicated cases of ADD or ADHD are best diagnosed through a careful history, parent and teacher reports, and the use of structured clinical interviews.

Neuropsychological testing beyond a standard parent interview and direct structured behavioral observation is rarely needed for diagnosing autism (Practice Parameter for Screening and Diagnosis of Autism from the American Academy of Neurology and the Child Neurology Society).

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K Wild and colleagues (2008) conducted a systematic review of computerized cognitive testing, focusing on its ability to detect cognitive decline in the aging population. The heterogeneity across selected studies and test batteries made a meta-analysis impossible. The study included review of 11 test batteries that were either developed to screen for cognitive decline in the elderly or have been applied to that function. In slightly more than half the tests, normative data for elderly subjects were rated as less than adequate as a result of either small sample size or lack of data specific to older adults in a larger sample. Reliability data was typically presented in some form, although only three test batteries met the highest rating achieved by describing more than one type of reliability. Few of the batteries are fully self-administered - the tests ranged widely in the amount of interaction required of an examiner. One of the persistent is the general lack of adequately established psychometric standards. Other concerns include failure to demonstrate equivalence between the examinee's experience of computer use versus traditional test administration, which is of particular importance in the elderly population.

Neuropsychological testing has not been proven in the literature to be beneficial in assessing and monitoring chronic conditions of the brain, including, but not limited to Alzheimer's and acquired immunodeficiency syndrome.

CODES: Number Description

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

<u>CPT:</u>	96116	Neurobehavioral status exam (clinical assessment of thinking, reasoning, and judgment, e.g., acquired knowledge, attention, language, memory, planning and problem solving and visual spatial abilities), per hour of psychologist's or physician's time, both face-to-face time the patient and time interpreting test results and preparing the report
	96118	Neuropsychological testing (e.g., Halstead-Reitan Neuropsychological Battery, Wechsler memory Scales and Wisconsin Card Sorting test), per hour of the psychologist's or physician's time, both face-to-face time the patient and time interpreting test results and preparing the report
	96119	Neuropsychological testing (e.g., Halstead-Reitan Neuropsychological Battery, Wechsler memory Scales and Wisconsin Card Sorting test), with qualified health care professional interpretation and report, administered by technician, per hour of technician time, face-to-face
	96120	Neuropsychological testing (e.g., Wisconsin Card Sorting Test), administered by a computer, with qualified health care professional interpretation and report

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HCPCS: No specific code

ICD9: Numerous diagnosis codes

ICD10: Numerous diagnosis codes

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American College of Neuropsychopharmacology. Neuropsychological assessment of patients with Alzheimer's disease. [http://www.acnp.org/g4/GN401000133/CH130.html] accessed 7/22/14.

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KEY WORDS:

CogState, HeadMinder, ImPACT, Neurobehavioral testing, Neuropsychological testing.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a Local Coverage Determination (LCD) for outpatient psychiatry and psychological services that addresses neuropsychological testing. Please refer to the following LCD website for Medicare Members:
http://apps.ngsmedicare.com/lcd/LCD_L26895.htm