This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the IEHP Pharmacy and Therapeutics Subcommittee.

**Drugs:** Adderall, Adderall XR (amphetamine/dextroamphetamine salts); Dexedrine Spansule SR, Dexedrine, Dextrostat, Procentra Oral Solution, Adzenys XR-ODT, Dyanavel XR suspension, Evekeo (amphetamine), Zenzedi (dextroamphetamine); Vyvanse (lisdexamfetamine); Focalin, Focalin XR (dexamphetamine); Concerta, Daytrana Transdermal Patch, Metadate CD, Metadate ER, Methylphenidate, Methylphenidate Oral Solution, QuilliChew ER, Quillivant XR Oral Suspension, Ritalin, Ritalin LA, Aptensio XR (methylphenidate); Desoxyn (methylamphetamine)

**Formulary:** Adderall, Adderall XR (amphetamine/dextroamphetamine salts); Dexedrine, Dextrostat, Dexedrine Spansule SR (dextroamphetamine); Focalin, Focalin XR (dexamphetamine); Concerta, Metadate CD, Metadate ER, Ritalin (methylphenidate);

**Class:** CNS Stimulants

**LOB:** Non-Medicare

**Effective Date:** May 18, 2016

**Revision Date:** May 18, 2016

**Policy/Criteria:**

Age-Edit Criteria older than Age 18:

1. **Adderall, Adderall XR (amphetamine/dextroamphetamine salts); Dexedrine, Dextrostat, Dexedrine Spansule SR (dextroamphetamine); Focalin, Focalin XR (dexamphetamine); Concerta, Metadate CD, Metadate ER, Ritalin (methylphenidate);**
   a. FDA-approved indication(s)

**Non-formulary CNS Stimulants**

1. **Ritalin LA, Aptensio XR (methylphenidate)**
   a. Diagnosis of ADHD
   b. Failure or clinically significant adverse effects to at least two formulary long-acting stimulant (e.g. Adderall XR, Concerta, Focalin XR, Dexedrine Spansule SR, Metadate CD, Metadate ER)

2. **Daytrana Transdermal Patch, QuilliChew ER, Quillivant XR Oral Suspension (methylphenidate), Adzenys XR-ODT, Dyanavel XR suspension (amphetamine):**
   a. Diagnosis of ADHD and one of the following:
      i. Administration via feeding tube
      ii. Documented difficulty swallowing
         1. Failure or clinically significant adverse effects to one of the preferred sprinkling capsule: Metadate CD or Ritalin LA
iii. Failure or clinically significant adverse effects to at least two formulary long-acting stimulants (e.g. Adderall XR, Concerta, Focalin XR, Dexedrine Spansule SR, Metadate CD, Metadate ER)

3. Methylin Chewable, Methylin Solution (methylphenidate), Procentra Oral Solution (dextroamphetamine):
   a. Diagnosis of ADHD and one of following:
      i. Administration via feeding tube
      ii. Documented difficulty swallowing:
         1. Failure or clinically significant adverse effects to one of the preferred sprinkling capsule: Metadate CD or Ritalin LA
      iii. Failure or clinically significant adverse effects to two formulary stimulants
   b. Diagnosis of Narcolepsy and one of following:
      i. Administration via feeding tube or documented difficulty swallowing
      ii. Failure or clinically significant adverse effects to two formulary stimulants

4. Vyvanse
   a. Diagnosis of ADHD and one of following:
      i. History of substance abuse
      ii. Failure or clinically significant adverse effects to at least two formulary long-acting stimulants (e.g. Adderall XR, Concerta, Focalin XR, Dexedrine Spansule SR, Metadate ER)
   b. Diagnosis of Binge Eating Disorder

5. Evekeo (amphetamine)
   a. Diagnosis of ADHD or Narcolepsy:
      i. Failure or clinically adverse effects to at least two formulary stimulants
   b. Diagnosis of obesity:
      i. Must meet BMI criteria (please see the anti-obesity drug class monograph)
      ii. Failure or clinically adverse effects to orlistat (Alli, over-the-counter), phentermine (Adipex-P) and diethylpropion (Tenuate)

6. Desoxyn (methamphetamine)
   a. Diagnosis of ADHD:
      i. Failure or clinically adverse effects to at least one long acting formulary stimulant and two additional formulary stimulants
      ii. Prescribed by a psychiatrist
   b. Diagnosis of Obesity:
      i. Must meet BMI criteria (please see the anti-obesity drug class monograph)
      ii. Failure or clinically adverse effects to orlistat (Alli, over-the-counter), phentermine (Adipex-P) and diethylpropion (Tenuate)

Clinical Justification:

2011 American Academy of Pediatrics: Clinical Practice Guideline for the Diagnosis, Evaluation and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents

- For elementary school-aged children (6-11 years of age), the primary care clinician should prescribe FDA approved medications for ADHD and/or evidence based parent- and/or teacher administered behavior therapy as treatment for ADHD, preferably both (Evidence A)
The evidence is particularly strong for stimulant medications and sufficient but less strong for atomoxetine, extended release guanfacine, and extended release clonidine (in that order). (Evidence A)

- For adolescents (12-18 years of age), the primary care clinician should prescribe FDA-approved medications for ADHD with the assent of the adolescents (Evidence A) and may prescribe behavior therapy as treatment for ADHD.

- All approved stimulant medications are methylphenidate or amphetamine compounds, which have similar effects and adverse effects. Given the extensive evidence of efficacy and safety, they remain the first choice of medication treatment.
  - Decision regarding which compound a clinician first prescribes should be made on the basis of individual preferences of the clinician and family
  - If a trial with 1 group is unsuccessfully (poor efficacy or adverse effects), a trial on a medication from the other group should be undertaken.

- For cases in which there is concern about possible abuse or diversion of the medication or there is a strong preference against stimulant medication, an FDA-approved non stimulant medication may be considered as first choice of medication.

- The medications that use a microbead technology can be opened and sprinkled on food for patients who have difficulty swallowing tablets or capsules. Immediate-release methylphenidate, which comes in liquid and chewable forms, and a methylphenidate transdermal patch are also available as alternatives to tablets or capsules.

- Atomoxetine is a selective norepinephrine-reuptake inhibitor and might result in maximum response only after approximately 4 to 6 weeks. Extended-release guanfacine and extended-release clonidine are alpha2-adrenergic agonists and might result in maximum response in approximately 2-4 weeks.

- Atomoxetine might cause gastrointestinal tract symptoms, appetite suppression and sedation early in treatment.

- Both alpha2-adrenergic agonists can cause the adverse effect of somnolence. In addition, it is recommended that the medications be tapered when discontinued to prevent a possible rebound in blood pressure.

Abuse Potential of Lisdexamfetamine

Overall, data evidence is limited on abuse potential of lisdexamfetamine. For patients with a history of amphetamine or stimulant abuse, lisdexamfetamine may be considered as a treatment option, when stimulants are clinically indicated.

A small study consisted of nine subjects evaluated the abuse liability of single intravenous doses of lisdexamfetamine and intravenous immediate-release dextroamphetamine compared to placebo in adult stimulant abusers. As a result, the 20mg dextroamphetamine showed significantly increase abuse-related liking scores compared with placebo (p < 0.05), whereas the liking effects of 50mg lisdexamfetamine did not significantly differ from placebo. The authors concluded that 25mg or 50mg lisdexamfetamine intravenous dose did not associate with significant abuse-related liking scores.
<table>
<thead>
<tr>
<th>Drug</th>
<th>Strength (mg)</th>
<th>Formulary Status</th>
<th>Frequency</th>
<th>Pediatric Usual Daily dose</th>
<th>Adult Usual Daily dose</th>
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<tbody>
<tr>
<td><strong>Amphetamine</strong></td>
<td></td>
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<tr>
<td>Dextedrine, Dextrostat</td>
<td>5, 10</td>
<td>F</td>
<td>Daily to three times daily</td>
<td>10-40mg</td>
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<td>(dextroamphetamine)</td>
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<tr>
<td>Dextedrine Spansule</td>
<td>5, 10, 15</td>
<td>F</td>
<td>Daily to twice daily</td>
<td>10-40mg</td>
<td>10-40mg</td>
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<td>(dextroamphetamine)</td>
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<tr>
<td>Dyanavel XR suspension</td>
<td>2.5mg/mL</td>
<td>NF</td>
<td>Daily</td>
<td>2.5-10mg</td>
<td>10-20mg</td>
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<td>(amphetamine)</td>
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<tr>
<td>Procentra (dextroamphetamine)</td>
<td>5mg/5mL</td>
<td>NF</td>
<td>Daily to three times daily</td>
<td>2.5-40mg</td>
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<td>Zenzedi (dextroamphetamine)</td>
<td>2.5, 5, 7.5, 10, 15, 20, 30</td>
<td>NF</td>
<td>Daily to three times daily</td>
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<tr>
<td>Adderall (amphetamine/</td>
<td>5, 7.5, 10, 12.5, 15, 20, 30</td>
<td>F</td>
<td>Daily to three times daily</td>
<td>2.5-40mg</td>
<td>5-60mg</td>
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<tr>
<td>dextroamphetamine salts)</td>
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<td>Adderall XR (amphetamine/dextroamphetamine salts)</td>
<td>5, 10, 15, 20, 25, 30</td>
<td>F</td>
<td>Daily</td>
<td>5-40mg</td>
<td>20-60mg</td>
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<td>Vyvanse (lisdexamfetamine)</td>
<td>20, 30, 40, 50, 60, 70</td>
<td>NF</td>
<td>Daily</td>
<td>20-70mg</td>
<td>30-70mg</td>
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<tr>
<td><strong>Methylphenidate</strong></td>
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<tr>
<td>Methylin Chewable</td>
<td>2.5, 5, 10</td>
<td>NF</td>
<td>Twice daily to three times daily</td>
<td>10-60mg</td>
<td>20-60mg</td>
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<tr>
<td>(methylphenidate)</td>
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<tr>
<td>Methylin Solution</td>
<td>5mg/5mL</td>
<td>NF</td>
<td>Twice daily to three times daily</td>
<td>10-60mg</td>
<td>20-60mg</td>
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<td>Metadate ER (methylphenidate)</td>
<td>10, 20</td>
<td>F</td>
<td>Daily</td>
<td>10-60mg</td>
<td>20-60mg</td>
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<tr>
<td>Ritalin (methylphenidate)</td>
<td>5, 10, 20</td>
<td>F</td>
<td>Twice to three times daily</td>
<td>10-60mg</td>
<td>20-60mg</td>
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<tr>
<td>Focalin (dexamethylphenidate)</td>
<td>2.5, 5, 10</td>
<td>F</td>
<td>Twice daily</td>
<td>5-20mg</td>
<td>10-40mg</td>
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<td>Concerta (methylphenidate)</td>
<td>18, 27, 36, 54</td>
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<td>Daily</td>
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<td>18-72mg</td>
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<td>Metadate CD (methylphenidate)</td>
<td>10, 20, 30, 40, 50, 60</td>
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<td>Daily</td>
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<td>20-60mg</td>
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<td>Ritalin LA (methylphenidate)</td>
<td>10, 20, 30, 40, 60</td>
<td>NF</td>
<td>Daily</td>
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<td>10-60mg</td>
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<td>Daytrana (methylphenidate)</td>
<td>10, 15, 20, 30</td>
<td>NF</td>
<td>Daily</td>
<td>10-30mg</td>
<td>30-60mg</td>
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<td>Drug Name</td>
<td>Dose Formulations</td>
<td>Dosage Formulations</td>
<td>Daily Dose Range</td>
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<tr>
<td>Quillivant XR (methylphenidate)</td>
<td>25mg/5mL, NF, Daily</td>
<td>20-60mg, 20-60mg</td>
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<td>QuilliChew XR (methylphenidate)</td>
<td>20, 30, 40, NF, Daily</td>
<td>20-60mg, 20-60mg</td>
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<tr>
<td>Focalin XR (dexamethylphenidate)</td>
<td>5, 10, 15, 20, 25, 30, 35, 40, F, Daily</td>
<td>5-30mg, 10-40mg</td>
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</tbody>
</table>

**Non-stimulant**

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dose Formulations</th>
<th>Dosage Formulations</th>
<th>Daily Dose Range</th>
<th>Daily Dose Range</th>
</tr>
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<tbody>
<tr>
<td>Intuniv ER (Guanfacine)</td>
<td>1, 2, 3, 4, F, Daily</td>
<td>1-4mg, 1-4mg</td>
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<td>Kapvay ER (clonidine)</td>
<td>0.1, F, Daily to twice Daily</td>
<td>0.1-0.4mg, 0.1-0.4mg</td>
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<tr>
<td>Strattera (atomoxetine)</td>
<td>10, 18, 25, 40, 60, 80, 100, F, Daily</td>
<td>0.5mg/kg - 1.4mg/kg, 40-100mg</td>
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</tbody>
</table>

**References:**