How Much Might We Be Prepared to Pay for Psychosocial Interventions for Patients with Attention-Deficit/Hyperactivity Disorder (ADHD)?

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Objectives: Notwithstanding evidence showing its clinical effectiveness, little if any data have supported the cost-effectiveness of psychosocial interventions for patients with ADHD. The NIMH-initiated MTA study was designed to maximize clinical effectiveness of psychosocial interventions in children with ADHD. We use patient-level data from this study to estimate the maximum allowable cost of better-targeted behavioral interventions that would still meet currently used benchmarks for cost-effectiveness in Europe, assuming they replicate clinical effectiveness as reported in the MTA study. **Methods**: 579 children age 7-9.9 years with ADHD (DSM-IV) were randomly assigned medication management (MedMgt), intense behavioral treatment (Beh), both combined (Comb), or community care (CC). All MTA treatment strategies were clinically effective. Costing from a societal and from a third-party payer's perspective for Germany, Netherlands, Sweden, and United Kingdom excluded the research component of the study. Treatment response was defined as normalization of core symptoms after 14 months. QALYs were estimated using utility weights derived from UK expert and parent-proxy-ratings. Comb was most effective, and Med dominated Beh economically. Using this data, we estimated the maximum allowable cost (MAC) of Comb versus Med, quantifying the uncertainty by means of non-parametric bootstrapping. **Results**: MACs and their 95% confidence intervals for Comb versus Med were determined (a) for ADHD, and for subgroups with (b) "pure" ADHD (without comorbidity, n=184) and (c) hyperkinetic disorder (HKD, with or without conduct disorder, n=145), assuming (1) Comb meeting an ICER threshold (when added to MedMgt) of (1) €50,000 or (2) €100,000 per QALY. MACs for UK were (1) €2,943 (€2,569-€3,310) and (2) €3,328 (€2,612-€4,043). Estimates for Germany and The Netherlands were lower, whereas Swedish estimates were broadly in line with UK data. **Conclusions**: Despite some limitations, which will be discussed, these estimates may assist designing clinical studies to support acceptable cost-effectiveness of psychosocial treatment strategies for ADHD.

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