New Guidelines for the Diagnosis and Treatment of ADHD

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University of Oklahoma
Health Sciences Center
Disclosures

Lilly Consultant and Research Support

Shire Consultant and Research Support
ADHD Historical Timeline

1900: George Still described ADHD symptoms
1937: Bradley Benzedrine
1955: Hyperactive Child Syndrome
1960: MPH created
1966: Attention Deficit Hyperactivity Disorder (DSM-III)
1980: Attention Deficit Disorder with or without Hyperactivity (DSM-III-R)
1987: DSM-IV updated criteria
1994: DSM-IV updated criteria
1. Primary Care Clinicians should evaluate or refer for evaluation for ADHD all children 4-18 years of age who present with inattention, hyperactivity, impulsivity, academic underachievement, or behavior problems.
The assessment requires evidence obtained directly from parents/care givers and classroom teachers regarding core symptoms, age of onset, duration of symptoms degree of impairment and coexisting conditions.
ADHD Guideline Recommendations

2. The diagnosis of ADHD requires meeting DSM-IV criteria including some impairment in more than one setting and significant impairment in social, academic or occupational functioning.
Definition of ADHD

Developmental Disorder of

Inattention

Hyperactivity/Impulsivity

I thought I said ‘Attention,’ Soldier! Attention!!!

Sir! I’m sorry, Sir! But I have Attention Deficit Disorder, Sir! In fact, I’m already getting bored with this conversation, Sir!!
DSM-IV Symptoms of Inattention

• Manifestations of the following symptoms must occur often*

• **Inattention**
  – Careless
  – Difficulty sustaining attention in activity
  – Doesn’t listen
  – No follow-through
  – Avoids/dislikes tasks requiring sustained mental effort
  – Can’t organize
  – Loses important items
  – Easily distractible
  – Forgetful in daily activities

*Must have 6 or more symptoms for at least 6 months to a degree that is maladaptive and inconsistent with developmental level.

GOOD NEWS—ALL THE TESTS SHOW YOU'RE NORMAL
"By the time I think about what I'm gonna do....I already DID it!"
DSM-IV Symptoms of Hyperactivity-Impulsivity

• Manifestations of the following symptoms must occur often*

  • Hyperactivity
    – Squirms and fidgets
    – Can’t stay seated
    – Runs/climbs excessively
    – Can’t play/work quietly
    – “On the go”/“driven by a motor”
    – Talks excessively

  • Impulsivity
    – Blurts out answers
    – Can’t wait turn
    – Intrudes/interrupts others

*Must have 6 or more symptoms for at least 6 months to a degree that is maladaptive and inconsistent with developmental level.
DSM-IV ADHD Diagnostic Criteria

• List of symptoms must be present for past 6 months
• Some symptoms are present before 7 years of age
• Some impairment from symptoms must be present in 2 or more settings (e.g., school and home)
• Significant impairment: social, academic, or occupational
• Excludes other mental disorders

“How was my day? Let’s just say it might be in the best interests of all concerned if we move out of the school district.”
DSM-IV Subtypes of ADHD

• Predominantly inattentive
• Predominantly hyperactive-impulsive
• Mixed/combined
• In partial remission
• Not otherwise specified (NOS)
Diagnostic Issues

• The diagnosis is dependent on reports of a child’s behaviors by multiple sources (particularly parents and teachers).

• Many of the children with ADHD seen by pediatricians fall close to the diagnostic border lines.
Inattention or Hyperactive/Impulsive Problems

- Children who do not meet the criteria of ADHD still may have some symptoms of inattention and/or hyperactivity/impulsivity. They fit the category in the DSM-PC of inattention and/or hyperactivity/impulsivity. Use of the chronic illness model and behavioral interventions are appropriate, but medications are not.

Diagnostic Issues (Con’t)

• The behaviors are environmentally dependent and reports are to some extent subjective.

• For each behavior, there are no specifically defined developmentally based criteria to define inappropriately often behaviors.
Diagnostic Issues (Con’t)

• Not clear how to handle parent/teacher discrepancies.
Preschool Age Diagnostic Issues

• There is evidence that the diagnostic criteria are pertinent for preschool age children. However, preschool age children may not have an independent observer if they do not attend a preschool/daycare program and the observers may be less qualified to provide accurate observations.

• Enrolling the child in a program and/or having the parents participate in a parent training program can help to improve the diagnostic purpose
Adolescent Diagnostic Issues

• Obtaining information from observers who have sufficient opportunity to observe the youths may be a challenge both in terms of parents as well as teachers and the youths like younger children tend to under estimate their behaviors.

• The risk of substance abuse is higher and must be ruled out before a diagnosis can be made.
Diagnostic Process

- Use of ADHD specific rating scales is a clinical option in the evaluation of ADHD.

- Use of broad-band rating scales is not recommended in diagnosing ADHD although they may be useful for evaluating for coexisting conditions.
# NICHQ Vanderbilt Assessment Scale—PARENT Informant

**Today's Date:**

**Child's Name:**

**Date of Birth:**

**Parent's Name:**

**Parent's Phone Number:**

**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 the child  
- [ ] was on medication
- [ ] was not on medication
- [ ] not sure

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

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

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NICHQ®  National Initiative for Children’s Healthcare Quality

McNeil
# NICHQ Vanderbilt Assessment Scale—TEACHER Informant

Teacher's Name: __________________________  Class Time: __________________________  Class Name: __________________________  
Today's Date: __________________________  Child's Name: __________________________  Grade Level: __________________________  

**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 the child**  
- [ ] was on medication  
- [ ] was not on medication  
- [ ] not sure?

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

The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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Adapted from the Vanderbilt Rating Scale developed by Mark L. Weitzman, MD.

Revised: 03/2013

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American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN

NICHQ
National Initiative for Children's Healthcare Quality

McNeil Consumer Healthcare
# Vanderbilt Parent Assessment Scale

<table>
<thead>
<tr>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does not pay attention to details or makes careless mistakes with, for example, homework</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2. Has difficulty keeping attention to what needs to be done</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3. Does not seem to listen when spoken to directly</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4. Does not follow through when given directions and fails to finish activities (not due to refusal or misunderstand)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. Has difficulty organizing tasks and activities</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Vanderbilt Parent Assessment Scale

**PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Above Average</th>
<th>Average</th>
<th>Somewhat of a Problem</th>
<th>Problematic</th>
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<tbody>
<tr>
<td>Overall School Performance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>Writing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Relationship with parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Relationship with siblings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Relationship with peers</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>Participation in organized</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>activities (e.g., teams)</td>
<td></td>
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</tbody>
</table>
Web-sites for the Vanderbilt Scales

http://devbehavpeds.ouhsc.edu
(go to Research then Oklahoma PLAY)

http://www.nichq.org
ADHD Guideline Recommendations

3. Evaluation of children with ADHD should include assessment for coexisting conditions. Other diagnostic tests are not routinely indicated to establish the diagnosis of ADHD.
Co-morbidity (Conditions Commonly Co-occurring with ADHD)

- Disruptive Behavior Disorders
  - Oppositional Defiant Disorder
  - Conduct Disorder
- Depressive Disorders
- Anxiety Disorders
- Cognitive Disorders
  - Learning Disabilities
  - Language Disorders
4. Primary care clinicians should establish a treatment program that recognizes ADHD as a chronic condition and a child with ADHD as a child/adolescent with special healthcare needs who needs a Medical Home.
Treating ADHD As A Chronic Condition

- Need to Educate Parents and Patients about ADHD
- Need to Develop A Partnership With The Family
- Need to Develop A Management Plan With Specific Targeted Goals
- If At All Possible Include The Teachers
- Requires ongoing monitoring and anticipation of developmental changes.
6. The clinician should recommend FDA approved medications and/or behavior therapy as appropriate to improve target outcomes in children with ADHD.
Results of Multimodality Treatment of ADHD

1. For Core Symptoms Medication RX was equal to Combined RX & better than Behavioral and Community RX.

2. For parents satisfaction Behavioral and Combined RX were best.

3. Combined RX was best if co-morbidity or family stress were present
Why Use Behavioral Treatment for ADHD?

- Has been shown to be effective
- Family may not want to utilize stimulant medications
- Reduces residual symptoms of ADHD
- Makes pharmacologic therapy more effective
- May reduce amount of medication required
- Parent satisfaction is high
Behavioral Interventions

- Reward System
- Time Out
- Social Reinforcement
- Modeling
- Group Problem-solving
- Sports Skills
- Social Skills Training
General Classroom Interventions

- Ensure Structure and Predictable Routines
- Employ Cost-response Token Economy Systems
- Use Daily Report Cards
- Teach Organizational and Work/study Skills
Newer Delivery Options

• **Amphetamine**
  – d, l amphetamine (Adderall®): 4-6 hours
  – Extended release d, l amphetamine (Adderall XR®)
  – Lisdexafetamine (Vyvanse)

• **Methylphenidate**
  – Metadate CD®: biphasic, 8 hours
  – Concerta: triphasic, 12 hours
  – Ritalin LA®: biphasic, 8 hours
  – Daytrana: 12 hour transdermal patch
  – dexmethylphenidate (Focalin)
  – dexmethylphenidate (Focalin) XR: biphasic, 8 hours
OROS® (methylphenidate HCl)
Capsule-Shaped Tablet

12.0 mm length
5.3 mm diameter

Orifice/Exit Port

Drug Overcoat
Rate Controlled Membrane

Drug Compartment #1
Drug Compartment #2

Push Compartment

Before Operation

During Operation

Water
Micro-Bead Delivery Systems

“Biphasic” release profile with combination of IR and ER MPH beads
Transdermal Delivery System (MTS)

- Doses: 10 mg, 15 mg, 20 mg & 30 mg
- 9 hour wear time covers approximately 12 hours

Data on file, Shire US.
STIMULANT MEDICATIONS SIDE EFFECTS

- Decreased Appetite
- Insomnia
- Headaches/Stomachaches
- Irritability/Moodiness (Rebound)
- Motor Tics
- Sedation
Preschool Age Treatment Issues

- While stimulant medications are appropriate for preschool age children based on recent research, given that a third of the children in a multi-site study improved on behavioral interventions alone, it is more appropriate to initiate a parent training program first before utilizing medication.

- Preschool age children frequently have a slower metabolism of the medications and can start at a lower dose and titrated at a slower rate.

Adolescent Treatment Issues

• It is important to determine if they are using other substances at the same time.

• Treatment with medication requires covering the periods when they are likely to be driving.

• The adolescents have to be part of the process and need to buy into the need for treatment.
Non-Stimulants: Atomoxetine

- Atomoxetine is a highly specific norepinephrine reuptake inhibitor
- It has low affinities for other neuronal transporters
- The compound benefits hyperactive/impulsive symptoms and inattentive symptoms in ADHD

7. Appropriate dosing of medication requires titration to achieve the maximum benefits with the minimum of side effects.
8. The clinician should periodically provide a systematic follow-up for the child with ADHD. Monitoring should be directed to target outcomes and adverse effects, with information gathered from parents, teachers, and the child.
Case Presentation 1
Clinical Presentation

• Sam, a 41/2-year-old boy:
  – Described by Mom as a “an energizer bunny” at home
  – Parents unable to use babysitters more than once
  – Removed from previous childcare center after a threatened expulsion
  – Child unmanageable during shopping in food store
Educational History

• A letter from Sam’s preschool teacher indicates that Sam is not participating in group activities at school, and shows substantially more hyperactivity and impulsivity than other kids in the class
Developmental History

• Birth: Sam was a 1120 gm prematurely born child who was treated with 4 days of ventilation, and who had apnea of prematurity and jaundice. Eye, hearing and CNS imaging studies were normal prior to discharge. Developmental follow-up clinic visits document normal early progress. Head growth is normal. Growth has been consistent at the 5th percentile
Developmental History

• Mom says Sam was:
  – A “colicy baby who was insatiable”
  – Bottle fed, slept in his own room and did not sleep through the night until over 1 year of age
Family History

- As an infant, Sam was very different from his 3-year-old sister.
- Sam’s father may have depression, but refuses evaluation, and Mom states he would also refuse to have counseling and medication.
- Mom and Grandma both say that Sam is “just like Dad was at his age.”
Question

• Do you feel this child is too young for a formal ADHD diagnosis?
  1. Yes
  2. No
Question

- At this point do you have enough evidence to make a diagnosis of ADHD?
  1. Yes
  2. No
Question

• Are other measures required for diagnosis?
  1. Conners Parent Rating Scale
  2. Vanderbilt ADHD Teacher Rating Scale
  3. Achenbach CBCL
  4. Intellectual Assessment
  5. Formal Communication Assessment

• Discuss: what further information would aid in establishing your diagnosis?
Question

• Are there specific medical investigations indicated in the assessment of behavioral concerns in very low birth weight infants?
  1. Yes
  2. No
Question

• Which assessment is your highest priority?
  1. Neurological consultation
  2. CNS imaging
  3. Formal sensory assessment
Question

What would be your initial treatment?
1. Stimulant medication.
2. Behavior therapy.
3. Stimulant medication and behavior therapy.
Treatment History

• Methylphenidate HCl 2.5 mg was started 4 weeks ago
  – For the first 2 days Sam was irritable and had a stomach ache
Audience Experience

- What is the age of the youngest child for whom you have prescribed medication?
  1. Two years
  2. Three years
  3. Four years
  4. Five years
Question

• Would you recommend:
  1. Behavioral management
  2. Trial of medication
  3. Both of the above
  4. Dietary intervention
Question

• Does small stature influence your treatment plan?
  1. Yes
  2. No
Question

• Do VLBW infants respond differently to ADHD treatments?
  1. Yes
  2. No
  3. Don’t know
Case Presentation 2
Clinical Presentation: School Report

• Rita, 14-year-old girl, eighth grade:
  – Satisfactory progress in elementary school
  – School grades declining rapidly
  – Gets detentions for not doing homework
Clinical Presentation: Parent’s Report

• Parents complain about Rita’s behavior:
  – May be smoking cigarettes
  – There are daily arguments about clothes, homework and Rita’s room
Educational History

• No history of hyperactivity or impulsive behavior
• Never an A student
• Mom says up until 5th grade:
  – Rita did well at school
  – Enjoyed going to school
Educational History (Cont’d)

• Writing
  – Would not write much when assigned writing tasks
  – Messy handwriting
• Poor homework completion drags down grades
• Reading
  – Adequate decoding and comprehension
  – Complains she needs to read material repeatedly in order to answer questions about the material
Family History

- Rita’s aunt:
  - Did not finish high school
  - Had an unplanned teenaged pregnancy
Question: Diagnosis

• At this point, would you consider:
  1. Oppositional defiant disorder (ODD)
  2. Depression
  3. Substance abuse
  4. ADHD, primarily inattentive
  5. All of the above
Follow-up

• Rita has been taking long-acting methylphenidate now for 12 months. She is doing better at school. She is attempting and finishing more work. She continues to struggle with low grades in English and Spanish

• How would you proceed?
STOP WHINING KIDS, WE'RE ALMOST THERE. SEE THAT WALL?