Clinical Policy: Attention Deficit Hyperactivity Disorder Assessment and Treatment

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Effective Date: 09/2018
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Coding Implications
Revision Log

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 PA Health & Wellness (PHW)® 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; Cognitive Behavioral Therapy; Treatment of comorbid behavioral health and/or medical diagnoses and associated symptoms;
3. When not otherwise excluded, other services for the treatment of ADHD.

II. It is the policy of PHW 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 rehabilitation
11. Computerized training on working memory
12. Deep pressure sensory vest
13. Dietary counseling and treatments, i.e., Feingold diet
14. Dore program / dyslexia – dyspraxia attention treatment (DDAT)
15. Educational intervention (e.g., classroom environmental manipulation, academic skills training, and parental training)
16. EEG biofeedback
17. Herbal remedies

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

CPT® Codes	Description
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
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,

CPT® Codes	Description
	family member(s) or caregiver(s), when performed; each additional hour (List separately in addition to code for primary procedure) 96131
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 performed; each additional hour (List separately in addition to code for primary procedure)
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
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	09/18	09/18
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.	12/19	
Revised description for CPT-96116	12/19	
Removed the following codes from the list of CPT codes considered not medically necessary when billed with a sole diagnosis of ADHD: 96136, 96137, 96138, 96139, and 96146.	12/19	

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