

Practice Protocol

Neuropsychological Evaluations



Jointly Developed by the Arizona Department of Health Services/Division of Behavioral Health Services and AHCCCS/Health Plans

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Purpose

To identify appropriate referrals and procedures for neuropsychological evaluations.

Targeted Population(s)

Individuals with identified physical, neurological or behavioral health conditions who may benefit from undergoing a neuropsychological evaluation.

Individuals who have experienced congenital or acquired brain damage and currently present with suspected impairments in higher cognitive functions or organic brain functions who may require a neuropsychological evaluation in order to make informed decisions regarding their treatment.

Introduction

A neuropsychological evaluation provides an assessment of brain function that can be useful in making the diagnosis of acquired or congenital problems presumed to be a result of brain disease or trauma. The evaluation assesses brain function inferred from an individual's cognitive, sensory, motor, emotional, or social behavior.

The diagnosis of brain damage has become increasingly accurate in recent decades as a result of improved visualization of brain structure by computerized tomography (CT), magnetic resonance imaging (MRI), angiography, and other advancements in diagnostic procedures. A neuropsychological assessment is still a useful diagnostic indicator of brain dysfunction for many conditions, but the above diagnostic procedures have allowed a shift in the focus of neuropsychological evaluation from the diagnosis of possible brain damage to a better understanding of specific brain-behavior relationships and of the psychosocial consequences of brain damage.

Neuropsychological evaluations can be quite useful in the early stages of recovery when placement from the acute care hospital is an issue and rehabilitation goals are being established. There are also certain diseases that can have serious cognitive effects which may resolve over time but have occasionally resulted in a premature diagnosis of dementia. For example, elevated ammonia levels secondary to liver disease or necrotizing fasciitis can produce dramatic cognitive impairment.

Multiple factors can potentially affect the results of neuropsychological evaluation. Age, educational level, ethnicity, cultural influences, gender, psychiatric disorders, and effects of substance abuse can impact the results of

the evaluation and must be factored into the analysis and recommendations. Many medications can also disrupt cognition through their subtle or profound effects on alertness, attention, and memory.

Referrals

Patients referred to a neuropsychologist for assessment may be classified into one of three groups:

1) Patients with known brain damage:

Examples: cerebrovascular disorders, head injury, hydrocephalus, Alzheimer's disease, Parkinson's Disease, Multiple Sclerosis, Huntington's Chorea, tumors, seizures, and infections.

2) Patients with a recognized risk factor for brain damage and who demonstrate a change in behavior which might be the result of disease or injury to the brain:

Examples: systemic illnesses, endocrinopathies, metabolic and electrolyte disturbances, diseases of the kidney, liver, and pancreas, nutritional deficiencies, toxins, including substance abuse (particularly alcohol), conditions producing decreased blood supply to the brain (e.g., trauma, vascular disorders, cardiac disease, pulmonary disease, anemia, carbon monoxide exposure, and complications of anesthesia or surgery).

3) Patients in which brain disease or trauma is suspected but no specific etiology or risk factor has been identified:

Examples: patients with observed and well-documented changes in behavior or mental deterioration, lack of identifiable risk factors for brain injury, and other potential medical illnesses have been excluded. In such cases, history taking, physical examination, laboratory, or other tests, and interviews with the patient's family or close associates should be conducted prior to referring for neuropsychological testing. The diagnostic workup should include CT and MRI visualization of the brain to rule out structural lesions.

Benefits of Neuropsychological Evaluation

Neuropsychological testing assists in defining the nature and severity of resulting functional problems. The assessment provides information about the patient's cognition, personality characteristics, social behavior, emotional status, and adjustment to functional limitations. Information about the patient's cognitive and behavioral strengths and weaknesses can be used for more effective,

individualized treatment planning, vocational training, competency determination, and counseling for both patients and their families.

It is important to consider when referring an individual for neuropsychological testing that a valid evaluation is dependent upon obtaining the patient's best performance. It is usually impossible to obtain satisfactory evaluations of patients who are uncooperative, fatigued, actively psychotic, seriously depressed, or highly anxious. Likewise, a valid and reliable evaluation is impossible to obtain if the individual is intoxicated or, depending on the substance (e.g., stimulants), has recently abused illicit substances or prescribed medications. However, maintenance treatment with opioids (i.e., methadone) should be considered baseline if the individual is properly medicated. Preparation of the patient for the evaluation is important in order to obtain the patient's cooperation and alleviate unnecessary anxiety. It is important to note that a neuropsychological evaluation generally requires at least 1 1/2 hours, and depending on the person's clinical/medical, cognitive, emotional, or physical condition, and the battery of tests used, may take up to 16 hours to complete the testing process and report preparation.

Testing in children or adolescents may be indicated when children/adolescents have difficulties that are neurologically-based and can provide valuable information to aid the treatment planning process. Understanding the strengths and weaknesses related to learning, information processing, and retention of information can facilitate more appropriate, beneficial educational experiences and better outcomes of treatment.

It is of utmost importance that the referring practitioner/provider identify specific questions that he/she desires to have answered by obtaining the evaluation. The more explicit the referral questions are, the more likely it is that the evaluation will be individually constructed to provide useful information. Referral questions that are framed around potential impact on treatment planning and recommendations are most helpful.

The Evaluation Process

The neuropsychological evaluation is conducted by a subspecialty-trained and qualified neuropsychologist with advanced training in testing and interpretation and differs substantially from a general psychological evaluation. Interview and observation are the chief means by which neuropsychological evaluations are conducted. The tests used by neuropsychologists are standardized and specialized observation tools that, in many instances, have the added advantage of providing normative data that aid in interpreting the observations.

The two main approaches are individually tailored examinations and fixed assessment procedures. The more information that can be gained before the assessment procedure begins, the more testing procedures and tools can be specifically tailored to respond to the referral questions. Commonly, intellectual testing is used along with standardized batteries of neuropsychological testing, such as the Halstead-Reitan or Luria-Nebraska test batteries.

When should a request for a neuropsychological evaluation be directed to the Health Plan for consideration?

A neuropsychological evaluation is generally a health plan covered service, and should be directed to the health plan when the purpose for the evaluation is to obtain additional information regarding the nature and severity of functional problems involving higher mental functions that *may be the result of organic brain damage*. The request for the evaluation should also be directed to the health plan when such information may be useful in making important treatment decisions that can guide treatment planning for a *medical condition*.

Examples of conditions that are frequently associated with significant organic brain dysfunction affecting higher mental functions include, but are not limited to:

- Traumatic Brain Injury/Head injury
- Cerebral Vascular Disorders/Stroke
- Hydrocephalus
- Epilepsy
- Brain Tumors (Primary or Metastatic; Malignant or Benign)
- Cerebral Anoxia or Hypoxia
- Exposure to toxic chemicals, substances, or other treatments that are known to cause toxic effects on the brain (acute or chronic) such as lead poisoning, intrathecal methotrexate, cranial irradiation
- Exposure to infectious diseases that affect brain functions or cause brain damage (e.g., Herpes Encephalitis)
- Chronic toxic/metabolic encephalopathic states resulting from systemic medical illnesses or conditions
- Neurological conditions resulting in chronic deteriorating course of illness affecting brain functions, including Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Acquired Immune Deficiency Syndrome (AIDS), and others.
- Prenatal, perinatal, or infant exposure to alcohol or drugs of abuse

A neuropsychological evaluation is generally not a health plan covered service for evaluation of:

- Mental disorders that are primarily attributable to organic brain damage that results in significant higher level mental organic brain dysfunction (e.g., Mood Disorder - Depression with psychosis secondary to traumatic brain injury; Mood Disorder due to cerebrovascular accident (CVA) with Major Depressive-Like Episode; Inhalant-Induced Persisting Dementia)¹
- Evaluation of individuals who have permanent, persistent, and static organic brain dysfunction, and for whom it is unlikely that evaluation results would provide new information that could be utilized to help alter the course of treatment or treatment planning.
- Evaluation of an individual's condition that may be covered by another service agency: Arizona Department of Health Services/Division of Behavioral Health Services (ADHS/DBHS), Arizona Department of Education (ADE), Arizona Department of Economic Security/Division of Developmental Disabilities (ADES/DDD), Arizona Health Care Cost Containment System (AHCCCS), Arizona Long Term Care Services (ALTCS), or other responsible agencies.

When should a request for a neuropsychological evaluation be directed to the T/RBHA for consideration?

A neuropsychological evaluation should generally be referred to the Tribal and Regional Behavioral Health Authority (T/RBHA) for evaluation of significant mental health dysfunction not responding to standard treatment in order to better clarify the extent of organicity and if *responsiveness to psychotherapeutic, counseling, rehabilitation/recovery, or treatment with psychotropic medications* can be positively impacted with appropriate modifications in approach.

If the individual referred is not currently T/RBHA enrolled, the T/RBHA must determine whether the individual should be scheduled for initial enrollment/re-enrollment and assessment of the person's behavioral health needs, including any need for neuropsychological evaluation, prior to authorizing a neuropsychological evaluation.

When should a request for a neuropsychological evaluation be directed to another agency for consideration?

Arizona Department of Education: If the request for neuropsychological testing is for a child or adolescent and requested primarily for the purpose of educational needs and/or vocational training, the request and/or approval should come from

¹ If the basis of the referral is to obtain treatment recommendations for the use of psychotropic medications for these conditions, a direct referral to the T/RBHA for psychiatric consultation should be made.

the school. The individuals who are served under the Disabilities Education Improvement Act (DEIA) have some Individual Education Program (IEP) services that are covered by Medicaid, but the services must be outlined in the IEP. The service would be provided by the school district.

Procedures

How to Request a Neuropsychological Evaluation

- 1) An AHCCCS Health Plan provider or T/RBHA behavioral health provider who would like to request a neuropsychological evaluation for a member shall submit a request in writing to the Health Plan/T/RBHA Medical Director or designee, which shall at a minimum include the following information:
 - a. The specific reasons why the evaluation is being requested; identify the specific diagnostic or treatment-related question(s) to be answered by the evaluation.
 - b. The complete current list of diagnoses and current medications.
 - c. The most recent complete history and physical examination and pertinent findings identified, including findings of laboratory and diagnostic procedures, which may be relevant to the evaluation request.
 - d. Results of any consultations from sub-specialists in neurology or psychiatry/mental health, if available.
 - e. Results of any prior psychological testing that may be available.
 - f. The specific areas of concern for evaluation that could impact the proposed course of treatment or treatment planning.
 - g. The desired or expected outcome of treatment identified by the referring practitioner/provider, which may result from the evaluation or testing. Address how this testing could benefit or impact the overall treatment approach for the patient.
- 2) Prior to referral to a neuropsychologist for a neuropsychological evaluation, the Health Plan/T/RBHA Medical Director or designee shall review the above information to determine if the evaluation will assist the requesting provider in further assessing and treating the particular member's presenting clinical profile, and whether to authorize the evaluation.
- 3) If the Health Plan/T/RBHA Medical Director or designee determines that the request does not contain adequate or complete information, or the request is not indicated or appropriate to obtain, the reviewer shall return the packet of information to the referring practitioner/provider to obtain the necessary information, or to communicate the specific reasons for the denial of the request.

- 4) Following review of the above, if a decision is made to continue with the referral of the member for the evaluation, the Health Plan/T/RBHA Medical Director or designee shall determine whether or not the Health Plan/T/RBHA will authorize payment for the service requested. If the Health Plan/T/RBHA Medical Director or designee determines that the Health Plan/T/RBHA will authorize payment, he/she shall forward the request to a neuropsychologist under contract to perform the evaluation.
- 5) Denials by AHCCCS Health Plan: If the Health Plan Medical Director or designee determines that the Health Plan will not authorize payment of the evaluation, and determines that the evaluation is still appropriate and the reason for the evaluation falls within the domain of ADHS/DBHS covered services, the AHCCCS Health Plan Medical Director or designee shall forward a complete packet of the referral information and request, including the rationale for his/her determination to the assigned T/RBHA Medical Director or designee, or to another appropriate agency, to obtain the evaluation. Whenever a request for neuropsychological evaluation is forwarded to the T/RBHA, the Health Plan will issue a “re-direct letter” to the provider and the member.
 - (a) The T/RBHA Medical Director or designee will either review the referral packet him/herself or forward the referral request packet to an appropriate Child/Adolescent or Adult Psychiatrist (depending on the age of the patient) or psychologist for review. For referrals of T/RBHA enrolled members, the assigned psychiatrist or psychologist shall determine whether or not the evaluation request should be authorized for payment by the T/RBHA. For referrals of non-T/RBHA enrolled Health Plan members, the assigned psychiatrist or psychologist shall determine whether or not the individual should be scheduled for initial enrollment/re-enrollment and assessment of the person’s behavioral health care needs, including the need for neuropsychological evaluation, prior to authorizing this service.
 - (b) The referral to the T/RBHA should identify the specific questions the referring provider wishes to have answered by obtaining the evaluation. Referral questions should be related to the differential diagnosis of mental disorders and identify how the results of the evaluation would be expected to impact behavioral treatment recommendations and planning for the individual. (In many cases, a general psychological evaluation is sufficient to determine differential diagnosis, assess intellectual functioning, and inform treatment planning and should be considered before requesting a neuropsychological evaluation.)
 - (c) If the evaluation request is authorized, the request packet will be forwarded to a neuropsychologist to perform the evaluation.

(d) If the assigned psychiatrist or psychologist determines that the request is not appropriate or necessary, and does not authorize the evaluation, the packet shall be returned to the T/RBHA Medical Director with an explanation of the reasons for not authorizing it. The T/RBHA Medical Director shall then make a determination to authorize the evaluation, or deny authorization and return the request packet back to the Health Plan.

(e) If the T/RBHA Medical Director denies the request and the member is enrolled with the T/RBHA, the T/RBHA is responsible to provide appropriate written notice of the denial to the member. The T/RBHA Medical Director is responsible to provide the Health Plan Medical Director with the disposition, and if denied, an explanation for the denial. If the member is not T/RBHA enrolled, and the Health Plan and the T/RBHA both deny the request, the Health Plan will issue the final denial notice to the member.

(f) If the Health Plan and T/RBHA Medical Directors cannot agree as to who should authorize/pay for the evaluation, but agree that it is necessary, the dispute may be referred to the AHCCCS Medical Director, or designee for resolution.

- 6) Denials by T/RBHA: If the initial referral comes from a T/RBHA behavioral health provider, and the T/RBHA Medical Director or designee determines that the T/RBHA will not authorize payment of the evaluation, and determines that the evaluation is still appropriate and the reason for the evaluation falls within the domain of the acute care health plan's covered services, the T/RBHA Medical Director or designee shall instruct the referring behavioral health provider to forward a complete packet of the referral information and request, including the rationale for his/her determination, to the assigned Health Plan Medical Director or designee or to another appropriate agency, to obtain the evaluation.