3.5 ADHD

SURVEILLANCE FOR **ADHD**:

- EXCESSIVE activity for developmental level, and/or interrupts/intrudes, distractibility, fails to finish work, gets overly excited/upset, fearless, inconsistent performance, unsafe, aggressive
- Symptoms are present in 2 or more settings and cause impairment

- Is child younger or older than ages of 6-12?
- Has child had significant traumatic changes (e.g., foster care, death) in last 6 months?
- Is there an existing diagnosis (e.g., Autism, ID, seizures, visual or hearing impairment)?

YES → **See special circumstances:** preschool, adolescent, Autism or DD, seizures

FOCUSED SCREEN FOR ADHD:
Vanderbilt rating scales to caregiver(s) and teacher

POSITIVE SCREEN ON VANDERBILT =

- score of 2/3 on 6 of 9 items on Q1-9 **and/or** Q10-18; **AND**
- evidence of impairment

Negative screen

CONSIDER OTHER DIAGNOSES

- Hearing, vision, lead level, learning problems or dev delays, brain injury, seizure disorder, primary sleep disorder, history of extreme prematurity, prenatal substances, anxiety/ depression is primary problem, early ACES, or trauma in last 6 months
- Consider more general screener (PSC-17, PHQ-9)
- Treat as if "MILD" if parent concerns; provide psychoeducation

Positive screen

SEVERITY

MILD / PRESCHOOL AGE
not impairing in school;
or only single setting problem;
or does not meet DSM-5

- Parent Behavior Management Training (PBMT)
- School interventions: daily report card
- Parent: education (see chadd.org/)
- Child: skills of self-regulation, social skills
- Review non-med approaches below

MODERATE / SEVERE
with no evidence of substance use in caregiver or patient

All items in Mild PLUS:

- Behavior therapy
- Discuss medication: parentsmedguide.org
- Start medication: titrate up to treat target symptoms
- Med follow-up in 2-4 weeks

MODERATE / SEVERE WITH SUBSTANCE USE IN CAREGIVER OR PATIENT
(see special circumstances)

All items in Mild PLUS:

- Behavior therapy
- Discuss medication: parentsmedguide.org
- If concerned for diversion, see special circumstances
- Consider VMAP consult or psychiatry referral

NON-MED APPROACHES

- www.nccih.nih.gov/
- Omega-3 (mild + effect)
- Limit dyes (min + effect)
- Improve sleep
- Exercise
- Parent education/behavior therapy
- Self-regulation
- Mindfulness
- Daily report cards at school

IMPROVED?

- Monitor every 3-6 months: HT, WT, BP, HR, tics, side effects
- Consider ADHD monitoring forms

NOT IMPROVED?

- Repeat Vanderbilts
- Trial of other stimulant or XR version of immediate release **OR** trial of non-stimulant
- Monitor trials with rating scales
- Reconsider dual diagnosis
- Consider VMAP consult or psychiatry referral

SIDE EFFECTS of medication?
See provider tips

- Decreased appetite
- Insomnia
- Tics
- Irritability
- Wears off too fast
- Consider VMAP call if persists

ADHD SPECIAL CIRCUMSTANCES

Dual diagnoses increase complexity: VMAP Consultation Line can help with your complex ADHD questions

PRESCHOOL: Under age 4, unlikely to meet full criteria for DSM-5. Sub-Types of ADHD — primary inattentive type (PIT), hyperactive type (HA), combined type (CT) — not reliable under age 6. Usually hyperactivity-impulsive behaviors. Behavioral management first. Consider specialist referral.

- Based on evidence in preschoolers, consider trial of MPH-IR: 2.5-5mg after breakfast and titrate to 2.5-5mg bid after breakfast and lunch. Target dose is often 7.5-10mg bid.
- May consider alpha agonist (e.g., guanfacine) for impairing behaviors (i.e., aggression, dysregulated anger): start at 0.5mg nightly, increase to 0.5mg bid/1mg nightly. Generally, total dose is less than 3-4mg/24hr. May crush immediate release guanfacine but not extended release guanfacine.

ADOLESCENCE (age 12-18): symptoms should have been present and impairing under age 12. Strongly consider a psychologist referral/neuropsychometric or psychoeducational testing if initial presentation is after age 12. Screen for Anxiety, Depression, Substance Use, Learning Disability, Autism. Gather collateral information from school: time management, organization difficulties, and inconsistency are common. May start with a long-acting stimulant.

AUTISM or other Developmental Disability: Dual diagnosis permitted since DSM-5 (2013). Typically follow PRESCHOOL model of START LOW and GO SLOW. Children with autism may have inattentive and distracted behavior due to their autism. They may have hyperactivity due to their stereotopies and sensory needs. If they have co-existing and impairing IMPULSIVITY, pursue dual diagnosis of ADHD in setting of Autism.

With ANXIETY: Anxiety and ADHD often co-exist (30%). Vanderbilts have anxiety questions that will help.

- Initiating BEHAVIOR THERAPY first may be a good choice, then treat residual ADHD symptoms with medication.
- MOST OFTEN, children present with impairing ADHD symptoms and some anxiety symptoms, and starting a ADHD medication helps both! Sometimes starting stimulants can aggravate anxiety symptoms. A second line medication is Atomoxetine for ADHD + Anxiety (though it often works best in kids with minimal hyperactivity symptoms).

SUBSTANCE USE or diversion concerns in patient or family: 15% of youth with ADHD have a co-occurring SUD. If using a stimulant, use a long-acting formulation with parent or school administration/supervision. Trial of non-stimulant such as Atomoxetine or Wellbutrin may be appropriate for youth, along with SUD therapy. Frequent requests to change meds, add additional doses, losing scripts, etc. should increase suspicion. Counsel older youth on risks of sharing meds. Check Virginia PDMP (+/- multi-state search) regularly.

TICS: 20% of kids with ADHD have tics. 50% of kids with tics have ADHD. ADHD meds do not cause or worsen tics. Guanfacine and Clonidine can sometimes decrease tics and, added to ADHD medication, may help. Learn more: ADHD and Tics: Is There a Connection? | Understood — For learning and thinking differences.

SEIZURES: Taking ADHD medication does not increase risk of seizures in patients with/without epilepsy. Use of stimulant medication with seizure medication is appropriate. It may be advisable to use once daily anti-convulsant in PM and once daily stimulant in AM.

INTEREST IN MILITARY SERVICE: While ADHD alone does not disqualify a person from military service, the Department of Defense (DoD) places significant enlistment restrictions on individuals with an ADHD diagnosis and/or prior treatment with stimulant medication. In 2018, ADHD was considered a DoD disqualifying condition if an applicant: was prescribed medication to treat ADHD in the last two years; was recommended or prescribed an IEP or 504 Plan, or work accommodations after age 14; has a history of comorbid mental disorders; has documentation of adverse academic, occupational, or work performance. Individuals with ADHD need a medical waiver to be able to enlist if they meet these points, with the branches typically requiring that applicants be off medication for several months and have evidence they can function at school or in a job without impairment off medication.

VANDERBILT ADHD DIAGNOSTIC PARENT RATING SCALE

Child's Name: _____ Parent's Name:_____

Today's Date: _____ Date of Birth:_____ Age:_____

Directions: Each rating should be considered in the context of what is appropriate for the age of your child. When completing this form, please think about your child's behaviors in the past 6 months.

Is this evaluation based on a time when this child: ☐ was on medication ☐ was not on medication ☐ not sure

Behavior	Never	Occasionally	Often	Very Often
1. Does not pay attention to details or makes careless mistakes with, for example, homework	0	1	2	3
2. Has difficulty keeping attention to what needs to be done	0	1	2	3
3. Does not seem to listen when spoken to directly	0	1	2	3
4. Does not follow through when given directions and fails to finish activities (not due to refusal or failure to understand)	0	1	2	3
5. Has difficulty organizing tasks and activities	0	1	2	3
6. Avoids, dislikes, or does not want to start tasks that require ongoing mental effort	0	1	2	3
7. Loses things necessary for tasks or activities (toys, assignments, pencils, books)	0	1	2	3
8. Is easily distracted by noises or other stimuli	0	1	2	3
9. Is forgetful in daily activities	0	1	2	3
10. Fidgets with hands or feet or squirms in seat	0	1	2	3
11. Leaves seat when remaining seated is expected	0	1	2	3
12. Runs about or climbs too much when remaining seated is expected	0	1	2	3
13. Has difficulty playing or beginning quiet play games	0	1	2	3
14. Is "on the go" or often acts as if "driven by a motor"	0	1	2	3
15. Talks too much	0	1	2	3
16. Blurts out answers before questions have been completed	0	1	2	3
17. Has difficulty waiting his or her turn	0	1	2	3
18. Interrupts or intrudes in on others' conversations and/or activities	0	1	2	3
19. Argues with adults	0	1	2	3
20. Loses temper	0	1	2	3
21. Actively defies or refuses to go along with adults' requests or rules	0	1	2	3
22. Deliberately annoys people	0	1	2	3
23. Blames others for his or her mistakes or misbehaviors	0	1	2	3
24. Is touchy or easily annoyed by others	0	1	2	3
25. Is angry or resentful	0	1	2	3
26. Is spiteful and wants to get even	0	1	2	3
27. Bullies, threatens, or intimidates others	0	1	2	3
28. Starts physical fights	0	1	2	3
29. Lies to get out of trouble or to avoid obligations (i.e., "cons" others)	0	1	2	3
30. Is truant from school (skips school) without permission	0	1	2	3
31. Is physically cruel to people	0	1	2	3
32. Has stolen things that have value	0	1	2	3
33. Deliberately destroys others' property	0	1	2	3
34. Has used a weapon that can cause serious harm (bat, knife, brick, gun)	0	1	2	3
35. Is physically cruel to animals	0	1	2	3

Behavior	Never	Occasionally	Often	Very Often
36. Has deliberately set fires to cause damage	0	1	2	3
37. Has broken into someone else's home, business, or car	0	1	2	3
38. Has stayed out at night without permission	0	1	2	3
39. Has run away from home overnight	0	1	2	3
40. Has forced someone into sexual activity	0	1	2	3
41. Is fearful, anxious, or worried	0	1	2	3
42. Is afraid to try new things for fear of making mistakes	0	1	2	3
43. Feels worthless or inferior	0	1	2	3
44. Blames self for problems, feels guilty	0	1	2	3
45. Feels lonely, unwanted, or unloved; complains that "no one loves him or her"	0	1	2	3
46. Is sad, unhappy, or depressed	0	1	2	3
47. Is self-conscious or easily embarrassed	0	1	2	3

Academic & Social Performance	Excellent	Above Average	Average	Somewhat of a Problem	Problematic
48. Overall school performance	1	2	3	4	5
49. Reading	1	2	3	4	5
50. Writing	1	2	3	4	5
51. Mathematics	1	2	3	4	5
52. Relationship with parents	1	2	3	4	5
53. Relationship with siblings	1	2	3	4	5
54. Relationship with peers	1	2	3	4	5
55. Participation in organized activities (e.g., teams)	1	2	3	4	5

Tic Behaviors: To the best of your knowledge, please indicate if this child displays the following behaviors:

1. **Motor Tics:** Rapid, repetitive movements such as eye-blinking, grimacing, nose twitching, head jerks, shoulder shrugs, arm jerks, body jerks, rapid kicks.
   ☐ No tics present ☐ Yes, they occur nearly every day, but go unnoticed by most people. ☐ Yes, noticeable tics occur nearly every day.
2. **Phonic (Vocal) Tics:** Repetitive noises including but not limited to throat clearing, coughing, whistling, sniffling, snorting, screeching, barking, grunting, repetition of words or short phrases.
   ☐ No tics present ☐ Yes, they occur nearly every day, but go unnoticed by most people. ☐ Yes, noticeable tics occur nearly every day.
3. If **YES** to 1 or 2 → Do these tics interfere with the child's activities (like reading, writing, walking, talking, or eating)?
   ☐ No ☐ Yes

Previous Diagnosis & Treatment	NO	YES
1. Has the child been diagnosed with ADHD or ADD?	☐	☐
2. Is he/she on medication for ADHD or ADD?	☐	☐
3. Has the child been diagnosed with a Tic Disorder or Tourette's Disorder?	☐	☐
4. Is he/she on medication for a Tic Disorder or Tourette's Disorder?	☐	☐

For Office Use Only

Total number of questions scored 2 or 3 in questions 1-9: _____
Total number of questions scored 2 or 3 in questions 10-18: _____
Total symptom score for questions 1-18: _____
Total number of questions scored 2 or 3 in questions 19-26: _____
Total number of questions scored 2 or 3 in questions 27-40: _____
Total number of questions scored 2 or 3 in questions 41-47: _____
Total number of questions scored 2 or 3 in questions 48-55: _____
Average Performance Score: _____

VANDERBILT ADHD DIAGNOSTIC TEACHER RATING SCALE

Child's Name: _____ Teacher's Name: _____

Today's Date: _____ School: _____ Age:_____

Directions: Each rating should be considered in the context of what is appropriate for the age of the child you are rating and should reflect that child's behavior since the beginning of the school year. Please indicate the number of weeks or months you have been able to evaluate the behaviors: _____.

Is this evaluation based on a time when this child: ☐ was on medication ☐ was not on medication ☐ not sure

Behavior	Never	Occasionally	Often	Very Often
1. Fails to give attention to details or makes careless mistakes in schoolwork	0	1	2	3
2. Has difficulty sustaining attention to tasks or activities	0	1	2	3
3. Does not seem to listen when spoken to directly	0	1	2	3
4. Does not follow through on instructions and fails to finish schoolwork (not due to oppositional behavior or failure to understand)	0	1	2	3
5. Has difficulty organizing tasks and activities	0	1	2	3
6. Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort	0	1	2	3
7. Loses things necessary for tasks or activities (school assignments, pencils, or books)	0	1	2	3
8. Is easily distracted by extraneous stimuli	0	1	2	3
9. Is forgetful in daily activities	0	1	2	3
10. Fidgets with hands or feet or squirms in seat	0	1	2	3
11. Leaves seat in classroom or in other situations in which remaining seated is expected	0	1	2	3
12. Runs about or climbs excessively in situations in which remaining seated is expected	0	1	2	3
13. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
14. Is "on the go" or often acts as if "driven by a motor"	0	1	2	3
15. Talks excessively	0	1	2	3
16. Blurts out answers before questions have been completed	0	1	2	3
17. Has difficulty waiting in line	0	1	2	3
18. Interrupts or intrudes in on others (e.g., butts into conversations or games)	0	1	2	3
19. Loses temper	0	1	2	3
20. Actively defies or refuses to comply with adult's requests or rules	0	1	2	3
21. Is angry or resentful	0	1	2	3
22. Is spiteful and vindictive	0	1	2	3
23. Bullies, threatens, or intimidates others	0	1	2	3
24. Initiates physical fights	0	1	2	3
25. Lies to obtain goods or favors or to avoid obligations (e.g., "cons" others)	0	1	2	3
26. Is physically cruel to people	0	1	2	3
27. Has stolen items of nontrivial value	0	1	2	3
28. Deliberately destroys others' property	0	1	2	3
29. Is fearful, anxious, or worried	0	1	2	3
30. Is self-conscious or easily embarrassed	0	1	2	3
31. Is afraid to try new things for fear of making mistakes	0	1	2	3
32. Feels worthless or inferior	0	1	2	3

Behavior	Never	Occasionally	Often	Very Often
33. Blames self for problems, feels guilty	0	1	2	3
34. Feels lonely, unwanted, or unloved; complains that "no one loves him/her"	0	1	2	3
35. Is sad, unhappy, or depressed	0	1	2	3

Academic & Classroom Behavioral Performance	Excellent	Above Average	Average	Somewhat of a Problem	Problematic
36. Reading	1	2	3	4	5
37. Writing	1	2	3	4	5
38. Mathematics	1	2	3	4	5
39. Relationship with peers	1	2	3	4	5
40. Following directions	1	2	3	4	5
41. Disrupting class	1	2	3	4	5
42. Assignment completion	1	2	3	4	5
43. Organizational skills	1	2	3	4	5

Comments:

Tic Behaviors: To the best of your knowledge, please indicate if this child displays the following behaviors:

1. **Motor Tics:** Rapid, repetitive movements such as eye-blinking, grimacing, nose twitching, head jerks, shoulder shrugs, arm jerks, body jerks, rapid kicks.
   ☐ No tics present ☐ Yes, they occur nearly every day, but go unnoticed by most people. ☐ Yes, noticeable tics occur nearly every day.
2. **Phonic (Vocal) Tics:** Repetitive noises including but not limited to throat clearing, coughing, whistling, sniffling, snorting, screeching, barking, grunting, repetition of words or short phrases.
   ☐ No tics present ☐ Yes, they occur nearly every day, but go unnoticed by most people. ☐ Yes, noticeable tics occur nearly every day.
3. If **YES** to 1 or 2 → Do these tics interfere with the child's activities (like reading, writing, walking, talking, or eating)?
   ☐ No ☐ Yes

Previous Diagnosis & Treatment	NO	YES
1. Has the child been diagnosed with ADHD or ADD?	☐	☐
2. Is he/she on medication for ADHD or ADD?	☐	☐
3. Has the child been diagnosed with a Tic Disorder or Tourette's Disorder?	☐	☐
4. Is he/she on medication for a Tic Disorder or Tourette's Disorder?	☐	☐

For Office Use Only	
	Total number of questions scored 2 or 3 in questions 1-9: _____
	Total number of questions scored 2 or 3 in questions 10-18: _____
	Total symptom score for questions 1-18: _____
	Total number of questions scored 2 or 3 in questions 19-28: _____
	Total number of questions scored 2 or 3 in questions 29-35: _____
	Total number of questions scored 2 or 3 in questions 36-43: _____
	Average Performance Score: _____

EVIDENCE-BASED BEHAVIORAL INTERVENTIONS FOR ADHD

The positive effects of behavioral therapies tend to persist, but the positive effects of medication cease when medication stops. "Behavior Management Training" and "Behavior Therapy" and "Parent Management Behavior Therapy (PMBT)" are all terms used for children and caregivers who receive counseling for their ADHD; this type of counseling is offered by pediatric psychologists and licensed mental health providers, including LCSWs. Almost always, caregivers need to have time alone with counselor to discuss compliance and discipline.

GUIDE TO ADHD PSYCHOEDUCATION

What is ADHD?

Attention Deficit Hyperactivity Disorder is a neurodevelopmental condition with symptoms existing along a continuum from mild to severe. It occurs across the life span.

How is ADHD Treated?

Treatment should be **multimodal.** Incorporating different interventions, such as education, medication, and behavioral modifications/motivational interviewing/ psychotherapy, produces a better outcome.

Treatment must be collaborative among the physician, the patient, and the family. It should be targeted to each individual's needs and goals, which may change over time.

Two important components of a multimodal approach:

PSYCHOEDUCATION

Psychoeducation should be the first intervention. Educating the family/ patient about ADHD (symptoms, functional impairment, possible comorbidities and treatment) will ensure a more successful outcome.

PSYCHOSOCIAL INTERVENTIONS

Psychosocial interventions can reduce impairments associated with ADHD symptoms and improve overall quality of life. Interventions can be **cognitive** or **behavioral**.

PSYCHOEDUCATION

Discover
- What does the individual/ family know about ADHD?

Demystify
- Myths about ADHD
- Diagnosis and assessment processes

Instill Hope
- Evidence-based treatments and interventions **do** exist and **will** promote a positive outcome

Educate
- Importance of combining pharmacological and psychosocial interventions
- Risks and benefits

Empathize
- Acknowledge feelings of discouragement, grief, and frustration.

Encourage
- A strength-based approach
- Make more positive than negative comments
- Discourage criticisms

Recognize
- Appropriate behavior, whether observed or reported
- Goals achieved

Be Sensitive
- Ethnic, cultural and gender issues may shape the perception and beliefs about ADHD and its treatment

Motivate
- Nurture strengths and talents
- Encourage skills

Promote
- Regular exercise
- Consistent sleep hygiene
- Healthy nutrition routine

Humour

Humour can defuse awkward, tense situations and avoid or reduce conflict

Give Resources
- Websites
- Local community resources
- Book lists

CADDRA

For further information, please refer to the Psychosocial Interventions and Treatments chapter, Canadian ADHD Practice Guidelines at caddra.ca

Version: October 2016

Parent Behavior Management Training

Parent Behavior Management Training (PBMT) is designed for children ages 2-17 and focused primarily on caregivers, though children may participate in some sessions. Caregivers are taught skills to more effectively manage challenging behaviors through modeling and role-playing. Between sessions, caregivers practice at home with their children. Training programs typically include at least 10 sessions.

PBMT has been shown to be effective in decreasing oppositional, aggressive, and antisocial behavior, with strong post-intervention results. For more information, visit the FACTs Sheet template (chadd.org); it includes links to behavior management in preschoolers, parent training, and 12 behavior programs that work in children with ADHD.

Parent AND Child Behavior Management Training (evidence-based): 10-20 sessions to teach psychoeducation, psychosocial strategies, and specific interventions for ADHD.

Preschool	School Age	Adolescent
Parent Behavior Management Training (PBMT) to decrease oppositional behavior, aggression. Improve positive parenting and parent self-efficacy and decrease negative parenting and coercive parenting.	PBMT to decrease oppositional behavior, aggression. Improve positive parenting and parent self-efficacy and decrease negative parenting and coercive parenting. Set up homework completion strategies, family function.	PBMT to establish appropriate token economy for compliance, rules to minimize risk-taking behaviors. Teens with ADHD are typically 2 years behind their peers socially and with respect to responsibility. Consider family therapy for older adolescents.
Child behavioral therapy to increase prosocial skills, decrease aggression, improve self-regulation.	Child behavior therapy to increase adaptive behavior, social skills.	Teen learning peer pressure strategies, organizational skills training. Cognitive Behavior Therapy (CBT) is effective for ADHD after about age 10 (to learn time management, etc.).
Teacher/childcare interventions include visual strategies, structure and routine in supervised settings.	Teacher to implement strong communication with daily report card, strategies for organization, improve academic productivity, peer interactions.	Social skills interventions (often done by schools), organizational skills/time management coaching, driving safety education.

MEDICATION GUIDANCE: ADHD

Class	Generic	Brand Name	Available Forms/Doses	Dosing Information	Other Information	Comments
Stimulant	Methylphenidate: short acting	Ritalin (IR) Focalin Methylin	Ritalin tab (5,10,20mg) Focalin* tab (2.5,5,10mg) Methylin • chew (2.5,5,10mg) • soln (5mg/5ml, 10mg/5ml)	**Initial dose:** 2.5-5.0mg bid **Max dose:** Usually 60mg/day except Focalin* 30mg/day **Typical effective dose:** 15-20mg/day <6y 25-40mg/day 6-12y 30-60mg/day >12y **Duration:** 3-4 hours	**SEE SIDE EFFECT HANDOUT** for full list **Common:** loss of appetite, sleep disturbance **Less common/rare:** All other symptoms Except for children under 6 — more side effects than school-age children and adolescents Monitor HT, WT, BP, Pulse	*Focalin is twice as concentrated as Ritalin — use ½ doses FDA approved for 6+, but research under age 6, used MPH (PATS study) Best to titrate with IR and switch to longer acting
	Methylphenidate: intermediate acting	Ritalin LA Metadate CD	Ritalin LA capsule can be sprinkled (10-40,60mg) Metadate CD capsule can be sprinkled (10-60mg)	**Duration:** 6-8 hours		FDA 6+
	Methylphenidate: long acting	Concerta Metadate ER Quillivant XR Focalin XR Aptensio XR Contempla XR-ODT Daytrana^patch	Concerta (18,27,36,54mg) Metadate ER (10,20mg) Quillivant XR • chew 20,30,40mg • soln 25mg/5cc Focalin XR caps can sprinkle (5,10,15,20,25,30mg) Aptensio (10,15,20,30,40,50,60mg) Contempla XR-ODT (8.6,17.3,25.9mg) ^Daytrana patch (10,15,20,30mg)	**Initial dose for >6 years:** 18-27mg Concerta or 20mg Quillivant XR, or others **Max dose:** Usually 60mg for all drugs, except * Focalin XR -30mg **Duration:** 8-12 hours **Peak effects vary:** 2-5 hours		^For Daytrana Patch information FDA 6+ Do not crush Concerta OROS capsule Other new meds on the market in MPH long acting group: • Jornay PM, taken night before • Azstarys is a long acting MPH with a combination of MPHs for action

Note: all medication information should be verified using current PDR

Class	Generic	Brand Name	Available Forms/Doses	Dosing Information	Other Information	Comments
Stimulant	Amphetamine (mixed salts and/or dextroamphetamine): short acting	Adderall Dexedrine Evekio Zenzedi Procentra	Adderall (5,7.5,10,12.5,15, 20,30mg) Evekio (5,10mg) Zenzedi (2.5,5,7.5,10,15,20,30mg) Procentra (5mg/5ml)	**Initial dose:** 2.5mg for 3-5 year old, 5mg BID for 6+ **Max:** Usually 40mg **Typical effective:** 5mg bid for <6; 10-15mg bid for >6+ **Duration:** 4-6 hours	**SEE SIDE EFFECT HANDOUT** for full list **Common:** loss of appetite, sleep disturbance **Less common/rare:** All other symptoms Except for children under 6 — more side effects than school-age children and adolescents. Monitor HT, WT, BP, Pulse	FDA approved for ages 3+, but less researched than MPH
	Amphetamine (mixed salts and/or dextroamphetamine): intermediate or long acting	Adderall XR Vyvanse Dexedrine spansules Adzenys XR ODT Adzenys ER Dyanavel XR Mydayis	Adderall XR caps can be sprinkled (5-30mg) Vyvanse may open cap and dissolve in water (20-70mg) Dexedrine spansules (5-15mg) †Adzenys • XR ODT (3.1,6.3mg, etc.) • ER (1.25mg/1ml) †Dyanavel XR (2.5mg/1ml) †Mydayis cap (12.5,25,37.5mg)	**Initial dose:** 5mg daily >6+ **Max:** 40mg **Typical effective:** 20-30mg **Duration:** 8-12 hours		†Adzenys is dosed for ODT and liquid. Starting dose is 6.3mg for 6+. †Dyanavel XR is liquid with initial dose of 2.5-5mg for >6+ †Mydayis dosed for teens only
SNRI	Atomoxetine	Strattera	Capsule 10,18,25,40,60,80, 100mg Do not open	Initial 0.5mg/kg/day for <70kg and >6+; for >70kg start with 40mg **Max:** 100mg **Typical effective:** 40-60mg **Duration:** 18-24 hours	Needs 2-4 weeks for effect BOX WARNING like SSRI **SEE SIDE EFFECT HANDOUT**	Other new SNRI on the market for ADHD is Quelbree (Viloxazine)

Relative Effect Size of ADHD Medication Choices
Effect size of all stimulants ~1.0
Effect size of atomoxetine ~0.7
Effect size of guanfacine ~0.65 (using Cohen's d-statistic)

Stimulant Relative Potencies
Methylphenidate 10mg ≈ dexmethylphenidate 5mg
Methylphenidate 10mg ≈ dextroamphetamine 5mg

Note: all medication information should be verified using current PDR

PROVIDER TIPS & CLINICAL PEARLS

What do I do with ADHD medication side effects?

PRINT OUT AACAP PARENT MEDICATION GUIDE: ADHD (2021) and review with family

- There is a table with STRATEGIES FOR STIMULANT SIDE EFFECTS
- There is a table with STRATEGIES FOR NON-STIMULANT SIDE EFFECTS
- Of note, if you ask BEFORE starting medications, a lot of children have picky eating, poor sleeping, and afternoon irritability at baseline, so medications may IMPROVE, HAVE NO EFFECT, OR WORSEN symptoms.
- 75% of children with ADHD improve with first stimulant tried, and another 10-15% improve if you have to go to second class of stimulants (MPH and AMP). So only about 10% of children don't improve or have so many side effects to STOP stimulant therapy in setting of ADHD.
- ADHD-Primary Inattentive Type (PIT) is missed more often and responds differently to meds than the Combined Type and the Hyperactive Type. If day dreaming is IMPAIRING, without other ADHD symptoms, look harder for a learning problem or autism Level 1.

What do I do if the screening results do not agree?

Parent Screener	Teacher Screener	Likely Outcome
+	+	ADHD ++ (often ODD, anxiety, etc.)
+	—	Explore concerns in the home, parent mental health status, parent-child relationship, stress
—	+	Likely ADHD or, if new concern this school year, consider teacher-child mismatch

Significant oppositional behaviors are common in setting of untreated ADHD, so treat as "impulsivity" symptoms first.

What about need for EKG before medications?

AAP does not recommend EKG or cardiology consultation, unless strong family history of cardiac problems (death under age 35-40) or underlying cardiac problems are present in patient. **Monitor at each visit: HR, BP, weight, height, and any new symptoms that could be cardiac-related (syncope, palpitations).**

What if I need to use medication in a child between ages 3-5?

- START LOW AND GO SLOW.
- Consider Guanfacine short-acting, and if not working, trial of MPH IR is best studied (though not FDA approved in preschoolers). The PATS Study identified total daily dose for ages 3-5 at 14-20mg/day, MUCH LESS THAN SCHOOL-AGE KIDS.

What about poor sleep at baseline causing behavior problems?

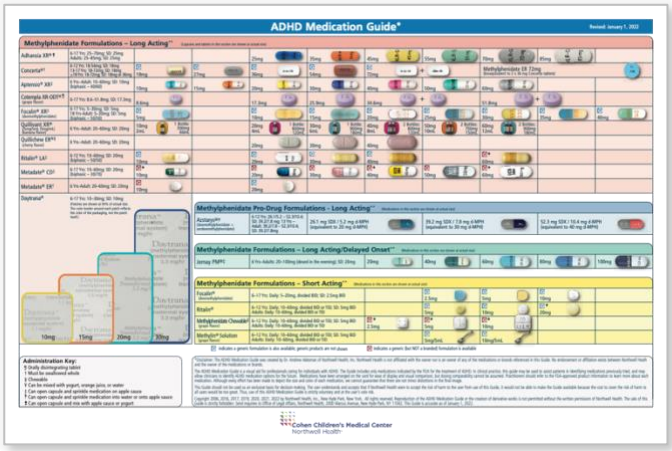
- Sleep onset latency insomnia is a HUGE problem for kids with ADHD. Consider 1-3mg of Melatonin first. Research shows it works in at least 50% of kids. Higher than 5-6mg is not recommended. Don't forget to emphasize good sleep hygiene practice.
- Separately, lack of sleep can mimic ADHD symptoms. Consider treating sleep first to see if symptoms improve.

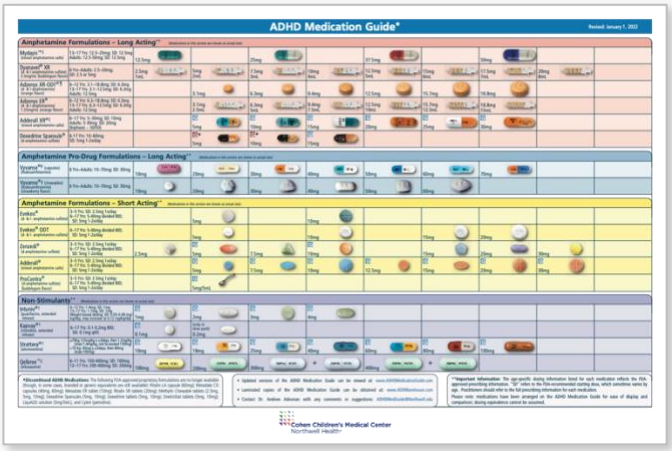
What should I monitor during regular 3-6 month medication checks?

- With stimulant or atomoxetine treatment, follow vital signs, sleep, mood lability, appetite, growth, and cardiac symptoms with treatment.
- With alpha agonist treatment, follow vital signs, symptoms of orthostasis, sedation, agitation, and for depressed mood.

ADHD resources for providers

- *AAP Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents* (Wolraich et al., 2019)
- *Society for Developmental & Behavioral Pediatrics Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents with Complex Attention-Deficit/Hyperactivity Disorder* (2020)
- Cohen Children's Medical Center The ADHD Medication Guide© is available for download at www.adhdmedicationguide.com/





ADHD web resources for patients and caregivers

- CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder): chadd.org/
- Understood: www.understood.org/hub
- ADDitude Magazine: www.additudemag.com/
- CDC child and family resources including videos, games, and fun facts about ADHD
- Harvard University Center on the Developing Child: age-based activity guide for building executive function skills
- American Academy of Child and Adolescent Psychiatry ADHD Parents Medication Guide

ADHD books for patients and caregivers

- *Taking Charge of ADHD: Complete Authoritative Guide for Parents* by Russell Barkley, PhD
- *How to Talk So Kids Will Listen and Listen So Kids Will Talk* by Adele Farber & Elaine Mazlish
- *Parenting the Strong-Willed Child* by Rex Forehand, PhD & Nicholas Long, PhD
- *Smart But Scattered* (child and teen version) by Peg Dawson, EdD & Richard Guare, PhD
- *1-2-3 Magic* by Thomas Phelan, PhD
- *Raising Boys with ADHD; Raising Girls with ADHD* by James Forgan & Mary Anne Rich