Health Service Expenditures for Patients with a Diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) in Germany – An Age and Gender Specific Analysis

Michael Schlander¹⁻³, Oliver Schwarz^{1,4}, Goetz-Erik Trott^{1,5}, Michael Viapiano⁶, Norbert Bonauer⁶

¹Institute for Innovation & Valuation in Health Care (InnoVal^{HC}), Eschborn, Germany; ²University of Heidelberg, Germany; ³University of Applied Economic Sciences Ludwigshafen, Germany; ⁴Heilbronn University, Germany; ⁵University of Wuerzburg, Germany; ⁶Kassenaerztliche Vereinigung Baden-Wuerttemberg, Karlsruhe, Germany

<u>Objective</u>: International studies have reported that patients with ADHD incur higher health care costs than persons without this condition, but little is known about the direct medical costs associated with ADHD in Germany. The present study aims at filling this void. Methods: Health care resource utilization data for patients with a diagnosis of ADHD (F90.0 and/or F90.1) were extracted from the Nordbaden claims database (for year 2003), covering the complete regional population insured by Statutory Health Insurance SHI (2.238 million lives in 2003), and were combined with SHI prescription data. Complete datasets were available for 3,831 outpatients with ADHD and for a randomly selected control group matched 1:1 by age and gender. For costing, resource use was valued applying SHI acquisition costs. **Results:** The annual average expenditure (direct medical costs borne by SHI) per patient was €650 versus €251 for matched controls, with physician charges accounting for 68% (€444 versus €170 for controls). All categories of costs were higher for patients with ADHD by a factor of 2 to 5 versus controls, an observation that was consistent across age and gender defined subgroups. Average expenditures per patient with ADHD increased with age (age group <7 years, €520; 7-12 years, €622; 13-19 years, €661; >20 years, €1,147), primarily reflecting higher medication costs. In contrast, average costs per control person showed little change across age groups (at €269, €245, €250, and €272, respectively). Among children and adolescents, there were no substantial spending differences by gender. **Conclusions**: These data are likely underestimates of the total expenditures attributable to ADHD since they do neither include costs of inpatient treatment nor cost of ergotherapeutic interventions, which will have to be addressed in future studies. They provide, for the first time, robust information from Germany on the significant financial burden for the SHI attributable to ADHD.

Published in: Value in Health 11 [6] (2008) A588

ISPOR 11th Annual European Conference, Athens, Greece, November 08-11, 2008