Clinical Policy: Attention Deficit Hyperactivity Disorder Assessment and Treatment

Reference Number: CP.MP.124 Coding Implications
Last Review Date: 05/19 Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Attention deficit hyperactivity disorder (ADHD) is one of the most common neurobehavioral disorders in children and also occurs with an increasing prevalence of diagnosis in adults. ADHD affects the cognitive, academic, emotional, and social well-being of individuals and can persist throughout life. While there is no single test to diagnose ADHD, a clinical assessment based on defined clinical parameters establishes criteria for diagnosis in children and adults.

Policy/Criteria

I. It is the policy of health plans affiliated with Centene Corporation® that the following services for the assessment and treatment of ADHD are **medically necessary**:

A. Assessment

1. Complete medical evaluation with history and physical examination;
2. Parent/child interview or patient interview, if adult, to obtain information listed in Diagnostic and Statistical Manual of Mental Health Disorders, Fifth Edition (DSM-5);
3. Complete psychiatric evaluation or other services provided by a psychiatrist, psychologist, or other behavioral health professional;
4. Laboratory evaluation prior to stimulant medication therapy, including any of the following:
   a. Complete blood count;
   b. Liver function tests;
   c. Cardiac evaluation and screening incorporating an electrocardiogram (ECG);
5. Measurement of thyroid hormone levels if patient exhibits clinical manifestations of hyperthyroidism;
6. Assessment of comorbid behavioral health and/or medical diagnoses and associated symptoms;
7. When not otherwise excluded, other services for the assessment of ADHD to meet the DSM-5 criteria.

B. Treatment:

1. Pharmacotherapy;
2. Behavioral modification;
3. Treatment of comorbid behavioral health and/or medical diagnoses and associated symptoms;
4. When not otherwise excluded, other services for the treatment of ADHD.

II. It is the policy of health plans affiliated with Centene Corporation that the following services for the assessment and treatment of ADHD are **investigational or unproven** (may not be all-inclusive):

A. Assessment:

1. Actimeter
2. AFF2 gene testing
3. Computerized electroencephalogram (EEG)
4. Computerized Tests of Attention and Vigilance
5. Education and achievement testing
6. Electronystagmography in the absence of symptoms of vertigo or balance dysfunction
7. Evaluation of iron status (e.g. measurement of serum iron and ferritin levels)
8. Event-related potentials
9. Functional near-infrared spectroscopy
10. Hair analysis
11. IgG blood tests
12. Measurement of peripheral brain-derived neurotrophic factor
13. Measurement of zinc
14. Neuroimaging (e.g., CT [computed tomography], CAT [computerized axial tomography], MRI [magnetic resonance imaging], including diffusion tensor imaging), MRS (magnetic resonance spectroscopy), PET (positron emission tomography), and SPECT (single-photon emission computerized tomography)
15. Neuropsychiatric EEG-based assessment aid system
16. Neuropsychologic testing for suspected uncomplicated cases of ADHD (without history of head trauma, seizures)
17. Otoacoustic emissions in the absence of signs of hearing loss
18. Quotient ADHD system / test
19. Synaptosomal-associated protein (SNAP) 25 gene polymorphisms testing
20. Transcranial magnetic stimulation – evoked measures (e.g., short-interval cortical inhibition in motor cortex) as a marker of ADHD symptoms
21. Tympanometry in the absence of hearing loss

B. Treatment:

1. Acupuncture/acupressure
2. Anti-*candida albicans* medication
3. Anti-fungal medication
4. Anti-motion sickness medication
5. Auditory Integration Therapy
6. Applied kinesiology
7. Brain integration
8. Chelation
9. Chiropractic manipulation
10. Cognitive behavior modification
11. Cognitive rehabilitation
12. Computerized training on working memory
13. Deep pressure sensory vest
14. Dietary counseling and treatments, i.e., Feingold diet
15. Dore program / dyslexia – dyspraxia attention treatment (DDAT)
16. Educational intervention (e.g., classroom environmental manipulation, academic skills training, and parental training)
17. EEG biofeedback

18. Herbal remedies
19. Homeopathy
20. Intensive behavioral intervention programs
21. Megavitamin therapy
22. Metronome training
23. Mineral supplementation
24. Music therapy
25. Optometric vision training
26. Psychopharmaceuticals (lithium, benzodiazepines, and selective serotonin reuptake inhibitors, unless the patient also exhibits anxiety and depression)
27. Reboxetine
28. Sensory integration therapy
29. The Good Vibrations Device
30. The Neuro Emotional Technique
31. Therapeutic eurythmy (movement therapy)
32. Transcranial magnetic stimulation / cranial electric stimulation
33. Yayarin
34. Vision therapy
35. Yoga

Background

ADHD is among the most commonly diagnosed neurodevelopmental disorders in children and adolescents and is increasingly being diagnosed in adults. The main characteristics of ADHD are symptoms of inattention, hyperactivity, and impulsivity that have continued for at least six months and are maladaptive and inconsistent with development level.[1] There is no single genetic or behavioral test to diagnose ADHD. Instead a clinical diagnosis based on the *Diagnostic and Statistical Manual of Mental Disorders-5* (DSM-5) criteria is applicable for both children and adults.[2] The prevalence of adult ADHD has been estimated to be around 4.4% in the United States and 3.4% internationally, whereas the prevalence in children and adolescents ranges from 2 –18%.[2,3]

In 2011, the American Academy of Pediatrics (AAP) published a clinical practice guideline to clarify the diagnosis, evaluation, and treatment parameters of ADHD.[4] This guideline expanded the age range of children to include preschool aged children and adolescents and suggests an expanded scope for behavioral interventions.[4] The evaluation of comorbid conditions that might coexist with ADHD must also be considered.[4] Similar clinical recommendations have been made by various organizations for adults, including the Canadian ADHD Resource Alliance, the American Academy of the Child and Adolescent Psychiatry, the National Institutes of Health, and the British Association for Psychopharmacology.[5] Pharmacotherapy can provide a way to manage ADHD symptoms and improve quality of life.

Stimulants and non-stimulants are common examples of medications prescribed to treat ADHD. Chan, *et al*, performed a systemic review of sixteen randomized clinical trials and one meta-analysis that involved 2668 participants and evaluated pharmacological and psychosocial treatments of ADHD in adolescents aged 12 years to 18 years. They found that extended-release

methylphenidate and amphetamine formulations, atomoxetine, and extended-release guanfacine led to clinically significant symptom reduction.[6]

While the pathogenesis of ADHD is unknown, the clinical impairments in neurobehavioral and neurodevelopmental functioning pathways elicit deficiencies in vigilance, perceptual-motor speed, working memory, verbal learning, and response inhibition.[2] Consequently ADHD affects the cognitive, academic, emotional, and social wellbeing of individuals and can persist throughout life.

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2019, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT codes considered not medically necessary when billed with a sole diagnosis of ADHD

CPT® Codes	Description
70450	Computed tomography, head or brain; without contrast material
70460	Computed tomography, head or brain; with contrast material(s)
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections
70551	Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material
70552	Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s)
70553	Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material, followed by contrast material(s) and further sequences
76390	Magnetic resonance spectroscopy
78600	Brain imaging, less than 4 static views;
78601	Brain imaging, less than 4 static views; with vascular flow
78605	Brain imaging, minimum 4 static views;
78606	Brain imaging, minimum 4 static views; with vascular flow
78607	Brain imaging tomographic (SPECT)
78608	Brain imaging, positron emission tomography (PET); metabolic evaluation.
78609	Brain imaging, positron emission tomography (PET); perfusion evaluation
81229	Cytogenetic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities
82365	Calculus; Infrared spectroscopy
82728	Ferritin
82784	Gammaglobulin (immunoglobulin); IgA, IgD, IgG, IgM, each

CPT® Codes	Description
82787	Gammaglobulin (immunoglobulin); immunoglobulin subclasses (eg, IgG1, 2, 3, or 4), each
83540	Iron
83550	Iron binding capacity
84630	Zinc
86001	Allergen specific IgG quantitative or semiquantitative, each allergen
92065	Orthoptic and/or pleoptic training, with continuing medical direction and evaluation
90867	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; initial, including cortical mapping, motor threshold determination, delivery and management
90868	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent delivery and management, per session
90869	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent motor threshold re-determination with delivery and management
90901	Biofeedback training by any modality
92540	Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and peripheral stimulation, with recording, and oscillating tracking test, with recording
92541	Spontaneous nystagmus test, including gaze and fixation nystagmus, with recording
92542	Positional nystagmus test, minimum of 4 positions, with recording
92544	Optokinetic nystagmus test, bidirectional, foveal or peripheral stimulation, with recordings
92550	Tympanometry and reflex threshold measurements
92558	Evoked otoacoustic emissions, screening (qualitative measurement of distortion product or transient evoked otoacoustic emissions), automated analysis
92567	Tympanometry (impedance testing)
92585	Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive
92586	Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; limited
92587	Distortion product evoked otoacoustic emissions; limited evaluation (to confirm the presence or absence of hearing disorder, 3-6 frequencies) or transient evoked otoacoustic emissions, with interpretation and report
92588	Distortion product evoked otoacoustic emissions; comprehensive diagnostic evaluation (quantitative analysis of outer hair cell function by cochlear mapping, minimum of 12 frequencies), with interpretation and report
95803	Actigraphy testing recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)
95812	Electroencephalogram (EEG) extended monitoring; 41-60 minutes
95813	Electroencephalogram (EEG) extended monitoring; greater than 1 hour
95816	Electroencephalogram (EEG); including recording awake and drowsy
95819	Electroencephalogram (EEG); including recording awake and asleep

CPT® Codes	Description
95827	Electroencephalogram (EEG); all night recording
95925	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs
95926	Short latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs
95927	Short latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in the trunk or head
95928	Central motor evoked potential study (transcranial motor stimulation); upper limbs
95929	Central motor evoked potential study (transcranial motor stimulation); lower limbs
95930	Visual evoked potential (VEP) testing central nervous system, checkerboard or flash
95933	Orbicularis oculi (blink) reflex, by electrodiagnostic testing
95937	Neuromuscular junction testing (repetitive stimulation paired stimuli), each nerve, any 1 method
95938	Short latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper and lower limbs
95939	Central motor evoked potential study (transcranial motor stimulation);in upper and lower limbs
96116	Neurobehavioral status exam (clinical assessment of thinking, reasoning and judgment, eg, acquired knowledge, attention, language, memory, planning and problem solving, and visual spatial abilities), by physician or other qualified health care professional, both face-to-face time with the patient and time interpreting test results and preparing the report, first hour
96130	Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour
96131	Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; each additional hour (List separately in addition to code for primary procedure)
96132	Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour
96133	Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when

CPT® Codes	Description
	performed; each additional hour (List separately in addition to code for primary procedure)
96136	Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes
96137	Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; each additional 30 minutes (List separately in addition to code for primary procedure)
96138	Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30 minutes
96139	Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; each additional 30 minutes (List separately in addition to code for primary procedure)
96146	Psychological or neuropsychological test administration, with single automated, standardized instrument via electronic platform, with automated result only
96365	Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); initial, up to 1 hour
96366	Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); each additional hour
96367	Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); additional sequential infusion, up to 1 hour
97127	Therapeutic interventions that focus on cognitive function (eg, attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (eg, managing time or schedules, initiating, organizing and sequencing tasks), direct (one-on-one) patient contact
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes
97533	Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes
97810	Acupuncture, one or more needles, w/o electric stimulation; initial 15 minutes of personal one-one contact with the patient.
97811	Acupuncture, one or more needles, w/o electric stimulation; each additional 15 minutes of personal one-one contact with the patient with re-insertion of needles.
97813	Acupuncture, one or more needles, with electric stimulation; initial 15 minutes of personal one-one contact with the patient.
97814	Acupuncture, one or more needles, with electric stimulation; each additional 15 minutes of personal one-one contact with the patient, with re-insertion of the needle(s).
98940	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
98941	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions
98942	Chiropractic manipulative treatment (CMT); spinal, 5 regions

CPT® Codes	Description
98943	Chiropractic manipulative treatment (CMT); extraspinal, 1 or more Regions

HCPCS codes considered not medically necessary when billed with a sole diagnosis of ADHD

HCPCS Codes	Description
P2031	Hair analysis (excluding arsenic)
S8040	Topographic brain mapping

ICD-10-CM Diagnosis Codes that Support Medical Necessity

ICD-10-CM Code	Description
F90.0 – F90.9	Attention-deficit hyperactivity disorders

Reviews, Revisions, and Approvals	Date	Approval Date
Policy developed	08/16	08/16
References reviewed and updated	07/17	08/17
Assessment: Added "Evaluation of iron status (e.g. measurement of serum iron and ferritin levels)" as not medically necessary. References and Codes reviewed and updated.	05/18	05/18
Added AFF2 gene testing and measurement of peripheral brain-derived neurotrophic factor as investigational to II.A. Code updates-deleted CPT 96101, 96102, 96103, 96118, 96119, 96120, and 97532. Added CPT-96130, 96131, 96132, 96133, 96136, 96137, 96138, 96139, 96146, and 97127. References reviewed and updated. Specialist reviewed.	04/19	05/19
Revised description for CPT-96116	05/19	

References

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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 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.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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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.