Specific Components of Pediatricians’ Attention-Deficit/Hyperactivity Disorder (ADHD) Medication-Related Care Predict ADHD Symptom Improvement

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Abstract

Objective
The development of attention-deficit/hyperactivity disorder (ADHD) care quality measures is a prerequisite to improving the quality of community-based pediatric care of children with ADHD. Unfortunately, the evidence base for existing ADHD care quality metrics is poor. The objective of this study was to identify which components of ADHD care best predict patient outcomes.

Method
Parents of 372 medication-naïve children in grades 1-5 presenting to their community-based pediatrician (n = 195) for an ADHD-related concern and who were subsequently prescribed ADHD medication were identified. Parents completed the Vanderbilt ADHD Parent Rating Scale (VAPRS) at the time ADHD was raised as a concern and again approximately 12 months after starting ADHD medication. Each patient’s chart was reviewed to measure twelve different components of ADHD care.

Results
Across all children, the mean (SD) VAPRS Total Symptom Score (TSS) reduction over the first year of treatment was 11.6 (10.1). Of the twelve components of ADHD care, shorter times to first contact and more teacher ratings collected in the first year of treatment significantly predicted greater reductions in patient TSS scores. Notably, it was timeliness of contacts, defined as either office visits, phone calls, or email communication, that predicted more ADHD symptom reduction. Office visits alone, in terms of number or timeliness, did not predict patient outcomes.

Conclusion
The magnitude of ADHD symptom reduction that can be achieved with the use of ADHD medications was associated with specific components of ADHD care. Future development/modifications of ADHD quality care metrics should include these ADHD care components.