

Clinical Policy: Central Auditory Processing Disorder

Reference Number: HNCA.CP.MP.375

Effective Date: 10/07

Last Review Date: 3/23

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[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Central auditory processing disorder (CAPD), also known as auditory processing disorder (APD), refers to the efficiency and effectiveness by which the central nervous system (CNS) utilizes auditory information in the perceptual processing of auditory information. The diagnosis, management, and even the existence of an auditory-specific perceptual deficit are controversial.

Policy/Criteria

- I. It is the policy of Health Net of California that diagnostic testing and therapy for the management of central auditory processing disorder are considered investigational due to lack of scientific evidence to support the validity of any diagnostic tests and treatment.

Background

According to the American Speech-Language Hearing Association (ASHA), central auditory processing disorder (CAPD), also known as auditory processing disorder (APD), refers to difficulties in the perceptual processing of auditory information in the CNS as demonstrated by poor performance in one or more of the skills noted above. CAPD It is a complex and heterogeneous group of auditory-specific disorders usually associated with a range of listening and learning deficits. Children or adults suspected of CAPD may exhibit a variety of listening and related complaints such as difficulty understanding speech in noisy environments, following directions, and discriminating (or telling the difference between) similar-sounding speech sounds. The child may have difficulty with spelling, reading, and understanding information presented verbally in a classroom. Some individuals may also have behavioral, emotional or social difficulties.

The diagnosis, management, and even the existence of a modality-specific dysfunction remain controversial. At this time, there is no universally accepted method of screening for CAPD. The Screening Test for Auditory Processing Disorders (SCAN) tests both monotic and dichotic listening abilities and has been proposed as a standardized method for determining the potential of central auditory processing disorder (CAPD) in children between the ages of 3 and 11 years. There also is no accepted “gold standard” test battery for establishing CAPD. Behavioral and electrophysiologic tests have been proposed to assess central auditory function. The behavioral tests are often broken down into four subcategories, including monaural low-redundancy speech tests (e.g, compressed speech test, filtered speech test), dichotic speech tests (e.g., staggered spondaic word test, dichotic digits test), tests of temporal processing, and binaural interaction tests. Central auditory processing assessments may not be appropriate for children with significant developmental delays (i.e., cognitive deficits) or children under the age of 7 years.

No pharmacologic agent has been demonstrated as effective specifically for CAPD. Interventions for CAPD focuses on improving the quality of the acoustic signal and the listening

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environment, improving auditory skills, and enhancing utilization of metacognitive and language resources.

In an interventional study, Lofti and colleagues (2016) examined the effects of an auditory lateralization training on speech perception in presence of noise/competing signals in children with suspected CAPD. A total of 60 children were selected based on multiple auditory processing assessment sub-tests. They were randomly divided into 2 groups of 9 year old children (control group and training group). The training program consisted of detection and pointing to sound sources delivered with inter-aural time differences under head-phones for 12 formal sessions (6 weeks). This study showed that in the training group, monaural selective auditory attention test and spatial word recognition) improved significantly after the auditory lateralization training. The authors concluded that auditory lateralization training for 6 weeks improved speech understanding in noise significantly. However, they stated that generalization of these findings needs further investigation and noted the need for further studies with higher sample size, auditory lateralization training for more extended time period and long-term follow-up are needed.

Uptodate (2022) notes that “Evaluation for a central auditory processing disorder in school-age children is based upon the assumption that an auditory-specific perceptual deficit is the foundation of learning problems such as reading and language disabilities. However, the diagnosis, management, and even the existence of a modality-specific dysfunction are controversial. Some authorities suggest that it may exist as a primary deficit, whereas others believe that it may be secondary to cognitive deficits. The absence of a coherent theory renders diagnosis and management exceedingly difficult.”

The American Speech Language Hearing Association (ASHA) published a technical report addressing APD stating additional research is needed in auditory processing and its disorders to develop testable models based on valid psychophysical principles, to develop more efficient screening tools as well as screening and diagnostic measures appropriate for multicultural/multilingual populations and examine, in a systematic scientific manner, the relationships among performance on various categories of central auditory diagnostic tests and higher order language, learning, or communication sequelae.

The American Academy of Audiology published clinical practice guidelines in 2010 regarding central auditory processing disorders and also noted that the testing for this disorder lacks “rigorous psychometric design, construction, and validation” and notes that “there continues to be a need to develop new and more precise measures of central auditory function with documented validity, reliability, and efficiency, and with appropriate normative data.”

The National Institute on Deafness and Communication Disorders notes that much research is still needed to understand CAPD problems, related disorders, and the best intervention for each child or adult. Researchers are currently studying a variety of approaches to treatment. Controlled case studies and randomized clinical trials are needed to ascertain systematically the relative efficacy of various treatment and management approaches.

Coding Implications

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CPT® Codes	Description
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	group, two or more individuals
92521	Evaluation of speech fluency (eg, stuttering, cluttering)
92522	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria)
92523	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (eg, receptive and expressive language)
92524	Behavioral and qualitative analysis of voice and resonance
92551 - 92588	Audiological function tests with medical diagnostic evaluation
92620	Evaluation of central auditory function, with report; initial 60 minutes
92621	each additional 15 minutes
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals
92522	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria)
92523	Evaluation of speech sound production with evaluation of language comprehension and expression (eg, receptive and expressive language)
92524	Behavioral and qualitative analysis of voice and resonance
92553	Pure tone audiometry (threshold); air and bone
92556	Speech audiometry threshold with speech recognition
92557	Comprehensive audiometry threshold and speech recognition (92553 and 92556 combined)
92620	Evaluation of central auditory function, with report; initial 60 minutes
92621	Evaluation of speech fluency (eg, stuttering, cluttering)

HCPCS Codes	Description

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ICD-10-CM Diagnosis Codes

ICD-10-CM Code	Description
H93.25	Central auditory processing disorder
H93.291-H93.299	Other abnormal auditory perceptions

Reviews, Revisions, and Approvals	Date	Approval Date
Initial approval	10/07	10/07
Update no revisions	03/11	03/11
Update no revision	03/12	03/12
Coding updates	03/13	03/13
Coding updates	03/14	03/14
Update no revision	03/15	03/15
Update no revision	03/16	03/16
Update no revision	03/17	03/17
Updated references	03/18	03/18
Updated references	03/19	03/19
Update no revisions, added references	03/20	03/20
Update no revision	03/21	03/21
Update; added reference	03/22	03/22
Update and added references	03/23	03/23

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Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to

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applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

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