Background
Attention-deficit/hyperactivity disorder inattentive type (ADHD-I) is characterized by increased inattention symptoms with relatively few symptoms of hyperactivity and impulsivity. Children with ADHD-I tend to have more academic and social impairments than children with ADHD-combined type (ADHD-C). If it is estimated that 72% of all individuals with ADHD are classified as the ADHD-I subtype. ADHD-I child. Self-reporting has the potential to be inaccurate. There is currently no standard for the willingness-to-pay threshold per ADHD-I child. There is a lack of standardization for the willingness-to-pay threshold per ADHD-I child.

Methods
Study design: A comparative decision analytic cost-effectiveness study was conducted using a Markov model.

Objective
To evaluate the cost-effectiveness of two behavioral psychosocial interventions, CLAS and PFT, compared to typical community treatment, TAU, for the treatment of ADHD-I in children.

Results
Cost-effectiveness of a Behavioral Psychosocial Treatment Integrated Across Home and School for Pediatric ADHD-Inattentive Type

Table 1. Base Case Analysis

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Cost ($)</th>
<th>Effect (ADHD-I cases avoided)</th>
<th>Incremental Cost ($)</th>
<th>Incremental Effectiveness (ADHD-I cases avoided)</th>
<th>ICER ($) per ADHD-I cases avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAU</td>
<td>478</td>
<td>10.7 (21%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PFT</td>
<td>58,832</td>
<td>33.9 (70%)</td>
<td>50,910</td>
<td>23.2</td>
<td>2,084</td>
</tr>
<tr>
<td>CLAS</td>
<td>122,472</td>
<td>38.9 (85%)</td>
<td>63,640</td>
<td>5.0</td>
<td>12,684</td>
</tr>
</tbody>
</table>

*ICER calculated by (Cost2 - Cost1) / (Effect2 - Effect1)

The increase in clinician time for CLAS is attributed to the clinician group meetings and clinician-focused parent-child consultations that were only offered to the CLAS treatment arm.

Figure 2. Sensitivity Analysis for the ICER of CLAS vs. PFT and CLAS vs. TAU

- Compared to TAU, PFT and CLAS cost about $800 and $1650 more per patient, respectively.
- The percentage of ADHD-I cases avoided with PFT or CLAS treatment is significantly higher than the percentage of cases avoided with TAU.
- The percentage of ADHD-I cases avoided with CLAS is higher compared to PFT. However, the difference is not statistically significant (p = 0.39).
- Both PFT and CLAS are cost-effective compared to TAU. CLAS costs $12,700 more than PFT for each ADHD-I case avoided, which may or may not be cost-effective.

Table 3. Average Daily Time (minutes) Saved After Treatment

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Parent Time</th>
<th>Clinician Time</th>
<th>Teacher Time</th>
<th>Total Time Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAU</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PFT</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>CLAS</td>
<td>12</td>
<td>3</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

In general, parents reported less time spent on homework-related post-treatment compared to school-based treatments. Although the PFT treatment arm saved more time in total post-treatment compared to CLAS, the difference was not statistically significant (p = 0.40).

Conclusions
- Cost savings were based on parent-reported time spent on daily activities with ADHD-I child. Self-reporting has the potential to be inaccurate.
- The treatment outcome was only followed for 5-7 months post-treatment. Thus, the overall effectiveness of a novel psychosocial treatment tailored to the needs of children with ADHD-I is characterized by increased inattention symptoms with relatively few symptoms of hyperactivity and impulsivity. Children with ADHD-I tend to have more academic and social impairments than children with ADHD-C.

Limitations
- Cost savings were based on parent-reported time spent on daily activities with ADHD-I child. Self-reporting has the potential to be inaccurate.
- The treatment outcome was only followed for 5-7 months post-treatment. Thus, data on the durability of response is limited.

Future studies evaluating the impact of behavioral psychosocial treatment on quality-adjusted life years (QALY) would provide a more thorough, long-term assessment of the cost-effectiveness of TAU, PFT, and CLAS.

References

4. Garner AA, Willcutt EG, Lin J, Willcutt JR, Olson CR, Yang J, et al. Attention-deficit/hyperactivity disorder inattentive type (ADHD-I) is characterized by increased inattention symptoms with relatively few symptoms of hyperactivity and impulsivity. Children with ADHD-I tend to have more academic and social impairments than children with ADHD-combined type (ADHD-C).

Figure 1. Randomized Treatment Arms for Pediatric ADHD-I

- Medication therapies
- Non-pharmacological interventions

- Sensitivity analysis: Decreasing the number and duration of meetings with specialized social workers, training social workers to lead the group, individual, and consultation sessions, excluding time savings, childcare costs, or teacher time.