co-morbidities, and prior use of inpatient services were also found to impact treatment costs. CONCLUSIONS: This study finds that compared to risperidone, olanzapine is associated with increased drug expenditures but reduced medical service costs. Although total costs are similar, results suggest that schizophrenia patients might benefit from olanzapine due to reduced medical service use.

**MH2**

**IMPACT OF OPEN ACCESS TO ATYPICAL ANTIPISTHOTICS IN CALIFORNIA MEDICAID**

Ahn J, McCombs JS
University of Southern California, Los Angeles, CA, USA

OBJECTIVES: Investigate the impact of open access to atypical antipsychotics on the cost of treating patients with severe mental disorders. METHODS: Monthly cost data were derived for two cohorts of California Medicaid patients with severe mental illness. The intervention cohort (N = 92,089) utilized services over the 24-months spanning the repeal of prior authorization in October 1997. The control cohort (N = 75,551) used services spanning October 1995. Multivariate time trend models for each service category were estimated to test whether utilization patterns were altered after open access. RESULTS: The unadjusted rate of growth for each type of service in the control cohort was (~ 0.8% ~ 1.8%) compared to (0.0% ~ 3.5%) for the intervention cohort. The multivariate time trend models for all services found that total cost and long-term care use increased in the first 2-months after open access by 4% and 3% respectively, but consistently decreased in the next 10 months and 8 months, respectively. The estimated total cost savings from these changes in utilization patterns was $145.50 per patient per month over the 12-month period following open access. CONCLUSIONS: These results suggest that policy analysts must be careful when evaluating open access to atypical antipsychotics since short-term and long-term impacts on cost may differ.

**MH3**

**COST-EFFECTIVENESS OF METHYLPHENIDATE OROS FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD): AN EVALUATION FROM THE PERSPECTIVE OF THE UK NATIONAL HEALTH SERVICE (NHS)**

Schlander M
University of Witten/Herdecke & University of Applied Sciences Ludwigshafen, Ludwigshafen am Rhein, Germany

Methylphenidate (MPH) has been shown to be an effective and cost-effective treatment for children and adolescents with attention-deficit/hyperactivity disorder (ADHD). Given their short duration of action, MPH immediate-release (MPH-IR) formulations require multiple daily dosing. Studies have reported noncompliance rates of 20–65%. OBJECTIVE: To evaluate, from the perspective of the UK NHS, the cost-effectiveness of MPH-OROS, a novel once-a-day formulation. METHODS: A meta-analysis was performed to synthesize data on clinical efficacy from three randomized clinical trials, comparing MPH-OROS o.a.d., MPH-IR t.i.d., and placebo (Caro 2003). Results were combined with unit cost data (BNF 2003, PSSRU 2003), resource utilization estimates (NHS perspective), and assumptions on treatment compliance (systematic review, Claxton et al. 2001). Data were used to populate a decision tree model adapting and extending the CCOHTA analysis (1998) of ADHD therapies. RESULTS: MPH-OROS and MPH-IR were significantly more efficacious than placebo, in both community teacher and parent ratings of inattention/overactivity (IOWA Conners I/O scale; primary trial endpoint). For teacher ratings, standardized mean differences (SMD, random effects model) compared to placebo were 1.32 (1.09–1.55, 95% CI, for MPH-OROS) and 1.19 (1.00–1.38 for MPH-IR); effect sizes reported by parents were generally higher and better for MPH-OROS compared to MPH-IR. Assuming 79% compliance with MPH-OROS o.a.d. and 65% with MPH-IR t.i.d. over one year, the incremental cost of MPH-OROS per SMD (teacher ratings) was £1345 (for MPH-IR: £1120); for parent ratings, MPH-OROS exhibited extended dominance over MPH-IR. Comprehensive sensitivity analyses were performed. For MPH-IR compliance rates below 57%, MPH-OROS dominated (in an extended sense) also in teacher ratings. CONCLUSION: These data indicate that MPH-OROS may be more effective than MPH-IR t.i.d. in daily practice. They suggest an acceptable incremental cost-effectiveness ratio of MPH-OROS, with extended dominance over MPH-IR under a broad range of assumptions. Real world data will have to confirm these estimates.

**MH4**

**ASSESSMENT OF HEALTH STATE UTILITIES FOR ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN CHILDREN USING PARENT-BASED STANDARD GAMBLE SCORES**

Secnik K1, Cottrell S2, Matza LS3, Edgell E4, Aristides M5, Tilden D5, Burridge J6, Mannix S7
1Eli Lilly and Company, Indianapolis, IN, USA; 2M-TAG Pty Ltd., London, England; 3MEDTAP International, Bethesda, MD, USA; 4Lilly Research Centre, Windlesham, United Kingdom; 5M-TAG Limited, London, United Kingdom; 6MEDTAP International, Inc, Bethesda, MD, USA

OBJECTIVES: Attention-Deficit/Hyperactivity Disorder (ADHD) is a behavior disorder, originating in childhood, with broad impairment in academic performance, social functioning, and quality of life. Limited research on ADHD health state utilities has been previously reported using parent ratings. The purpose of this study was to use standard gamble (SG) utility valuation methodology to assess ADHD health states in a European sample of children diagnosed with ADHD. METHODS: The study was conducted in August 2003 in London, England. Parents of children diagnosed with ADHD completed the feeling thermometer and SG utility interviews, in which they rated their child’s current health and 14 hypothetical health states (e.g., untreated ADHD, short- and long-acting stimulant treatment, and atomoxetine treatment [a new non-stimulant]). The hypothetical health states were developed based on published literature, clinical trial data, and opinion of clinical experts. Parents reported children’s symptoms using the 18-item ADHD-RS. RESULTS: Participants were 83 parents of children diagnosed with ADHD. The sample mean ADHD-RS total score was 37. Raw and adjusted SG ratings were presented (the latter re-scales the ratings as some parents were unable to take part in the hypothetical gamble involving death). The mean parent raw and adjusted SG ratings of their child’s current health state were 0.72 and 0.91, respectively. Raw and adjusted SG ratings of hypothetical health states ranged from 0.63–0.90 and 0.88–0.96, respectively. Parents’ responses to the hypothetical health states using the feeling thermometer (range 0–100) were lower overall (26–87) when compared to the SG scores, with parents’ rating their own child’s current health state at 57. CONCLUSION: SG rating scores can be obtained for children who have been diagnosed with ADHD by using their parents as proxies. Moreover, parents are able to distinguish and evaluate different hypothetical ADHD health states by assigning unique values to the scenarios presented to them.