Comparative Cost Analysis of Sequential, Adaptive, Behavioral, Pharmacological, and Combined Treatments for Childhood ADHD.


Abstract
We conducted a cost analysis of the behavioral, pharmacological, and combined interventions employed in a sequential, multiple assignment, randomized, and adaptive trial investigating the sequencing and enhancement of treatment for children with attention deficit hyperactivity disorder (ADHD; Pelham et al., 201X; N = 146, 76% male, 80% Caucasian). The quantity of resources expended on each child's treatment was determined from records that listed the type, date, location, persons present, and duration of all services provided. The inputs considered were the amount of physician time, clinician time, paraprofessional time, teacher time, parent time, medication, and gasoline. Quantities of these inputs were converted into costs in 2013 USD using national wage estimates from the Bureau of Labor Statistics, the prices of 30-day supplies of prescription drugs from the national Express Scripts service, and mean fuel prices from the Energy Information Administration. Beginning treatment with a low-dose/intensity regimen of behavior modification (large-group parent training) was less costly for a school year of treatment ($961) than beginning treatment with a low dose of stimulant medication ($1,669), regardless of whether the initial treatment was intensified with a higher "dose" or if the other modality was added. Outcome data from the parent study (Pelham et al., 201X) found equivalent or superior outcomes for treatments beginning with low-intensity behavior modification compared to intervention beginning with medication. Combined with the present analyses, these findings suggest that initiating treatment with behavior modification rather than medication is the more cost-effective option for children with ADHD.