Clinical Policy Title: Attention deficit hyperactivity disorder — diagnosis and treatment

Clinical Policy Number: 09.02.03

Effective Date: December 1, 2013
Initial Review Date: June 16, 2013
Most Recent Review Date: April 10, 2018
Next Review Date: April 2019

Policy contains:
- Guidelines of diagnosis and medication.
- Quotient ADHD testing.
- Continuous performance testing.

ABOUT THIS POLICY: Prestige Health Choice has developed clinical policies to assist with making coverage determinations. Prestige Health Choice’s clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of “medically necessary,” and the specific facts of the particular situation are considered by Prestige Health Choice when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Prestige Health Choice’s clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Prestige Health Choice’s clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Prestige Health Choice will update its clinical policies as necessary. Prestige Health Choice’s clinical policies are not guarantees of payment.

Coverage policy

Prestige Health Choice considers the evaluation of children and adults for possible attention deficit hyperactivity disorder (ADHD) by appropriately trained mental health professionals and primary care providers (PCPs) and its treatment with behavioral therapy, including family and classroom therapies and prescription stimulant medication management, to be clinically proven and, therefore, medically necessary (American Academy of Pediatrics [AAP], 2011; Gayleard, 2017; Joseph, 2017; Knouse and subsequent correction, 2017; Luan, 2017; Liu, 2017; Otasowie, 2014).

Limitations:

Coverage determinations are subject to benefit limitations and exclusions as delineated by the state Medicaid authority. The Florida Medicaid website may be accessed at http://ahca.myflorida.com/Medicaid/.
Prestige Health Choice considers the use of the Quotient ADHD System test and the employment of continuous performance testing (CPT) by non-mental health professionals to be investigational, as the effectiveness of their use has not been established in peer-reviewed professional literature and, therefore, it is prohibited from coverage by state and/or federal laws and/or regulatory requirements.

Alternative covered services:

A PCP or a network mental health professional can make the diagnosis of ADHD. Typically these same providers are able to effectively manage the child or adult with ADHD.

Background

The American Academy of Pediatrics (AAP) indicates that ADHD is the most common neurodevelopmental disorder of childhood. In the United States as of 2011 – 2012, according to parental reports about 11 percent of children ages 4 – 17 years or 6.4 million have a diagnosis of ADHD.

There is no known cause of ADHD. Studies of twins suggest a genetic basis for at least some cases of ADHD. Other cases appear to have associations with brain injuries and fetal intra-uterine exposures (i.e., lead, tobacco or alcohol).

ADHD is characterized by both difficulty in focusing on tasks and impulsivity. Hyperactivity (or hyperkinesis) is commonly a part of the condition, but is not a necessary finding for the diagnosis. Diagnostic criteria for ADHD from the DMS-5 (American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, 2013) are included in Table 1 (Appendix A).

ADHD is generally diagnosed in childhood and may persist into adulthood. An estimated 50 percent of cases occur post-adolescence.

The diagnosis of ADHD is most commonly made by PCPs using diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM)-5.

Children are evaluated at the request of parents, teachers, or counselors who suspect the diagnosis and observe externalizing behaviors, such as impulsivity, disruptiveness, or hyperactivity.

In the evaluation of a child for ADHD, the primary care clinician should include assessment for other conditions that might coexist with ADHD, including emotional or behavioral (e.g., anxiety, depressive, oppositional defiant, and conduct disorders); developmental (e.g., learning and language disorders or other neurodevelopmental disorders); and physical (e.g., tics, sleep apnea) conditions (AAP, 2011).

There is no evidence that neuropsychological testing is superior to careful history-taking by the treating physician, psychologist or other mental health network provider in the investigation and management of ADHD.
These tests include the Controlled Oral Word Association Test (COWAT), Rey-Osterreith Complex Task (ROCT), Stroop Color and Word Test, Tail Making Test, Wisconsin Card Sort Test (WCST), Freedom from Distractibility Index (FFDI), Wide Range Assessment of Memory and Learning (WRAML), Test of Variables of Attention (TOVA), Conners’ Continuous Performance Test (CPT), and Gordon Diagnostic System (GDS).

A more recent test, the Quotient ADHD System, has been marketed to PCPs for diagnosis and ongoing clinical assessment for both children and adults.

Studies in the 1990s suggested that performance of psychological inventories could be used as a gauge of effectiveness of therapy. Subsequent experience and studies have not demonstrated superiority of use of psychological testing or of tests such as the Quotient Rx or continuous performance test over clinical assessment alone in final outcomes.

As such, the role of these tests in final outcomes is not clear. Neither the AAP nor the AACAP guidelines recommend the use of such psychological inventories for diagnosis or management of ADHD.

The cornerstones of treatment for ADHD are behavioral therapy and FDA-approved prescription medications.

Evidence-based studies have demonstrated improvement in ADHD-associated behavior with behavioral parent training (BPT) that help the child regulate his or her own behavior. Behavioral therapy techniques used in the classroom have also been helpful in managing the child’s behavior in a classroom setting.

Drug management relies on the use of stimulant medications that have the paradoxical effect of reducing the hyperactivity component, allowing the child to better focus. Recommendations for medication treatment include first-line use of stimulants, consideration of extended release alpha 2 adrenergic agonists concurrently, and atomoxetine as alternative for patients who cannot tolerate stimulants.

There are two extended release alpha 2 agonists that are FDA approved for treatment of ADHD in children ages 6 – 17 years.

Recent research has focused on the efficacy of tri-cyclic antidepressants in the treatment of ADHD. There is some evidence, of good quality, that this class of drugs may be helpful as an alternative to currently prescribed and FDA-approved medications in the treatment of ADHD.

Concerns persist regarding side effects of stimulant drugs, such as delayed growth, suicidal ideation, tics, substance abuse, seizures, hypertension, prolonged Q-T interval, and rare reports of sudden death. Monitoring of growth, blood pressure, and cardiac symptoms is important.

The AAP recommends development of a communication system between the treating provider, patient, family, and school or social systems to maximize the effectiveness of treatment.

Searches
Prestige Health Choice searched PubMed and the databases of:

- UK National Health Services Centre for Reviews and Dissemination.
- Agency for Healthcare Research and Quality’s National Guideline Clearinghouse and other evidence-based practice centers.
- The Centers for Medicare & Medicaid Services (CMS).

We conducted searches on February 12, 2018. Search terms were: “attention deficit,” “ADHD,” and “hyperactivity.”

We included:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews.**
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.

**Findings**

The preponderance of medical evidence supports a conclusion that the evaluation of children and adults for ADHD by appropriately trained mental health professionals and PCPs, and its treatment with behavioral therapy including family and classroom therapies and prescription stimulant medication management, is a clinically proven methodology for safe practice.

**Policy updates:**

A narrative review (Bied, 2017) considered the psychometric properties of parent and teacher informants relative to ADHD diagnosis in pediatric populations. The diagnostic accuracy for predicting ADHD diagnoses did not differ between parents and teachers. Sample size, sample type, participant drop-out, participant age, participant gender, geographic area of the study, and date of study publication were assessed as potential confounds. Parent reports were statistically indistinguishable from those of teachers. The authors concluded that both parents and teachers may yield moderate to good diagnostic accuracy for ADHD diagnoses.

In the 2018 review, we added 30 peer-reviewed publications to the reference list. Of these, we added 11 to the summary of clinical evidence. We did not add any publications in the guideline/other category. Also of note, a study previously included in the summary of clinical evidence was removed from this table because the Cochrane Collaboration determined that the literature that it was based on had numerous shortcomings, and that the review’s methods and conclusions were flawed (Boesen, 2017; Epstein, 2014).
Summary of clinical evidence:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Content, Methods, Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kortekaas-Rijlaasdam (2018)</td>
<td>Key points:</td>
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<tr>
<td>Does methylphenidate improve academic</td>
<td>• This systematic review and meta-analysis examines outcome-domain-specific medication effects on academic improvement, specifically, the effect of methylphenidate (MPH) on academic productivity and accuracy for math, reading, spelling. It included 34 studies.</td>
</tr>
<tr>
<td>performance?</td>
<td>• Findings: For math, MPH improved productivity (7.8% increase, ( p &lt; .001 )) and accuracy (3.0% increase, ( p = .001 )). In reading, it increased speed (Standard Mean Difference [SMD] .47, ( p &lt; .001 )) but not accuracy. While potential mediators or moderators were tested, none affected MPH efficacy.</td>
</tr>
<tr>
<td></td>
<td>• Compared to symptom improvements, academic improvements were small. Qualitative changes were limited to math. Clinicians should take this discrepancy into account when prescribing medication for ADHD.</td>
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<tr>
<td>No authors listed (2017)</td>
<td>Key points:</td>
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<tr>
<td>Meta-analysis of cognitive-behavioral</td>
<td>• This is a correction of an article which used incorrect effect sizes for two included articles.</td>
</tr>
<tr>
<td>treatments for adult ADHD: Correction to</td>
<td>• The corrected findings show that through use of a random effects model, results show that cognitive behavioral therapy had medium-to-large effects (self-reported ADHD symptoms: ( g = 1.00 ); 95% confidence interval [CI] 0.84, 1.16; self-reported functioning: ( g = .73 ); 95% CI 0.46, 1.00). Small-to-medium effects were shown versus control for symptoms (g = .65; 95% CI 0.44, 0.86) and for functioning (g = .51; 95% CI 0.23, 0.79).</td>
</tr>
<tr>
<td>Knouse, Teller, and Brooks (2017)</td>
<td>• Current cognitive behavioral therapies for adults with ADHD shows comparable effect sizes to behavioral treatments for children with ADHD, which are considered well-established treatments. The resulting effect sizes were heterogeneous for most outcomes. Those studies with active control groups showed smaller effect sizes. Neither participant medication status nor treatment format moderated pre-to-post treatment effects. Longer treatment periods were not associated with better outcomes.</td>
</tr>
<tr>
<td>Bied (2017)</td>
<td>Key points:</td>
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<tr>
<td>Parent-based diagnosis of ADHD is as</td>
<td>• Narrative review on ADHD diagnosis.</td>
</tr>
<tr>
<td>accurate as a teacher-based diagnosis of</td>
<td>• Diagnostic accuracy for ADHD did not differ between parents and teachers.</td>
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<tr>
<td>ADHD</td>
<td>• Parent reports were statistically indistinguishable from those of teachers.</td>
</tr>
<tr>
<td></td>
<td>• The authors concluded that both parents and teachers may yield moderate to good diagnostic accuracy for ADHD diagnoses.</td>
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<td>Cook (2017)</td>
<td>Key points:</td>
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<tr>
<td>Managing attention deficit hyperactivity</td>
<td>• Illicit stimulant use and ADHD are common comorbidities. This systematic review included eight randomized clinical trials.</td>
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<td>disorder in adults using illicit</td>
<td>• Four studies found improved ADHD outcome measures in those being treated with pharmacotherapy compared with placebo.</td>
</tr>
<tr>
<td>psychostimulants: A systematic review</td>
<td>• Two studies showed an effect in reduced substance use. They both used higher than usual ADHD treatment dosage.</td>
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<td></td>
<td>• Substitution pharmacotherapy is a plausible strategy for treating stimulant dependence, but will likely require higher dosing. Increased tolerance to stimulants is likely present in persons with a long history of daily illicit stimulant use, therefore, they may need a robust dose of prescribed</td>
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<tr>
<td>Citation</td>
<td>Content, Methods, Recommendations</td>
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| Gayleard (2017) | **Atomoxetine treatment for children and adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD)**  
- This meta-analysis of outcomes on parent-rated core symptoms included 42 studies (33 of these with control groups and 9 without, n = 8398).  
- For those receiving the non-stimulant atomoxetine (ATX), the effect size of the standardized mean gain was 1.37 (95% Confidence Interval [CI] 1.24, 1.51, p < .001). Overall, ATX outperformed control conditions (Z = 4.07, p < .001). However, results differed by the type of control; e.g. when comparing ATX to alternative medications, significant differences were no longer present.  
- The authors concluded that ATX led to significant improvement in core ADHD symptomatology, and that ATX can be considered a viable pharmacological treatment for ADHD. |
| Holmskov (2017) | **Gastrointestinal adverse events during methylphenidate treatment of children and adolescents with attention deficit hyperactivity disorder**  
- This meta- and trial sequential analysis included 61 randomized clinical trials (18 parallel group trials and 43 cross-over trials, n = 5983) that reported gastrointestinal adverse events.  
- Among children and youth, MPH was associated with increased risk of decreased appetite (RR 3.66, 95% CI 2.56 to 5.23), weight loss (RR 3.89, 95% CI 1.43 to 10.59), and abdominal pain (RR 1.61, 95% CI 1.27 to 2.04). No differences in the risks of gastrointestinal adverse events according to type, dose, or duration of administration were found.  
- The potential for risk of bias was perceived as high. |
| Joseph (2017) | **Comparative efficacy and safety of attention-deficit/hyperactivity disorder pharmacotherapies, including guanfacine extended release: a mixed treatment comparison.**  
- This Bayesian meta-analysis compared efficacy and safety of ADHD pharmacotherapy among 6-17 year olds. Thirty-six RCTs were included.  
- The mean (95% credible interval [Crl]) ADHD-RS-IV total score change (from baseline, active less placebo) was -14.98 (-17.14, -12.80) for lisdexamfetamine dimesylate (LDX), -9.33 (-11.63, -7.04) for extended release methylphenidate (MPH), -8.68 (-10.63, -6.72) for extended release guanfacine (GXR), and -6.88 (-8.22, -5.49) for atomoxetine (ATX). No data were available for MPH immediate release.  
- The relative risk (95% Crl) for CGI-I response (active versus placebo) was 2.56 (2.21, 2.91) for LDX, 2.13 (1.70, 2.54) for MPH extended release, 1.94 (1.59, 2.29) for GXR, 1.77 (1.31, 2.26) for ATX, and 1.62 (1.05, 2.17) for MPH immediate release. Among non-stimulant pharmacotherapies, GXR was more effective than ATX, when examining ADHD-RS-IV total score change (with a posterior probability of 93.91%) and CGI-I response (posterior probability 76.13%).  
- In sum, this analysis showed that LDX was more efficacious than GXR, ATX, and MPH in the treatment of children and adolescents with ADHD. GXR had a high posterior probability of being more efficacious than ATX, although their Crls overlapped. |
| Knouse (2017) | **Meta-analysis of cognitive-behavioral treatments for adult ADHD**  
- A correction was issued (No author listed, 2017).  
- This analysis was based on 32 trials (n = 896).  
- Through use of a random effects model, the analysis showed that cognitive behavioral therapies had medium-to-large effects on self-reported ADHD symptoms (g = 1.00; 95% CI: 0.84, 1.16) and on self-reported functioning (g = .73; 95% CI 0.46, 1.00). Effects were small-to-medium versus control for symptoms (g = .65; 95% CI 0.44, 0.86) and for functioning (g = .51; 95% CI
<table>
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| **Loy (2017)**| Atypical antipsychotics are increasingly used to treat disruptive behavior disorders. This Cochrane updated review analyzed each drug separately compared to placebo, in children and youth up to age 18. Ten trials of 898 children and youth were included.  
- The findings show that short term risperidone may reduce aggression and conduct problems in children and youths with disruptive behavior disorders, however, this intervention is associated with significant weight gain. For aggression, the difference in scores of 6.49 points on the ABC — Irritability subscale (range 0-45) may be clinically significant. The differential findings on two different ABS subscales are challenging to interpret for their clinical significance, as distinguishing between reactive and proactive aggression in clinical practice may be challenging. For conduct problems, the difference of 8.61 points on the NCBRF-CP (range 0-48) is likely to be clinically significant. Weight gain remains a concern.  
- Due to limitations in the current evidence and a small number of high-quality trials, caution is encouraged in interpreting these results.  
- There is insufficient evidence to support the use of quetiapine, ziprasidone or any other atypical antipsychotic for disruptive behavior disorders in children and youth, and no evidence for children under five years of age. It is uncertain to what degree the effectiveness demonstrated in clinical research will translate into real-life practice.  
- Parent-training interventions show efficacy in the management of these disorders, while evidence for efficacy of medication is equivocal. Therefore, it is important not to use medication alone. |
| Luan (2017)   | This meta-analysis and network meta-analysis examined six treatments for ADHD in youth ages 6-18 years. The included treatments were lisdexamfetamine dimesylate (LDX), atomoxetine (ATX), methylphenidate (MPH), clonidine hydrochloride (CLON), guanfacine extended release (GXR), and bupropion. Data were extracted from 73 studies (15,025 participants).  
- Results of the pairwise meta-analysis showed that LDX was associated with lower withdrawal symptoms than ATX for lack of efficacy. MPH was associated with lower efficacy than LDX, as measured by the ADHD Rating Scale score.  
- Results of the network meta-analysis showed significant results of efficacy for LDX as a competitive drug, when evaluating LDX and other drugs except for CLON.  
- Both ATX and GXR were associated with higher rates of symptoms of abdominal pain, versus inactive treatment. |
| Liu (2017)    | Compared to ATX, MPH showed a higher response rate (relative risk [RR] = 1.14, 95% confidence interval [CI] 1.09, 1.20), decreased inattention (Standard Mean Difference [SMD] = -0.13, 95% CI -0.25, -0.01) and lower risk of adverse events (drowsiness: RR = 0.17, 95% CI 0.11, 0.26; nausea: RR = 0.49; 95% CI [0.29, 0.85]; vomiting: RR = 0.41, 95% CI 0.27, 0.63).  
- However, MPH was associated with a higher risk of insomnia than ATX (RR = 2.27, 95% CI
<table>
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<tr>
<th>Citation</th>
<th>Content, Methods, Recommendations</th>
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<tbody>
<tr>
<td>hyperactivity disorder in children and adolescents:</td>
<td>1.63, 3.15, p &lt; .01.</td>
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<tr>
<td><strong>Conclusions:</strong> These results further demonstrate the effectiveness of both medications ATX and MPH and suggest that MPH should be considered as a first-line treatment.</td>
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<tr>
<td>Riera (2017)</td>
<td><strong>Key points:</strong></td>
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<tr>
<td>Discontinuation of pharmacological treatment of children and adolescents with attention deficit hyperactivity disorder: meta-analysis of 63 studies enrolling 11,788 patients</td>
<td>- This meta-analysis included studies investigating 10 drugs, with ATX and MPH most frequently studied. Randomized, placebo-controlled clinical trials generally lasted a mean 7.9 weeks.</td>
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<td></td>
<td>- Treatment discontinuation from any cause was lowest with pharmacological treatment than placebo (OR = 0.68). Pharmacological treatment was more effective than placebo independently of the rater (clinician, parent, or teacher; SMD ranged from 0.63 to 0.75).</td>
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<td></td>
<td>- Psychostimulants showed greater effectiveness and an improved outcome on treatment discontinuation compared to non-stimulant drugs. Efficacy was smaller in studies for which a psychiatric comorbidity was an inclusion criterion, was larger in studies with a commercial sponsorship and showed a negative association with treatment length.</td>
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<td></td>
<td>- There was evidence of publication bias for clinician-rated efficacy, especially in industry-sponsored trials.</td>
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<td></td>
<td>- The authors conclude that in the short term, pharmacotherapies provide moderate-high symptom relief, are safe, and show lower treatment discontinuation rates compared to placebo. This suggests a suitable risk-benefit balance, particularly with psychostimulants. The efficacy is lower in patients with a psychiatric comorbidity and should be assessed periodically, as it appears to reduce over time.</td>
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<tr>
<td>Otasowie (2014)</td>
<td><strong>Key points:</strong></td>
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<tr>
<td>Tricyclic antidepressants for attention deficit hyperactivity disorder (ADHD) in children and adolescents</td>
<td>Tricyclic antidepressants (TCAs) as alternative therapy in ADHD (Level A):</td>
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<td></td>
<td>- SR of six RCTs inclusive of 216 participants found TCAs, particularly desipramine, appear efficacious for treating ADHD in children and adolescents in the short term, but there are newer and safer alternative medications.</td>
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<td></td>
<td>- First-line stimulants (methylphenidate and amphetamine derivatives) and non-stimulants (atomoxetine and alpha agonists) are alternative medications.</td>
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<td></td>
<td>- TCAs may be considered as a third-line medication for ADHD treatment.</td>
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<tr>
<td>AAP Clinical Practice Guideline (2011)</td>
<td><strong>Key points:</strong></td>
</tr>
<tr>
<td>AAP Practice Guidelines (Level B):</td>
<td>- The PCP should initiate evaluation for children and adolescents (4 – 18 years of age) if academic or behavioral problems of inattention, hyperactivity, or impulsivity exist.</td>
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<td>- Diagnosis is based on DSM criteria, not psychological testing.</td>
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<td>- PCP should also test neurodevelopmental disorders.</td>
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<td>- Chronic nature of condition requires supportive home environment.</td>
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<tr>
<td>National Institute for Health and Clinical Excellence (NICE) (2008) (update expected March 2018)</td>
<td><strong>Key points:</strong></td>
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<td></td>
<td>- NICE Guidelines (Level C):</td>
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<td></td>
<td>- Diagnosis should be made by qualified health care professionals with training in ADHD.</td>
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<td></td>
<td>- A diagnosis of ADHD should not be made solely on the basis of a rating scale or observational data.</td>
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<td></td>
<td>- Rating scales (e.g., Conners’ rating scales and Strengths and Difficulties questionnaire) are valuable adjuncts.</td>
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<td></td>
<td>- Observations (e.g., teachers at school) are useful when there is doubt about symptoms.</td>
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<tr>
<td>Citation</td>
<td>Content, Methods, Recommendations</td>
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<td></td>
<td>• Diagnosis must meet DSM criteria.</td>
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</tbody>
</table>

**References**

**Professional society guidelines/other:**


**Peer-reviewed references:**


**CMS National Coverage Determinations (NCDs):**

No NCDs identified as of the writing of this policy.

**Local Coverage Determinations (LCDs):**

No LCDs identified as of the writing of this policy.

**Commonly submitted codes**

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill in accordance with those manuals.

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>96111</td>
<td>Developmental testing, (includes assessment of motor, language, social, adaptive and/or cognitive functioning by standardized developmental instruments) with interpretation and report.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>ICD-10 Code</th>
<th>Description</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>F90.0</td>
<td>Attention-deficit hyperactivity disorder, predominantly inattentive type</td>
<td></td>
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<tr>
<td>F90.1</td>
<td>Attention-deficit hyperactivity disorder, predominantly hyperactive type</td>
<td></td>
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<tr>
<td>F90.2</td>
<td>Attention-deficit hyperactivity disorder, combined type</td>
<td></td>
</tr>
<tr>
<td>F90.8</td>
<td>Attention-deficit hyperactivity disorder, other type</td>
<td></td>
</tr>
<tr>
<td>ICD-10 Code</td>
<td>Description</td>
<td>Comment</td>
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<tr>
<td>F90.9</td>
<td>Attention-deficit hyperactivity disorder, unspecified type</td>
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<thead>
<tr>
<th>HCPCS Level II Code</th>
<th>Description</th>
<th>Comment</th>
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<tr>
<td>N/A</td>
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Appendix A

Table 1
ADHD consists of a pattern of behavior present in multiple settings where it gives rise to social, educational or work performance difficulties.

A. Either (A1) or (A2):

A1. Inattention
Six or more of the following symptoms of inattention have been present for at least six months to a degree that is inconsistent with developmental level and that impact directly on social and academic/occupational activities.

- Often does not give close attention to details or makes careless mistakes in schoolwork, work or other activities (e.g., overlooks or misses details, work is inaccurate).
- Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations or reading lengthy writings).
- Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- Often does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked; fails to finish schoolwork, household chores or tasks in the workplace).
- Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; poor time management; tends to fail to meet deadlines).
- Often avoids, dislikes or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms or reviewing lengthy papers).
- Often loses things needed for tasks and activities (e.g., school materials, pencils, books, tools, wallets, keys, paper work, eyeglasses or mobile telephones).
- Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- Is often forgetful in daily activities (e.g., chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

A2. Hyperactivity and impulsivity:
Six or more of the following symptoms of hyperactivity and impulsivity have been present for at least six months to a degree that is inconsistent with developmental level and that impact directly on social and academic/occupational activities.

Hyperactivity:
- Often fidgets with hands or feet or squirms in seat.
- Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, office or other workplace, or in other situations that require remaining seated).
- Often runs about or climbs in situations where it is inappropriate. (In adolescents or adults, may be limited to feeling restless.)
- Often unable to play or engage in leisure activities quietly.
- Is often “on the go” or often acts as if “driven by a motor” (e.g., is unable or uncomfortable being still for an extended time, as in restaurants, meetings, etc.; may be experienced by others as being restless and difficult to keep up with).
- Often talks excessively.
- Often blurts out answers before questions have been completed (e.g., completes people’s sentences and
h. Often has trouble waiting his or her turn (e.g., while waiting in line).

i. Often interrupts or intrudes on others (e.g., butts into conversations or games or activities; may start using other people’s things without asking or receiving permission; adolescents or adults may intrude into or take over what others are doing).

B. Some symptoms that cause impairment were present prior to age 12.

C. Criteria for the disorder are met in two or more settings (e.g., at home, school or work, with friends or relatives, or in other activities).

D. There must be clear evidence that the symptoms interfere with or reduce the quality of social, academic or occupational functioning.

E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better accounted for by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder or a personality disorder).

Specify based on current presentation:

Combined presentation: If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past six months.

Predominantly inattentive presentation: If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met and three or more symptoms from Criterion A2 have been present for the past six months.

Inattentive presentation (restrictive): If Criterion A1 (inattention) is met but no more than two symptoms from Criterion A2 (hyperactivity-impulsivity) have been present for the past six months.

Predominantly hyperactive/impulsive presentation: If Criterion A2 (hyperactivity-impulsivity) is met and Criterion A1 (inattention) is not met for the past six months.

Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, “in partial remission” should be specified.

ADHD not elsewhere classified may be coded in cases in which the individuals are below threshold for ADHD or for whom there is insufficient opportunity to verify all criteria. However, ADHD-related symptoms should be associated with impairment, and they are not better explained by any other mental disorder.