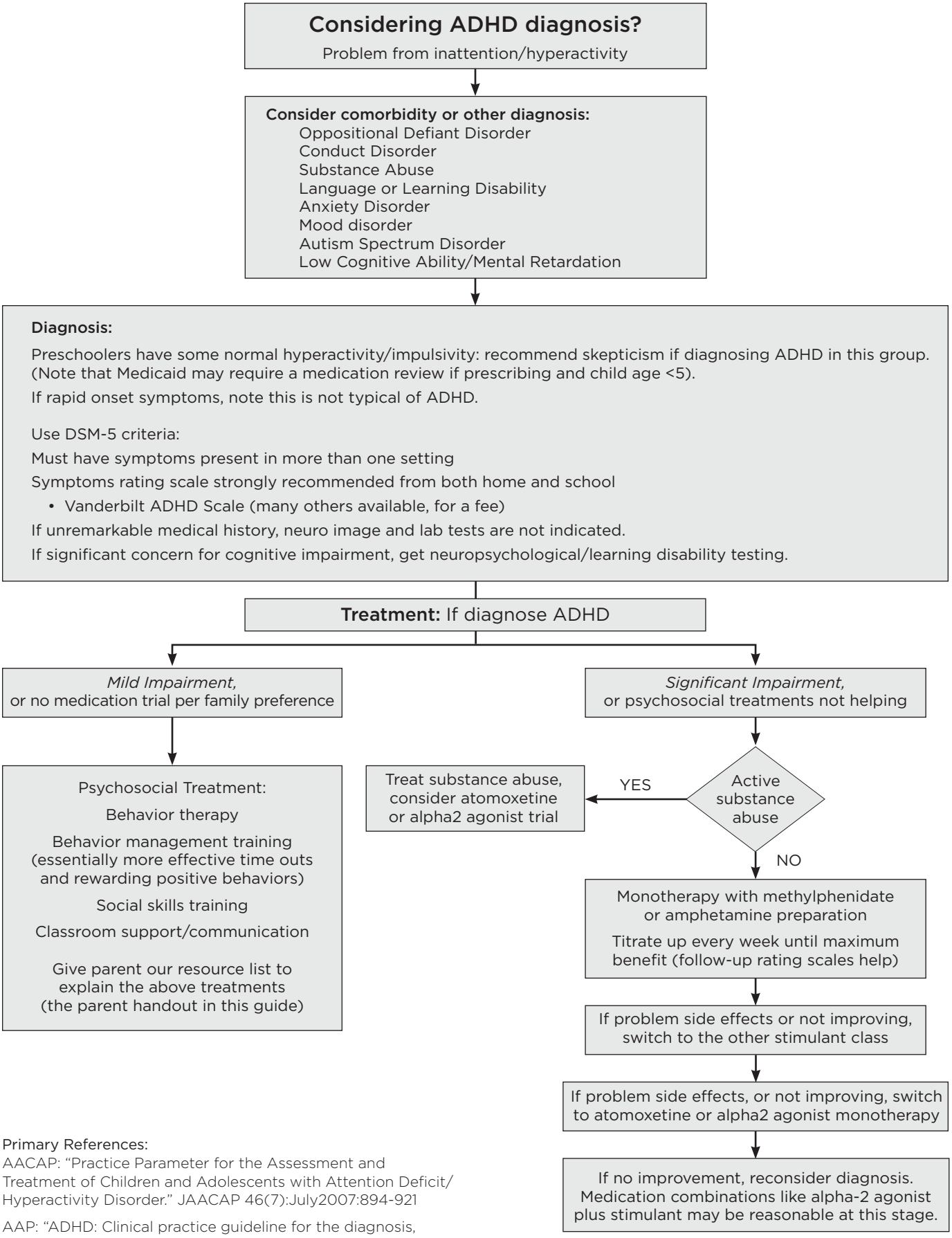
ADHD



Primary References:
AACAP: "Practice Parameter for the Assessment and Treatment of Children and Adolescents with Attention Deficit/ Hyperactivity Disorder." JAACAP 46(7):July2007:894-921

AAP: "ADHD: Clinical practice guideline for the diagnosis, evaluation, and treatment of ADHD in children and adolescents." Prediatrics 128(5), November, 2011:1007-1022

Vanderbilt ADHD Teacher Rating Scale

Child's Name .....

Date of Birth ..... Grade ..... Today's Date .....

Completed by ..... Subject Taught (if applicable) .....

Each rating should be considered in the context of what is appropriate for the age of the child. If you have completed a previous assessment, your rating should reflect the child's behavior since you last completed a form.

	Symptoms	Never	Occasionally	Often	Very Often
1.	Does not pay attention to details or makes careless mistakes, such as in homework	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 instruction 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 when remaining in seated is expected	0	1	2	3
12.	Runs about or climbs excessively when 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 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 (butts into conversations or games)	0	1	2	3
19.	Loses temper	0	1	2	3
20.	Actively defies or refuses to comply with adults' 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 for favors or to avoid obligations ("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

Vanderbilt ADHD Teacher Rating Scale

Child's Name .....

Today's Date.....

	Symptoms	Never	Occasionally	Often	Very Often
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
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

Performance	Above Average		Average		Problematic
Academic Performance					
Reading	1	2	3	4	5
Mathematics	1	2	3	4	5
Written Expression	1	2	3	4	5
Classroom Behavior					
Relationship with Peers	1	2	3	4	5
Following Directions/Rules	1	2	3	4	5
Disrupting Class	1	2	3	4	5
Assignment Completion	1	2	3	4	5
Organizational Skills	1	2	3	4	5

Comments:

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SYMPTOMS:

Number of questions scored as 2 or 3 in questions 1-9: .....

Number of questions scored as 2 or 3 in questions 10-18: .....

Total symptom score for questions 1-18: .....

Number of questions scored as 2 or 3 in questions 19-28: .....

Number of questions scored as 2 or 3 in questions 29-35: .....

Vanderbilt ADHD Diagnostic Teacher Rating Scale was developed by Mark L. Wolraich, MD.
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Vanderbilt ADHD Parent Rating Scale

Child's Name .....

Date of Birth .....Grade .....Today's Date .....

Completed by .....Relationship to child: ❑ Mom ❑ Dad ❑ Other.....

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.

	Symptoms	Never	Occasionally	Often	Very Often
1.	Does not pay attention to details or makes careless mistakes, such as in homework	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 instruction 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 when remaining in seated is expected	0	1	2	3
12.	Runs about or climbs excessively when 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 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 (butts into conversations or games)	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 comply 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 misbehavior	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 vindictive	0	1	2	3
27.	Bullies, threatens, or intimidates others	0	1	2	3
28.	Initiates physical fights	0	1	2	3
29.	Lies to obtain goods for favors or to avoid obligations ("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

Vanderbilt ADHD Parent Rating Scale

Child's Name .....

Today's Date.....

Symptoms		Never	Occasionally	Often	Very Often
32.	Has stolen things of nontrivial 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
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/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

Performance	Above Average		Average		Problematic
Academic Performance					
Reading	1	2	3	4	5
Mathematics	1	2	3	4	5
Written Expression	1	2	3	4	5
Classroom Behavior					
Relationship with Peers	1	2	3	4	5
Following Directions/Rules	1	2	3	4	5
Disrupting Class	1	2	3	4	5
Assignment Completion	1	2	3	4	5
Organizational Skills	1	2	3	4	5

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SYMPTOMS:

Number of questions scored as 2 or 3 in questions 1-9: .....

Number of questions scored as 2 or 3 in questions 10-18: .....

Total symptom score for questions 1-18: .....

Number of questions scored as 2 or 3 in questions 19-26: .....

Number of questions scored as 2 or 3 in questions 27-40: .....

Number of questions scored as 2 or 3 in questions 41-47: .....

Comments:

Vanderbilt ADHD Diagnostic Parent Rating Scale was developed by Mark L. Wolraich, MD. Reproduced and format adapted by R. Hilt, MD and PAL with permission.

Scoring the Vanderbilt ADHD Scales

The Vanderbilt rating scale is a screening and information gathering tool which can assist with making an ADHD diagnosis and with monitoring treatment effects over time. The Vanderbilt rating scale results alone do not make a diagnosis of ADHD or diagnose any other disorder — one must consider information from multiple sources to make a clinical diagnosis. Symptom items 1-47 are noted to be significantly present if the parent or teacher records the symptom as "often or very often" present (a 2 or 3 on the scale). The "performance" items at the end are felt to be significant if the parent or teacher records either a 1 or 2 on each item.

The validation studies for the Vanderbilt Assessment Scales were for the 6-12 year old age group. To the extent that they collect information to establish DSM-5 criteria, they are applicable to other groups where the DSM-5 criteria are appropriate.

Parent Version

Predominantly Inattentive Subtype
Requires 6 or more counted behaviors on items 1 through 9 and a performance problem (score of 1 or 2) in any of the items on the *performance* section.

Predominantly Hyperactive/Impulsive Subtype
Requires 6 or more counted behaviors on items 10 through 18 and a performance problem (score of 1 or 2) in any of the items on the *performance* section.

Combined Subtype
Requires 6 or more counted behaviors each on both the inattention and hyperactivity/impulsivity dimensions.

Oppositional-defiant disorder
Requires 4 or more counted behaviors on items 19 through 26.

Conduct disorder
Requires 3 or more counted behaviors on items 27 through 40.

Anxiety or depression
Requires 3 or more counted behaviors on items 41 through 47.

Teacher Version

Predominantly Inattentive Subtype
Requires 6 or more counted behaviors on items 1 through 9 and a performance problem (score of 1 or 2) in any of the items on the *performance* section.

Predominantly Hyperactive/Impulsive Subtype
Requires 6 or more counted behaviors on items 10 through 18 and a performance problem (score of 1 or 2) in any of the items on the *performance* section.

Combined subtype
Requires 6 or more counted behaviors each on both the inattention and hyperactivity/impulsivity dimensions.

Oppositional defiant and conduct disorders
Requires 3 or more counted behaviors from questions 19 through 28.

Anxiety or depression
Requires 3 or more counted behaviors from questions 29 through 35.

The **performance section** is scored as indicating some impairment if a child scores 1 or 2 on at least 1 item.

ADHD Stimulant Medications

Short Acting Stimulants

Drug Name	Duration	Dosages	Stimulant Class	Usual Starting Dose	FDA Max Daily Dose
Methylphenidate (Ritalin, Methylin)	4-6 hours	2.5, 5, 10, 20 mg	Methyl.	5mg BID 1/2 dose if 3-5yr	60mg
Dexmethylphenidate (Focalin)	4-6 hours	2.5, 5, 10 mg	Methyl.	2.5mg BID	20mg
Dextroamphetamine (Dexedrine, Dextro Stat, Pro Centra, Zenzedi)	4-6 hours	2.5, 5, 10 mg tabs	Dextro.	5mg QD-BID 1/2 dose if 3-5yr	40mg
Amphetamine Salt Combo (Adderall)	4-6 hours	5, 7.5, 10, 12.5, 15, 20, 30 mg	Dextro.	5mg QD-BID 1/2 dose if 3-5yr	40mg
d and l-amphetamine sulfate (Evekeo/Evekeo ODT)	4-6 hours	5, 10 mg (tab); 5, 10, 15, 20 mg (disintegrating tab)	Dextro.	5 mg QD-BID, 1/2 dose if 3-5 yr	40mg

ADHD Stimulant Medications (cont'd)

Extended Release Stimulants

Drug Name	Duration	Dosages	Stimulant Class	Usual Starting Dose	FDA Max Daily Dose	Editorial Comments
Metadate ER	4-8 hours	10, 20mg tab	Methyl.	10mg QAM	60mg	Generic available. Uses wax matrix. Variable duration of action
Concerta	10-12 hours	18, 27, 36, 54 mg	Methyl.	18mg QAM	72mg	Generic available. Osmotic pump capsule
Adderall XR	8-12 hours	5, 10, 15, 20, 25, 30 mg	Dextro.	5mg QD	30mg	Generic available. Beads in capsule can be sprinkled
Metadate CD (30% IR) ~8 hours	~8 hours	10, 20, 30, 40, 50, 60 mg capsules	Methyl.	10mg QAM	60mg	Generic available. Beads in capsule can be sprinkled
Ritalin LA (50% IR) ~8 hours	~8 hours	10, 20, 30, 40 mg capsules	Methyl.	10mg QAM	60mg	Generic available. Beads in capsule can be sprinkled
Focalin XR	10-12 hours	5 to 40mg in 5 mg steps	Methyl.	5mg QAM	30mg	Beads in capsule can be sprinkled
Daytrana patch	Until 3-5 hours after patch removal	10, 15, 20, 30 mg Max 30mg/9hr	Methyl.	10mg QAM	30mg	Rash can be a problem, slow AM startup, has an allergy risk, peeling off patch a problem with young kids
Lisdexamfetamine (Vyvanse)	~10 hours	10, 20, 30, 40 50, 60, 70mg	Dextro.	30mg QD	70mg	Conversion ratio from dextroamphetamine is not established. Chewable available
Dexedrine Spansule	8-10 hours	5, 10, 15 mg	Dextro.	5mg QAM	40mg	Beads in capsule can be sprinkled
Quillivant XR	10-12 hours	25mg/5ml 1 bottle = 300mg or 60ml	Methyl.	10mg QAM	60mg	Liquid banana flavor
Quillichew ER	6-8 hours	20, 30, 40 mg	Methyl.	20mg QAM	60mg	Chewable cherry-flavored tablets

ADHD Stimulant Medications (cont'd)

Extended Release Stimulants (cont'd)

Drug Name	Duration	Dosages	Stimulant Class	Usual Starting Dose	FDA Max Daily Dose	Editorial Comments
Cotempla XR-ODT	10-12 hours	8.6, 17.3, 25.9 mg	Methyl.	17.3 mg QD	51.8 mg	Tablet should be allowed to disintegrate on tongue without chewing or crushing.
Aptensio XR	10-12 hours	10, 15, 20, 30, 40, 50, 60 mg	Methyl.	10 mg QD	60 mg	Beads in capsule can be sprinkled.
Adhansia XR	to 16 hours	25, 35, 45, 55, 70, 85 mg	Methyl.	25 mg QD	>70 mg associated with increased adverse effect	Beads in capsule can be sprinkled. Long-action may impact sleep.
Jornay PM	12 hours, after 10 hr delayed release	20, 40, 60, 80, 100 mg	Methyl.	20 mg QD in the PM	100 mg	Beads in capsule can be sprinkled.
Mydayis	to 16 hours	12.5, 25, 37.5, 50 mg	Dextro.	12.5 mg QD	25 mg	13 years and older. Beads in capsule can be sprinkled. Monitor for sleep impact.
Dyanavel XR	8-12 hours	2.5mg/mL	Dextro.	2.5-5mg QD	20 mg	Suspension
Adzenys ER/ Adzenys XR ODT	8-12 hours	3.1, 6.3, 9.4, 12.5, 15.7, 18.8 mg or 1.25 mg/mL	Dextro.	6.3 mg QD or 5 mL	6-12 yrs 18.8 mg (15 mL); 13-17 yrs 12.5 mg (10 mL)	Disintegrating tablet or suspension
Azstarys (dexmethylphenidate-serdexmethylphenidate)	10-12 hours	5.2 mg-26.1 mg, 7.8 mg-39.2 mg, 10.4 mg-52.3 mg	Methyl.	5.2 mg-26.1 mg	10.4 mg-52.3 mg	Capsule contents can be sprinkled into water or on applesauce.

The above charts do not contain all available stimulant brands.

ADHD Non-Stimulant Medications

Drug Name	Dosages	Usual Starting Dose	FDA Max Daily Dose	Editorial Comments
Atomoxetine (Strattera)	10, 18, 25, 40 60, 80, 100mg	0.5mg/kg/day (1 to 1.2 mg/kg/d usual full dosage)	Lesser of 1.4mg/ kg/day or 100mg	Has GI side effects, takes weeks to see full benefit, do not open capsule — eye irritant
Clonidine (Catapres)	0.1, 0.2, 0.3mg	0.05mg QHS if <45kg, otherwise 0.1mg QHS Caution if <5 yr.	(Not per FDA) 27-40kg 0.2mg 40-45kg 0.3mg >45kg 0.4mg	Often given to help sleep, also treats tics, can have rebound BP effects
Clonidine XR (Kapvay)	0.1, 0.2 mg	0.1mg QHS	0.4mg daily	Lower peak blood level, then acts like regular clonidine (similar 1/2 life). Still is sedating. Approved for combo with stimulants
Guanfacine (Tenex)	1, 2 mg	0.5mg QHS if <45kg, otherwise 1mg QHS Caution if <5 yr.	(Not per FDA) 27-40kg 2mg 40-45kg 3mg >45kg 4mg	Often given to help sleep, also treats tics, can have rebound BP effects
Guanfacine XR (Intuniv)	1, 2, 3, 4 mg	1mg QD if over 6 years old (full dosage 0.05 to 0.12mg/kg)	Whichever is lower: a) 4mg/day 6-12 years old, 7mg/day 13-17 years old Or, b) 0.05-0.12 mg/kg/day	Lower peak blood level, then acts like regular Tenex (similar 1/2 life) Still is sedating. Approved for combo with stimulants
Viloxazine (Qelbree)	100 mg, 150 mg 200 mg	100 mg once daily	400 mg	May open and sprinkle capsule over applesauce

Reference: AACAP ADHD Practice Parameter (2007), Micromedex 2013

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

*ADHD Medication Monitoring:

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

Information for Families

Books families may find helpful:

Taking Charge of ADHD: The Complete Authoritative Guide for Parents (Revised Edition, 2000), by Russell A. Barkley, PhD

Raising Resilient Children: Fostering Strength, Hope and Optimism in Your Child (2002), by Robert Brooks, PhD and Sam Goldstein, PhD

Attention Deficit Disorder: The Unfocused Mind in Children and Adults (2006), by Tom Brown, PhD

Teenagers with ADD and ADHD: A Guide for Parents and Professionals (2006), by Chris Dendy

Books children may find helpful:

Learning to Slow Down & Pay Attention: A Book for Kids about ADHD (2004), by Kathleen Nadeau, PhD, Ellen Dixon, PhD, and Charles Beyl

Jumpin' Johnny Get Back to Work! A Child's Guide to ADHD/Hyperactivity (1981), by Michael Gordon, PhD

Websites families may find helpful:

Parents Med Guide
www.parentsmedguide.org (quality information about medications for ADHD)

Children and Adults with ADHD
www.chadd.org (support groups, information resource)

Teach ADHD
http://www.additudemag.com/ (teaching advice for ADHD kids)

"Behavior Management Training" and "Behavior Therapy":

Manual and research based therapies for ADHD related problems lasting 10-20 sessions that can be performed by a qualified therapist. These treatments, though helpful with ADHD, are usually less effective than medications. But when combined with medications, these therapies may improve some difficulties (such as oppositional or aggressive behavior in ADHD) more than treating with medications alone.

The principle elements of these treatments are:

- reviewing information about the nature of ADHD
- learning to attend carefully to both misbehavior and when child complies
- establishing a "token economy," like sticker chart rewards
- using time out effectively
- managing non-compliant behavior in public settings
- using a daily school report card
- anticipating future misconduct

This resource page is now available in Spanish at www.seattlechildrens.org/pal