MERCYCARE HEALTH PLANS

Guidelines for Clinical Care March 2009

Attention-Deficit Hyperactivity Disorder

MercyCare Health Plans reviews the ADHD guideline at least every two years. If new scientific evidence, or national standards are published prior to the two-year review date, the information is reviewed by MCHP's Behavioral Health Medical Director and disseminated to providers.

Objective:

To promote appropriate diagnosis, and treatment of attention-deficit/hyperactivity disorder in children and adolescents.

Key Points

- **Evaluation**-should include collaboration with parent, child, and school personnel
- **Diagnosis-**DSM-IV-TR
- **Treatment-**Recommendation of stimulant medication and/or behavior therapy and identify target outcomes. If starting on a new ADHD medication, follow up with a prescriber should be within 1 month (initiation phase)
- **Monitoring-**An additional 2 visits within 9 months after the initiation phase, for examination of patient and evaluation of medication response

If there is no medication response, clinicians may want to evaluate the original diagnosis, treatment plan compliance, and the possible presence of co-existing conditions.

Screening:

Are ADHD symptoms present?

- ☐ inattention
- ☐ impulsivity
- ☐ hyperactivity

and

Does the impairment exist in 2 settings? If yes, complete a full ADHD evaluation

Evaluation:

- Clinical interview with parent
- Clinical interview with patient (Mental Status Exam)
- Administer Connors Parent/Teacher Standardized Behavioral Rating Scales or Vanderbilt Rating Scales
- Screen adolescents for substance abuse, ETOH, or smoking cigarettes

Address:

- School history
- Medical history/ADHD treatment history
- Social history
- Family history/History of ADHD or mental disorders
- Co-morbid conditions (language or learning disorders; oppositional defiant, conduct, mood, anxiety, or tic disorders; or substance abuse)
- Prenatal history-exposure to nicotine, alcohol, cocaine/chemical exposure

Other Considerations:

- If suspected lead exposure, check lead levels
- If the patient's medical history is unremarkable, laboratory or neurological testing is not indicated
- Psychological and neuropsychological tests are not mandatory for the diagnosis for ADHD, but should be performed if
  - * the patient's history suggests low general cognitive ability
  - *low achievement in language or mathematics relative to the patient's intellectual ability
  - *no clear improvement in academic performance after ADHD treatment

If a learning or language disorder is suspected, treat the ADHD, and then consider referral for psychological testing

Diagnosis:

DSM-IV-TR Must have 6 of 9 symptoms present under item A or B for at least 6 months to a degree that is maladaptive and inconsistent with developmental level in addition to criteria C,D, and E:

A. Inattention

Often **fails to give close attention to details** or **makes careless mistakes** in schoolwork, work, or other activities
Often has **difficulty sustaining attention** in tasks or play activities
Often **does not seem to listen** when spoken to directly
Often **does not follow through** on instructions and **fails to finish schoolwork**, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
Often has **difficulty organizing** tasks and activities
Often **avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort** (such as schoolwork or homework)
Often **loses things** necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
Is often **easily distracted** by extraneous stimuli
Is often **forgetful** in daily activities

B. Hyperactivity/Impulsivity

Often **fidgets** with hands or feet or squirms in seat
Often **leaves seat** in classroom or in other situations in which remaining seated is expected
Often **runs about or climbs excessively** in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
Often has **difficulty playing or engaging in leisure activities** quietly
Is often **"on the go"** or often acts as if **"driven by a motor"**
Often **talks excessively**
Often **blurts out** answers before questions have been completed
Often has **difficulty awaiting turn**
Often **interrupts** or intrudes on others (e.g., butts into conversations or games)

C. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present **before age 7**.
Some impairment from the symptoms is **present in two or more settings** (e.g., at school [or work] and at home).

D. There must be clear evidence of clinically significant **impairment** in social, academic, or occupational functioning.

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

Diagnosis and Codes Based on Type

DSM-IV-TR Criteria Used:	ICD-9-CM Codes
If both criteria for A and B are met for the past 6 months Attention-Deficit/Hyperactivity Disorder, Combine Type	314.01
If criteria A is met but not criteria B for the last 6 months Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type	314.00
If criteria for B is met but not criteria A for the last 6 months Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type	314.01

Diagnose co-morbid disorder if present.

Add diagnosis codes for any cormorbid diagnosis if present

TREATMENTS-STIMULANT MEDICATIONS (*FIRST LINE TREATMENT):

- Patient should be seen **within 30 days** of initiating medication treatment (initiation phase HEDIS® Quality Measure)

-Patient should have **2 additional follow-up visits w/in 9 months** of the initiation phase (engagement HEDIS® Quality Measure)

-Methylphenidate and amphetamines are equally effective

-If the child is <16kg, start with a short-acting stimulant

-Short-acting preparations are equally effective as long-acting

-If after dose adjustments, the 1st medication is not effective, change to other stimulant group

*Pharmacological treatment is more effective than behavioral health treatment alone

Medications on MCHP Formulary that are FDA Approved

**Do not prescribe stimulant if pre-existing heart disease or symptoms suggesting cardiovascular disease*

**Be aware of package warnings or packet insert*

Blue=tier 1 **Red=tier 2**

	FIRST LINE TREATMENT	DRUG NAME	DOSE FORM	TYPICAL STARTING DOSE	FDA MAX/DAY
Group I	**Amphetamine Preparations** Short acting stimulant for children <16kg.	·**Adderall** ·**Dexedrine**	5, 7.5, 10, 12.5, 15, 20, 30mg tab 5mg cap	3-5 y: 2.5mg q.d.; ≥6y: 5mg q.d.-b.i.d. 3-5 y: 2.5mg q.d.	40mg 40mg
	Long acting stimulant	·**Dexedrine spansule** ·Adderall XR	5, 10, 15 mg cap 5, 10, 15, 20, 25, 30 mg. cap	≥6y: 5-10 mg q.d.-b.i.d. ≥6 y: 10 mg q.d.	40 mg 30 mg
Group II	**Methylphenidate Preparations** Short acting stimulant for children <16kg.	·**Ritalin**	5, 10, 20 mg	5 mg b.i.d.	60mg
	Intermediate acting stimulant	·**Ritalin SR** ·Metadate CD	20 mg. 10, 20, 30, 40, 50, 60 mg 10, 20, 30, 40 mg	10 mg q.a.m. 20 mg q.a.m.	60 mg. 60 mg
	Long acting stimulant	·Concerta ·Daytrana patch	18, 27, 26, 54 mg cap 10, 15, 20, 30 mg patches	18 mg q.a.m. Begin with 10mg patch q.d., then titrate up by patch strength	72 mg 30 mg
Atomoxetine (Strattera)-a selective norepenephrine reuptake inhibitor if: • Active drug or alcohol abuse • Co-morbid anxiety • Severe side effects on stimulants • Tics present					
	Selective Norepinephrine Reuptake Inhibitor Non stimulant	·Atomoxetine (Strattera)	10, 18, 25, 40, 60, 80, 100 mg cap	Children and adolescents<70 kg: 0.5 mg/kg/day for 4 days; then 1 mg/kg/day for 4 days; then 1.2 mg/kg/day	Lesser of 1.4 mg/kg or 100 mg

Stimulant Monitoring

During appointment monitor for stimulant emergent side effects:

- ▹ **Check for elevated blood pressure and pulse**
- ▹ **Decreased appetite/weight loss, insomnia, or headache**
- ▹ **Tics, emotional lability/irritability**
- ▹ **Monitor dose/dose adjustment**

Stimulant Monitoring Continued

- **Adjunct psychopharmacology to treat the side effects**
  - For insomnia, consider:
    - clonidine (monitor blood pressure and pulse, and report any cardiovascular symptoms)
    - Trazadone (risk of priapism)
    - Antihistamine (watch for paradoxical excitement), or
    - melatonin
  - For anorexia, consider cyproheptadine
  - For emergent tics, choose alternate stimulant or non-stimulant treatment, or stimulant plus clonidine or tenex
- **If afternoon worsening of symptoms, add low dose short-acting stimulant**
- **If dose adjustments are not effective, switch to another stimulant group**

Atomoxetine (Strattera) Monitoring

During appointment monitor for atomoxetine emergent side effects

- **Suicidal ideation**
- **Developing symptoms of hepatic disease**
- **Clinical worsening of behavior**
- **Must stay on 6 weeks to evaluate medication effectiveness**

Follow Up Appointments

- Appointment with prescriber within 1 month of initial script (initiation phase HEDIS® Quality Measure)
- 2 additional follow-up visits w/in 9 months of the initiation phase (engagement HEDIS® Quality Measure)
- Connors Parent and Teacher/Vanderbilt Rating Scales 1 week after treatment has begun (or any standardized rating scale)
- Titrate dose upward every 1-3 weeks as recommended by drug manufacturer
- Check blood pressure, pulse, height, and weight
- Check side effects/worsening of physical or behavioral symptoms
- If child<6 years old, cautious titration, due to side effects and response to lower doses than school aged children
- Check for medication response

If No Response to Medication

- Review diagnosis (look for co-morbid conditions)
- Consider behavior therapy
- Consider use of medications not approved by FDA for treatment of ADHD and document reasons for treatment in record
  - Buproprion-not for children under 25kg
  - TCA's-check EKG prior to medication and at each dose increase
  - Clonidine/tenex-lacking controlled trials
- Refer to child/adolescent psychiatrist

BEHAVIORAL TREATMENTS

▹ BEHAVIORAL/PSYCHOSOCIAL TREATMENTS RECOMMENDED IF:

-Used alone for mild/minimal impairment -Diagnosis ADHD uncertain -Parents reject medication treatment

-Parents or Parents/School disagree about diagnosis

▹ LINK FAMILY WITH:

-Psychoeducation about ADHD -Link with community support groups -Additional school resources

▹ Address:

-Family dysfunction -Parental ADHD/depression -Parental substance abuse -Marital problems

References:

1. Practice Parameters for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder. J. AM.ACAD. Child Adolescent Psychiatry, 46:7, July 2007
2. MercyCare Health Plans Formulary
3. HEDIS® 2009 Volume 2 Technical Specifications, Effectiveness of Care