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Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD): Are U.S. cost-effectiveness findings based upon the MTA Study relevant to mental health care policy makers in Germany?

The U.S. MTA Study represents the most important randomized trial of ADHD treatment strategies that has undergone economic evaluation. Yet there are distinct differences between the United States and Germany regarding diagnostic criteria, treatment preferences, health care utilization patterns, and unit costs related to ADHD. **OBJECTIVE**: To evaluate, based on the MTA, the cost-effectiveness of clinically proven treatment strategies for ADHD from the perspective of the statutory health insurance (SHI) in Germany, and to provide cost-utility estimates. METHODS: 579 children with ADHD, combined type (DSM-IV), aged 7-10, were assigned to 14 months of routine community care (CC), medication management (MedMgt), intensive behavioral treatment (Beh), or the two combined (Comb). Diagnostic data were used to identify patients meeting the stricter ICD-10 criteria for Hyperkinetic (Conduct) Disorder (HKD, F90.0, or HKCD, F90.1; n=145). Clinical effectiveness was determined using ADHD symptom normalization rates, and utility estimates came from the literature. Costs were calculated for resources used, excluding the research component of the study, using current (2005) SHI acquisition costs. Time horizon of the analysis was one year. **RESULTS**: MedMgt, compared to CC, led to an incremental cost per patient normalized of 2,088 Euro (or 17,850-32,630 Euro/QALY), dominating the Beh strategy. Comb, compared to MedMgt, was associated with an ICER of 55,441 Euro per patient normalized. Deterministic and stochastic sensitivity analyses (by nonparametric bootstrapping) demonstrated the robustness of these findings over a broad range of assumptions, including less costly routine care. CONCLUSIONS: Despite substantial differences in ADHD diagnosis and treatment between the U.S. and Germany, these results for Germany concur with overall U.S. findings in clearly showing dominance of MedMgt compared to Beh for HKD/HKCD. Based upon the MTA, adding intensive Beh to MedMgt ("Comb") in patients with HKD/HKCD is associated with an estimated cost per OALY gained in the range of 474,000-866,000 Euro.

Presented at the 8th Annual European Congress of the International Society for Pharmacoeconomics & Outcomes Research, Florence, Italy, November 08, 2005