



The New England Comparative Effectiveness Public Advisory Council

**An Action Guide for ADHD: Next Steps for
Patients, Clinicians, and Insurers**

August 2012

Completed by:

The Institute for Clinical and Economic Review



Introduction

About this guide

Evidence from clinical effectiveness reviews is critical to judgments that patients, clinicians, and health insurers must make about treatment choices and coverage policies. Yet that evidence is often not translated in a way that is helpful to inform healthcare decisions. This document is a companion policy guide designed to help patients, clinicians, and insurers make use of the results of two reports: 1) the evidence review on treatment options for Attention Deficit Hyperactivity Disorder (ADHD) produced by the Agency for Healthcare Research and Quality (AHRQ)¹; and a supplementary report with additional data and analyses on ADHD treatment options developed by the Institute for Clinical and Economic Review (ICER). These two reports were used to support the deliberations of the New England Comparative Effectiveness Public Advisory Council (CEPAC) – an independent body that provides objective guidance on how information from federally produced evidence reviews can best be used by regional decision-makers to improve the quality and value of healthcare services.²

CEPAC held its meeting on ADHD treatment options on June 1, 2012. A full report summarizing the discussion and votes taken is available at: <http://cepac.icer-review.org/wp-content/uploads/2011/04/Final-ADHD-Meeting-Summary.pdf>. We have developed this action guide in order to provide a user-friendly overview of the CEPAC findings and an associated list of specific evidence-based action steps that patients, clinicians, and insurers can take to improve patient outcomes and the overall value of ADHD services. This information is being provided for informational purposes only.

A note on CEPAC evidence voting

Each public meeting of CEPAC involves deliberation and voting on key questions on the comparative clinical effectiveness of various treatment options discussed. When a majority of CEPAC votes that the evidence is adequate to demonstrate that an intervention produces patient outcomes equivalent or superior to a reference option, council members are also asked to vote on whether the intervention represent a “high”, “reasonable”, or “low” economic value. The value perspective that members of CEPAC are asked to assume is that of a state Medicaid making resource decisions within a fixed budget for care.

¹ The full AHRQ report can be accessed here: Charach A, et al. October 2011. Attention deficit hyperactivity disorder: effectiveness of treatment in at-risk pres-schoolers; long-term effectiveness in all ages; and variability in prevalence, diagnosis, and treatment; comparative effectiveness review No. 44. Rockville, MD: Agency for Healthcare Research and Quality; October 2011; Accessed July 19, 2012
[\[http://www.effectivehealthcare.ahrq.gov/ehc/products/191/818/CER44-ADHD_20111021.pdf\]](http://www.effectivehealthcare.ahrq.gov/ehc/products/191/818/CER44-ADHD_20111021.pdf)

² For more information on CEPAC, visit: <http://cepac.icer-review.org/>

Treatment Options for Children with ADHD

Background

The number of individuals diagnosed with ADHD has risen in recent years, and it is now regarded to be a common condition among children in the United States. While reported prevalence ranges widely between 6-16% depending on location and measurement technique (Pastor, 2008; Elder, 2010; Froehlich, 2007), it has been estimated that ADHD affects at least 5 million children aged 4-17 years in the U.S. (CDC, 2010). Over 2.5 times as many boys have a diagnosis of ADHD as girls (Froehlich, 2007; Pastor, 2008), and children from lower income families are at nearly double the risk of ADHD relative to those from higher income strata (Froehlich, 2007).

Presentation of ADHD symptoms is heterogeneous, and includes various subtypes as well as co-morbid psychiatric conditions. Subtypes are primarily defined as inattentive, hyperactive-impulsive, and a combination of the two (Elia, 2009). Other common and highly correlated disorders include oppositional defiant disorder (ODD), which involves disobedient, hostile, and defiant behavior toward authority figures (A.D.A.M. Medical Encyclopedia, 2012); and conduct disorders, which are often more serious and involve aggression toward people or animals, destruction of property, dishonesty, and other delinquent and/or criminal behavior (Lahey, 2000). These disorders are often grouped together as disruptive behavior disorders (DBD). In addition, children with ADHD often have substantial psychiatric comorbidity, including separation or other anxiety disorders, obsessive-compulsive disorder, and major depression (Ghanizadeh, 2009).

In the long term, a diagnosis of ADHD in children has been associated with poorer outcomes in social functioning (Hodgkins, 2012), academic performance (Galéra, 2009; Hodgkins, 2012), adolescent substance abuse (Hodgkins, 2012; Molina, 2007), and delinquent behavior (Hodgkins, 2012; Molina, 2007). The economic burden of ADHD has been estimated at over \$30 billion annually in the US, over 10% of which can be attributed to work loss of parents caring for affected children (Birnbaum, 2005).

Management options for children with ADHD

Parent Behavior Training

Parent behavior training involves individual or group training sessions which typically track progress through a training manual. Sessions generally last 1-2 hours per week over a treatment course of 8-20 weeks. Overarching objectives include management of problem behaviors and fostering of positive and caring parent-child relationships. While available programs differ somewhat in their approach, all utilize rewards and other non-punitive tools to modify child behavior. Manual-based programs known by their brand names include the Triple P – Positive Parenting Program®, The

Incredible Years® parenting program, and Parent-Child Interaction Therapy (see Action Steps for Patients for further details). Other programs exist, and may be delivered through interactive materials, individual or group-based sessions in a clinic setting, or telephone-based therapy discussions.

CEPAC Votes and Deliberation on Parent Behavior Training:

Preschoolers

- CEPAC unanimously voted that the evidence is adequate to demonstrate that parent behavior training is superior to usual care in improving the outcomes of preschoolers with ADHD.
- The majority of CEPAC also voted that parent behavior training for the parents of preschoolers with ADHD had high or reasonable value compared to usual care (5 high, 7 reasonable).
- Given the strength of evidence for parent behavior training, the uncertainty regarding appropriate diagnosis of ADHD in younger children, and potential long-term effects of medication, CEPAC indicated that parent behavior training is an appropriate first-line treatment for *most* preschoolers (medication may still be more appropriate as a first-line therapy for preschoolers with severe symptoms or certain psychiatric comorbidities).

Children Six and Older

- For children with ADHD over age six, a majority of CEPAC (9 to 4) voted that the evidence on the long-term risks and benefits was inadequate to demonstrate that parent behavior training was as good as or better than usual care.

Medication

Several stimulants are used in children of all ages for the treatment of ADHD symptoms. FDA-approved therapies evaluated in the AHRQ review include methylphenidate (e.g., Ritalin®), dextroamphetamine (e.g., Dexedrine®) and mixed amphetamine salts (Adderall®).

Methylphenidate is the oldest available medication, gaining FDA approval in 1955, followed by mixed amphetamine salts in 1960 and dextroamphetamine in the 1970s. Stimulants work to improve symptoms such as inattention, impulsivity, and hyperactivity by increasing and balancing levels of neurotransmitters in the brain (Mayo Clinic, 2011).

Other medications with FDA approval for use in ADHD include atomoxetine (Strattera®), a selective norepinephrine-reuptake inhibitor, and extended-release formulations of two alpha₂-agonists originally used as antihypertensive medications: guanfacine (Intuniv®) and clonidine (Kapvay™). Atomoxetine is widely considered to be a second-line agent following a trial of stimulant medication, but may be selected by parents choosing to avoid stimulant therapy or in patients with

current substance abuse problems as well as those at risk for future abuse (Pliszka, 2007). It has been suggested that patients with comorbidities like ODD or anxiety may also experience better efficacy with atomoxetine (Dell’Agnello, 2009; Geller, 2007).

CEPAC Votes and Deliberation on Medication:

Preschoolers

- A majority of CEPAC (10 to 3) voted that the evidence is adequate to demonstrate that methylphenidate is as good as or better than usual care (i.e. no specific ADHD management) for most preschoolers with ADHD or DBD. Other medications may be more appropriate in the presence of certain clinical indications, like tics, anxiety disorder, or potential diversion.
- The majority of CEPAC also voted that methylphenidate has high or reasonable value compared to usual care (6 High, 3 Reasonable, and 1 Abstain).

Children Six and Older

- CEPAC stipulated that the evidence is adequate to demonstrate that medication is better than usual care (i.e. no specific ADHD management) for treating ADHD in children over six.
- For this age group, a slight majority of CEPAC (7 to 6) voted that the evidence is adequate to demonstrate that other medications may be as effective as methylphenidate in treating ADHD, with CEPAC emphasizing the superiority of specific medications in treating certain subpopulations (like patients with tics). However, when addressing comparative value, a majority (5 to 2) of CEPAC voted that other medications had low long-term comparative value.

Combined therapy

Some clinical guidelines recommend combining behavioral therapies with medication in children with ADHD or DBD, particularly for children with psychiatric comorbidities or without supportive home environments. Behavioral therapies can include parent behavior training, school-based interventions, or other forms of therapy, which can combine behavioral and psychosocial approaches. Behavioral therapy is comprised of techniques designed to change the physical and social environment of a child with ADHD through utilization of reward systems for positive behaviors and consequences for undesirable behaviors (Subcommittee-AAP, 2011; Rader, 2009). Psychosocial therapy addresses the emotions and thought processes involved in destructive behaviors (Subcommittee-AAP, 2001), and may consist of individual psychotherapy, play therapy, or cognitive behavioral therapy (Pelham, 1998). These therapeutic approaches may be utilized alone or as a part of a multimodal program that may also include parent training, social skills training, traditional psychotherapy, and school-based interventions (see following page).

CEPAC Votes and Deliberation on Combined Behavioral and Medication

Therapy:

Preschoolers

- For children under six, a majority of CEPAC (10 to 3) voted that evidence on long-term benefits and harms is inadequate to demonstrate that medication combined with behavioral/psychosocial interventions (including parent behavior training) is as good as or better than medication alone in treating ADHD or DBD.

Children Six and Older

- For children over six, a majority of CEPAC (10 to 2) voted that the evidence is adequate to demonstrate that medication combined with psychosocial interventions (including parent behavior training) is better than medication alone. CEPAC members were split evenly on deciding whether combination therapy had low, reasonable or high value.

School-based interventions

Multiple school-based interventions exist for ADHD, including classroom-based special education services, individualized student training, and specialized teacher training to develop strategies of behavior modification (Antshel, 2011). Specialized classroom environments utilize teachers and aides specifically trained and supervised by child psychologists, employing behavioral methods and unique treatment curriculums (Barkley, 2000). Use of communication tools such as daily school behavior report cards facilitates communications with parents regarding behavioral trends in children (Antshel, 2011). Positive reinforcement, peer-tutoring, and organizational skills training are other school-based approaches for children with ADHD (Antshel, 2011).

CEPAC Deliberation on School-based Interventions

Though CEPAC did not formally vote on long-term effectiveness of school-based interventions, the council acknowledged that school-based interventions are an especially important component of ADHD treatment, as they may provide the only access to behavioral/psychosocial interventions for low-income and/or rural patients.

Action Steps for Patients and Caregivers

If your child has been diagnosed with ADHD, the following steps are designed to help you make choices about the various ADHD treatment options for your child, based on the best available evidence.

1. Become an expert: learn as much as you can about the various treatment options for ADHD.

This guide outlines the major approaches to ADHD treatment: parent-behavior training, medication, and combined therapies (e.g. medication plus behavioral therapies, such as parent behavior training, school-based interventions, or other behavioral interventions).

2. Discuss these treatment options with your doctor, identifying the pros and cons of each treatment option, and the most important risks and benefits for your child.

The AHRQ consumer summary provides an overview of the different types of ADHD treatment and their associated costs, with information on how to discuss with your child's doctor the various treatment options for ADHD.

This summary can be accessed online at

http://www.effectivehealthcare.ahrq.gov/ehc/products/191/1148/adhd_con_fin_to_post.pdf,

or you can order free print copies by calling 800-358-9295.

3. Talk to your child's teacher about your child's diagnosis and treatment plan, and discuss any school-based interventions that are available in your community.

School-based interventions can be effective in helping some children with ADHD decrease disruptive behavior and improve work productivity, especially in communities where other behavioral interventions are not available.

4. If considering medication, ask your doctor about any generic options that are available, and call your health insurance plan about the different out-of-pocket costs associated with each.

Many medicines for ADHD work equally well, but differ in value. Talk to your doctor about which medication options have the highest value for your child, given your child's individual needs.

5. If considering parent-behavior training, seek out therapists who use a certified approach.

A major obstacle in accessing appropriate ADHD treatment is the limited availability of qualified therapists that provide behavioral/psychosocial services, such as parent behavior training, in many geographical areas.

The list on page 10 of certified parent behavior training providers is designed to help parents and caregivers with young children locate providers for parent behavior training in their area. All programs are designed to help parents manage behavior through rewards and non-punitive strategies and by fostering a positive and caring parent-child relationship.

Note: these are the “branded” parent behavior training programs; many mental health providers are trained to offer parent behavior training but do not get certified or accredited by these groups.

- 6. Keep a journal that tracks your child’s progress with treatment. Bring this journal with you to your child’s appointments and discuss with your doctor any changes over time.**

Parent Behavior Training Resource List

Program	Description	Cost	Availability	Insurance Coverage
<p>Triple P – Positive Parenting Program ® http://www.triplep.net/</p>	<ul style="list-style-type: none"> • Parents meet individually with a practitioner for 1-1.5 hrs for 10-12 weeks • Program focuses on teaching parents 17 core child management strategies to promote child development and help manage misbehavior • Parents also do self-directed study with “homework” from workbooks that help them set and monitor their own goals • Several of the sessions take place in the home • Accreditation offered to professional practitioners with post-secondary qualifications in health, education, or social services with knowledge of child/adolescent development and experience working with families; not all providers are licensed mental health practitioners 	<p>Costs of the program are determined by the providers</p> <p>Options include: -Flat rate -Coverage by insurance -Costs built into overall budget with services provided free to the community</p>	<p>Accreditation available from Triple P</p> <p>Website claims 20,000 practitioners worldwide</p> <p>146 providers in New England, but no specific information provided by program: <u>Connecticut:</u> 39 (mostly in the Lower Naugatuck Valley) <u>Maine:</u> 38 (practitioners are spread across the state) <u>Massachusetts:</u> 51 (mostly in Springfield and Boston) <u>New Hampshire:</u> 17 (mostly in Groveton and Gorham) <u>Rhode Island:</u> 0 <u>Vermont:</u> 1</p>	<p>For the ADHD and DBD program, most providers are able to bill private insurance and get reimbursed as if it was a “typical” mental health visit; for those Triple P providers that do not accept insurance, costs are out-of-pocket for parents.</p>

<p>The Incredible Years® parenting program (IYPP) http://www.incredibleyears.com/</p>	<ul style="list-style-type: none"> • Group sessions for parents run by two specially trained leaders for 12, 2-2.5 hour weekly sessions for 10-14 participants – components of the Basic parent program are: <ul style="list-style-type: none"> ○ Program 1 - Strengthening Children's Social Skills, Emotional Regulation and School Readiness Skills ○ Program 2 - Using Praise and Incentives to Encourage Cooperative Behavior ○ Program 3 - Positive Discipline - Rules, Routines and Effective Limit Setting ○ Program 4 - Positive Discipline - Handling Misbehavior • Emphasizes parenting skills to promote children’s social competence and to reduce behavior problems, and it teaches parents how to play with children, help children to learn, give effective praise and incentives, use limit-setting, and handle misbehavior. • Leaders are from many disciplines, including counseling, social work, psychology, psychiatry, nursing, and education and have training in child development, behavior management and group process. • Leaders are trained and accredited from 	<p>Costs for group parenting estimated at \$500/per parent for a full session</p>	<p>Certification available from Incredible Years organization</p> <p>Training is not required for purchase of program</p> <p>Requested but did not receive any information regarding providers in New England</p>	<p>No evidence of insurance coverage found – some private insurers may cover the cost</p>
--	---	---	---	---

	the Incredible Years organization			
Parent-Child Interaction Therapy (PCIT) http://pcit.phhp.ufl.edu/	<ul style="list-style-type: none"> Based on a clinician’s guide developed in 1995 by Hembree-Kigin and McNeil Parents and child meet individually with a practitioner (often behind a one-way mirror giving tips via wireless microphone to the parent) for “special playtime” where parents are taught skills to modify unwanted behavior to be deployed during playtime – known as Relationship Enhancement Parents also learn “discipline skills” where parents are taught behavior management strategies – known as Child Management Sessions continue until the parent has mastered the skills and the child is in the normal range on a behavior-rating scale; typically 12-20 weekly sessions (1-2 hr sessions) Practitioners must have at least a Masters degree in a mental health field 	Based on rates set by the practitioner; some practices claim \$150+ per session for a total of \$1800-3000 per course of treatment	Official therapist certification is under development, but to date there is no official certification process. The following providers are confirmed to have received training in PCIT: Massachusetts: Jami Furr, PhD Jon Comer, PhD Donna Pincus, PhD New York: Melanie Fernandez, PhD, ABPP Steven Kurtz, PhD, ABPP Phyllis Ohr, PhD Katherine Gibson, PhD Hayley Cooper, PhD	Some practitioners aid parents in filing paperwork for reimbursement; some claim that PCIT is often covered under insurance plans as family therapy or as individual child psychotherapy if the practitioner is covered by the insurance company; many practitioners offer sliding scale fees
Helping the Non-Compliant Child	<ul style="list-style-type: none"> For parents of 3 to 8 year old children who have difficulty following directions, are aggressive, and display other disruptive behaviors Program focuses on changing the parent-child interaction by teaching parents more 	N/A	Available at: The Behavior Therapy and Psychotherapy Center, University of Vermont, 2 Colchester Avenue, Burlington, Vermont 05405-0134,	Typically covered by private insurance

	<p>effective ways to interact with their children, including providing attention to appropriate behavior, issuing effective instructions, and using disciplinary strategies that work</p>		<p>(802) 656-2661</p> <p>The following clinics may also have providers available trained in the program:</p> <p>MA: Greater Boston Family Services, 31 Heath Street, Jamaica, Plain, MA 02130, (617) 523-6400</p> <p>NH: Sarah D. Stearns, Ph.D., Geisel School of Medicine at Dartmouth, Dartmouth-Hitchcock Psychiatric Associates, One Medical Center Drive, Lebanon, NH 03756-0001, (800) 556-6249</p> <p>Community Partners, Dover, NH, (603) 749-4015</p> <p>Manchester Mental Health Center, Manchester, NH, (603)</p>	
--	---	--	---	--

			<p>668-4111</p> <p>Seacoast Mental Health Center, Portsmouth, NH, (603) 431-6703</p> <p>West Central Behavioral Health, Lebanon, NH, (603) 448-0126</p> <p>Genesis Behavioral Health, Laconia, NH, (603) 524-1100</p> <p>Monadnock Family Services, Keene, NH, (603) 357-4400</p> <p>Greater Nashua Mental Health Center, Nashua, NH, (603) 889-6147</p> <p>Northern Human Services, Conway, NH, (603) 447-3347</p> <p>Center for Life Management, Derry, NH, (603) 434-1577</p> <p>Riverbend Community</p>	
--	--	--	---	--

			Mental Health, Concord, NH, (603) 228-1551 VT: Northwestern Counseling and Support Services, Inc, St. Albans, VT, (802) 524-6554	
--	--	--	--	--

Action Steps for Clinicians

If you are a clinician treating a patient with ADHD, the following steps are designed to help you develop a treatment plan that incorporates the best available evidence.

1. Use an evidence-based approach to diagnosis, using appropriate diagnostic criteria including the ruling out of comorbid conditions such as obstructive sleep apnea.

Clinical guidelines are available from the following medical societies, which outline evidence-based approaches to diagnosis and treatment for children with ADHD:

- American Academy of Child and Adolescent Psychiatry (2007):
http://www.aacap.org/galleries/PracticeParameters/JAACAP_ADHD_2007.pdf
- American Academy of Pediatrics (2011):
<http://pediatrics.aappublications.org/content/early/2011/10/14/peds.2011-2654.full.pdf+html>
- Institute for Clinical Systems Improvement (2012)
http://www.icsi.org/guidelines_and_more/gloss_prot/behavioral_health/adhd/adhd_in_primary_care_for_children_adolescents_diagnosis_and_management_of.html
- National Institute for Health and Clinical Excellence (2009):
<http://www.nice.org.uk/nicemedia/live/12061/42060/42060.pdf>
- Preschool Psychopharmacology Working Group (2007):
http://resources.childhealthcare.org/resources/Psychopharm_for_very_young_children_context_and_guidelines.pdf

2. Discuss all relevant risks and benefits of treatment options with parents.

The AHRQ Clinician Research Summary on ADHD summarizes the evidence on the comparative clinical effectiveness of the various treatment options for ADHD, and gives information on what to communicate to patients and their caregivers when discussing various treatment options.

This research summary for clinicians is available at

http://effectivehealthcare.ahrq.gov/ehc/products/191/1149/adhd_clin_fin_to_post.pdf.

3. Seek opportunities for collaborative co-management of patients between primary care and specialty care, particularly for complex patients or those who do not respond adequately to initial treatment.

4. Use consistent outcomes measures throughout the course of treatment in order to evaluate your patient's response to treatment.

5. **For patients under the age of 6, consider parent behavior training as a first-line therapy unless the patient’s symptoms are so severe to necessitate medication, or the caregiver is unable or unwilling to participate in behavioral therapy.**
6. **When a patient under 6 requires medication, consider prescribing methylphenidate as a first-line treatment except in the presence of certain clinical indications, like tics, anxiety disorder, and potential for diversion. Avoid the use of antipsychotics, and consider seeking consultation with a specialist before starting a second medication in a patient “not responding” to an initial drug choice.**
7. **For all patients who begin medication, ensure that doses are appropriately titrated on a regular basis to achieve optimum benefits. Evidence suggests that many patients are underdosed or overdosed.**
8. **When referring patients and their families for parent behavior training, select therapists offering an evidence-based approach and use available CPT codes for billing.**

A list of parent behavior training providers throughout New England is available on page 9.

Anecdotal evidence suggests that providers are often required to give parents a diagnosis in order to receive reimbursement for parent behavior training. Two CPT codes that may be helpful to providers billing for parent behavior training programs for when the patient is or is not present are:

90846: Family psychotherapy, without the patient present

90847: Family psychotherapy (conjoint psychotherapy), with patient present

Most insurers allow for both codes to be billed on the same date of service for traditional/commercial business, but individual plans may vary. It is important to note that these codes may only be used for individual parent behavior training sessions, and not for families participating in parent behavior training as a group.

Action Steps for Payers

The following steps are designed to help payers develop policies that incentivize the use of evidence-based treatment options for ADHD:

- 1. Create and support payment structures that encourage innovative collaboration between primary care and specialty care, such as co-management of patients via telepsychiatry.**
- 2. Heighten efforts to reduce administrative burden for clinicians seeking exceptions from clinical policies for clinically appropriate reasons.**
- 3. Maintain or strengthen medical policies that discourage the use of antipsychotics and other agents that lack evidence to support their effectiveness in children with ADHD.**
- 4. Maintain or strengthen medical policies that incentivize the use of methylphenidate as a first-line treatment for patients with ADHD or DBD requiring medication.**

Based on the findings of the Agency for Healthcare Research and Quality (AHRQ) review and CEPAC votes on the comparative clinical effectiveness and value of other medications compared to methylphenidate, payers may consider designing medical policies that incentivize the use of methylphenidate as a first-line treatment for patients with ADHD or DBD requiring medication.

ICER did not find an example of any medical policy or formulary for ADHD medications from the major national or regional payers that required patients to fail methylphenidate first before receiving reimbursement for other ADHD medications. The following medical policies are provided as a reference, as they currently reimburse methylphenidate without restriction and could be adapted to encourage first-line use of methylphenidate over other ADHD medications.

Blue Cross Blue Shield of Rhode Island

https://www.bcbsri.com/sites/default/files/documents/Preferred_Drug_List_pdf.pdf

Tier 1 Coverage	dexamethylphenidate, dextroamphetamine, methylphenidate/ER
Tier 2 Coverage	mixed amphetamine salts/ER, Focalin XR, Concerta, Straterra
Tier 3 Coverage	Adderall XR, Concerta, Daytrana, Metadate CD, Vyvanse

Tufts Health Plan

http://www.tuftshealthplan.com/providers/pdf/pharmacy_criteria/MedicationsforADHD.pdf

Step-1 therapies: covered without prior authorization)	mixed amphetamine salts, Adderall, dexamethylphenidate, dextroamphetamine, Metadate ER, methylphenidate/ER, methamphetamine, Methylin/ER
Step- 2 therapies: coverage requires documentation of 30-day trial with one of the Step-1 or Step-2 medications within the previous 180 days	Adderall XR, Concerta, Daytrana, Focalin XR, Metadate CD, Procentra, Ritalin, Ritalin DR, Vyvanse, Ritalin LA

MassHealth (Massachusetts Medicaid)

<https://masshealthdruglist.ehs.state.ma.us/MHDL/pubtheradetail.do?id=31>

All ADHD medications require prior authorization above established quantity limits (>60 units/month for long-acting agents, >90 units/month for shot- to intermediate acting agents).

The following medications have additional prior authorization requirements:

Adderall XR (amphetamine salts ER)	Documentation of inadequate response (≥ 7 days of therapy) or an adverse response to a generic equivalents; and one of the following: <ul style="list-style-type: none"> • Inadequate response to a long-acting methylphenidate • Adverse reaction to a long or short-acting methylphenidate Requested quantity must be ≤ 60 tablets/30 days.
Concerta ER (methylphenidate ER)	Documentation of inadequate response or an adverse response to a generic equivalents; and one of the following: <ul style="list-style-type: none"> • Inadequate response to a long-acting amphetamine • Adverse reaction to a long or short-acting amphetamine Requested quantity must be ≤ 60 tablets/30 days.
Daytrana (methylphenidate transdermal)	Documentation of medical rationale for use in a member that is < 6 years or ≥ 18 years old
Desoxyn (methamphetamine)	Documentation of diagnosis of ADHD and an adverse reaction or inadequate response to all other stimulant or non-stimulant medications
Intuniv (guanfacine extended-release)	Documentation of the following: <ul style="list-style-type: none"> • Diagnosis of ADHD; and • Inadequate response or adverse reaction to immediate-release guanfacine; and

	<ul style="list-style-type: none"> • Inadequate response, adverse reactions, or contraindication to atomoxetine (Strattera); <p>And one of the following:</p> <ul style="list-style-type: none"> • Inadequate response to a long-acting amphetamine; or • Adverse reaction to a long or short-acting amphetamine <p>Member must be ≥ 6 years old and requested quantity must be ≤ 30 tablets/30 days</p>
Kapvay (clonidine ER)	<p>Documentation of the following:</p> <ul style="list-style-type: none"> • Diagnosis of ADHD; and • Inadequate response or adverse reaction to immediate-release clonidine; and • Inadequate response, adverse reactions, or contraindication to atomoxetine (Strattera); <p>And one of the following:</p> <ul style="list-style-type: none"> • Inadequate response to a long-acting methylphenidate; or • Adverse reaction or contraindication to a long- or short-acting methylphenidate <p>And one of the following:</p> <ul style="list-style-type: none"> • Inadequate response to a long-acting amphetamine; or • Adverse reaction to a long or short-acting amphetamine <p>Member must be ≥ 6 years old.</p>
Strattera (atomoxetine)	<p>Documentation of the following is required:</p> <ul style="list-style-type: none"> • An adverse reaction or contraindication to a methylphenidate and/or amphetamine product; or • An inadequate response to a methylphenidate and an amphetamine product; or • The member (≤ 18 years of age) or immediate family member in household has a history of substance abuse; or • For adults (≥ 19 years of age) with a history of substance abuse, documentation must be provided regarding an inadequate response (defined as ≥ 14 days of therapy) or an adverse reaction to a non-stimulant medication such as a tricyclic antidepressant or bupropion

Harvard Pilgrim Health Care

https://www.harvardpilgrim.org/pls/ext/f?p=768:27:3346366082004122::NO:RP:P27_PDF:T3DrugListByCategory

Tier 1 Coverage	mixed amphetamine salts/SR, dexamethylphenidate, dextroamphetamine/SA, methylphenidate/ER/SR/solution, Methylin/ER
Tier 2 Coverage	Vyvanse, Focalin XR, Metadate CD/ER
Tier 3 Coverage	Adderall/ XR, Dexedrine Spansule, Concerta, Daytrana, Focalin, Methylin (chew tab, solution), Ritalin/LA/SR, Strattera, Kapvay

References

1. A.D.A.M. medical encyclopedia. Oppositional defiant disorder. Atlanta: A.D.A.M., Inc.; c2012. <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002504/>. Accessed April, 2012.
2. Antshel, KM, Hargrave TM, Simonescu M, Kaul P, Hendricks K, Faraone SV. Advances in understanding and treating ADHD. *BMC Med.* 2011;9:72.
3. Agency for Healthcare Research and Quality. Treatment options for ADHD in children and teens: A Review of research for patients and caregivers. http://www.effectivehealthcare.ahrq.gov/ehc/products/191/1148/adhd_con_fin_to_post.pdf. Accessed June, 2012.
4. Birnbaum HG, Kessler RC, Lowe SW, et al. Costs of attention deficit disorder (ADHD) in the US: excess costs of persons with ADHD and their family members in 2000. *Curr Med Res Opin.* 2005;21(2):195-205.
5. Blue Cross Blue Shield of Rhode Island. Plans & Services: Pharmacy: Preferred drug list: Three tier commercial premier formulary guide. https://www.bcbsri.com/BCBSRIWeb/plansandservices/plans/Preferred_Drug_List.pdf. Accessed April, 2012.
6. Centers for Disease Control and Prevention. National Center on Birth Defects and Developmental Disabilities: Attention-deficit/hyperactivity disorder (ADHD): Data & statistics: Diagnosis data. <http://www.cdc.gov/ncbddd/adhd/prevalence.html>. Accessed April, 2012.
7. Commonwealth of Massachusetts. MassHealth Drug List: Therapeutic class tables: Table 31: Cerebral stimulants and miscellaneous agents. <https://masshealthdruglist.ehs.state.ma.us/MHDL/pubtheradetail.do?id=19&drugId=60>. Accessed April, 2012.
8. Charach A, Dashti B, Carson P, et al. Attention deficit hyperactivity disorder: effectiveness of treatment in at-risk preschoolers; long-term effectiveness in all ages; and variability in prevalence, diagnosis and treatment; comparative effectiveness review No. 44. Rockville, MD: Agency for Healthcare Research and Quality; 2011; 12-EHC003-EF.
9. Dell'Agnello G, Zuddas A, Masi G, Curatolo P, Besana D, Rossi A. Use of atomoxetine in patients with attention-deficit hyperactivity disorder and co-morbid conditions. *CNS Drugs.* 2009;23(9):739-753.

10. Elder TE. The importance of relative standards in ADHD diagnoses: evidence based on exact birth dates. *J Health Econ.* 2010;29(5):641-656.
11. Elia J, Arcos-Burgos M, Bolton KL, Ambrosini PJ, Berrettini W, Muenke M. ADHD latent class clusters: DSM-IV subtypes and comorbidity. *Psychiatry Res.* 2009;170:192-198.
12. Froehlich TE, Lanphear BP, Epstein JN, Barbaresi WJ, Katusic SK, Khan RS. Prevalence, recognition, and treatment of attention-deficit/hyperactivity disorder in a national sample of US children. *Arch Pediatr Adolesc Med.* 2007;161(9):857-864.
13. Galéra C, Melchior M, Chastang JF, Bouvard MP, Fombonne E. Childhood and adolescent hyperactivity-inattention symptoms and academic achievement 8 years later: the GAZEL Youth study. *Psychol Med.* 2009;39(11):1895-1906.
14. Ghanizadeh A. Psychiatric comorbidity differences in clinic-referred children and adolescents with ADHD according to the subtypes and gender. *J Child Neurol.* 2009;24(6):679-684.
15. Harvard Pilgrim Health Care. For Providers: Drug tier look-up. https://www.harvardpilgrim.org/pls/ext/f?p=768:27:6775417181878733::NO:RP:P27_PDF:T3DrugListByCategory. Accessed April, 2012.
16. Hodgkins P, Arnold LE, Shaw M, et al. A systematic review of global publication trends regarding long-term outcomes of ADHD. *Front Psychiatry.* 2012;2:art 84.
17. Lahey BB, Schwab-Stone M, Goodman SH, et al. Age and gender differences in oppositional behavior and conduct problems: a cross-sectional household study of middle childhood and adolescence. *J Abnorm Psychol.* 2000;109(3):488-503.
18. Mayo Foundation for Medical Education and Research. Diseases and conditions: Attention-deficit/hyperactivity disorder (ADHD) in children. <http://www.mayoclinic.com/health/adhd/DS00275>. Accessed April, 2012.
19. Molina BSG, Flory K, Hinshaw SP, et al. Delinquent behavior and emerging substance use in the MTA at 36 months: prevalence, course, and treatment effects. *J Am Acad Child Adolesc Psychiatry.* 2007;46(8):1028-1040.
20. National Institute for Health and Clinical Excellence (NICE). Attention deficit hyperactivity disorder (ADHD): full guideline. <http://www.nice.org.uk/CG072fullguideline>. Accessed April, 2012.
21. Parent-Child Interaction Therapy (PCIT). <http://pcit.php.ufl.edu/>. Accessed April, 2012.

22. Pastor PN, Reuben CA. Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004–2006. National Center for Health Statistics. *Vital Health Stat* 10(237). 2008.
23. Pelham WE, Foster EM, Robb JA. The economic impact of attention-deficit/hyperactivity disorder in children and adolescents. *J Pediatr Psychol*. 2007;32(6):711-727.
24. Pliszka S, et al. for the AACAP Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry*. 2007;46(7):894-921.
25. Rader R, McCauley L, Callen EC. Current strategies in the diagnosis and treatment of childhood attention-deficit/hyperactivity disorder. *Am Fam Physician*. 2009;79 (8):657-665.
26. Subcommittee on Attention-Deficit/Hyperactivity Disorder, Steering Committee on Quality Improvement and Management. ADHD: clinical practice guideline for the diagnosis, evaluation and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*; 2011;128(5):1007-1022.
27. The Incredible Years® Parents, teachers and children training series. <http://www.incredibleyears.com/>. Accessed April, 2012.
28. Institute for Clinical and Economic Review. Attention deficit hyperactivity disorder: effectiveness of treatment in at-risk preschoolers and long-term effectiveness in all ages. Supplementary data and analyses to the comparative effectiveness review of the Agency for Healthcare Research and Quality. Boston: Institute for Clinical and Economic Review. <http://cepac.icer-review.org/wp-content/uploads/2011/04/Final-MASTER-Report-6.26.20123.pdf>
29. Tufts Health Plan. Providers: Pharmacy: Commercial: Pharmacy medical necessity guidelines. http://www.tuftshealthplan.com/providers/pdf/pharmacy_criteria/MedicationsforADHD.pdf. Accessed April, 2012.
30. Triple-P Positive Parenting Program. <http://www.triplep.net/>. Accessed April, 2012.