paroxetine (expected cost = $688 for 76 SFDs), for an incremental cost effectiveness ratio of $2.79/SFD ($1004/Symptom-free year). Paroxetine was dominated under the SOC perspective. Total expected cost from the SOC perspective was $3676 and $3529 for paroxetine and escitalopram, respectively. Sensitivity analysis was conducted on upper and lower efficacy boundaries, yielding similar incremental cost-effectiveness results. CONCLUSION: Escitalopram is cost-saving in the treatment of GAD under the SOC perspective in Canada, and appears to be cost-effective under the MoH perspective.

**PMH2**

**ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN CHILDREN AND ADOLESCENTS: MENTAL HEALTH AND PHYSICAL CO-MORBIDITY IN NORDBADEN / GERMANY**

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ADHD in children and adolescents is associated with substantial comorbidity. Longitudinal studies have shown ADHD to frequently persist into adulthood. OBJECTIVES: To use administrative data from Nordbaden / Germany to assess the extent of co-existing medical conditions in grown-ups with a diagnosis of ADHD (Hyperkinetic Disorder: ICD-10 F90.0, F90.1). METHODS: Using the comprehensive claims database of the official physicians’ organization of Nordbaden (KVNB, with an insured population of 2.234m in 2003), n = 630 ADHD patients age 20 and beyond were identified. The ADHD group was matched with a non-ADHD cohort (n = 630) on a 1:1 ratio based on age and gender, and the rate of co-existent conditions was compared between both groups. Chi-square statistics was used to explore levels of significance. RESULTS: The most prevalent psychiatric conditions associated with ADHD in adults included depressive episodes (F32: prevalence 30.3%; relative risk [RR] 7.1*** [p < 0.001]), recurrent depressive disorder (F33: 14.3%, RR 12.9***), persistent mood disorders (F34: 7.0%, RR 11.0***), anxiety disorders (F41: 15.7%, RR 5.8***), adjustment disorders (F43: 18.9%; RR 6.6***), other neurotic disorders (F48: 8.6%, RR 6.8***), specific personality disorders (F60: 14.1%; RR 22.3***), other behavioral/emotional disorders with onset in childhood/adolescence (F98: 9.0%; RR 57.0***), mental/behavioral disorders due to substance use (F19: 4.9%; RR 7.8***), or due to use of alcohol (F10: 4.6%; RR 5.8***), and eating disorders (F50: 4.3%, RR 13.5***). Non-psychiatric conditions associated with ADHD included obesity, metabolic, infectious and allergic disorders, including asthma bronchiale, and diseases of the ear and hearing loss but not disorders of the eye and visual disturbances. Detailed analyses by age and gender will be presented. CONCLUSIONS: These data point to significant comorbidity associated with ADHD in grown-ups, thus underscoring the clinical relevance of the condition. They provide a basis for further epidemiological research and for analyses of the cost associated with ADHD in adult patients.

**PMH3**

**ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN GROWN-UPS: ADMINISTRATIVE DATA ON CO-EXISTING CONDITIONS**

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ADHD in children and adolescents is associated with substantial comorbidity. Longitudinal studies have shown ADHD to frequently persist into adulthood. OBJECTIVES: To use administrative data from Nordbaden / Germany to assess the extent of co-existing medical conditions in grown-ups with a diagnosis of ADHD (Hyperkinetic Disorder: ICD-10 F90.0, F90.1). METHODS: Using the comprehensive claims database of the official physicians’ organization of Nordbaden (KVNB, with an insured population of 2.234m in 2003), n = 630 ADHD patients age 20 and beyond were identified. The ADHD group was matched with a non-ADHD cohort (n = 630) on a 1:1 ratio based on age and gender, and the rate of co-existent conditions was compared between both groups. Chi-square statistics was used to explore levels of significance. RESULTS: The most prevalent psychiatric conditions associated with ADHD in adults included depressive episodes (F32: prevalence 30.3%; relative risk [RR] 7.1*** [p < 0.001]), recurrent depressive disorder (F33: 14.3%, RR 12.9***), persistent mood disorders (F34: 7.0%, RR 11.0***), anxiety disorders (F41: 15.7%, RR 5.8***), adjustment disorders (F43: 18.9%; RR 6.6***), other neurotic disorders (F48: 8.6%, RR 6.8***), specific personality disorders (F60: 14.1%; RR 22.3***), other behavioral/emotional disorders with onset in childhood/adolescence (F98: 9.0%; RR 57.0***), mental/behavioral disorders due to substance use (F19: 4.9%; RR 7.8***), or due to use of alcohol (F10: 4.6%; RR 5.8***), and eating disorders (F50: 4.3%, RR 13.5***). Non-psychiatric conditions associated with ADHD included obesity, metabolic, infectious and allergic disorders, including asthma bronchiale, and diseases of the ear and hearing loss but not disorders of the eye and visual disturbances. Detailed analyses by age and gender will be presented. CONCLUSIONS: These data point to significant comorbidity associated with ADHD in grown-ups, thus underscoring the clinical relevance of the condition. They provide a basis for further epidemiological research and for analyses of the cost associated with ADHD in adult patients.

**PMH4**

**ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN CHILDREN AND ADOLESCENTS: MENTAL HEALTH AND PHYSICAL CO-MORBIDITY IN NORDBADEN / GERMANY**

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With reported prevalence rates of 2–10%, ADHD is one of the most common disorders of childhood and adolescence. Only recently, comorbidity has been recognized as one of the most important aspects of the disorder. OBJECTIVES: To determine real-world prevalence rates for psychiatric and non-psychiatric comorbid conditions in children and adolescents with a diagnosis of ADHD according to ICD-10 criteria (Hyperkinetic [Conduct] Disorder, HKD/HKCD, F90.0/F90.1), using the Nordbaden claims database covering 2.238m insured persons in South-Western Germany (82% of the regional population). METHODS: A total of n = 11,245 ADHD patients age 19 or less were identified. The ADHD group was matched with a non-ADHD cohort (n = 11,228) on a 1:1 ratio based on age and gender, and the rate of co-existent conditions was compared between both groups. Chi-square statistics was used to explore levels of significance. RESULTS: The most frequent psychiatric comorbidities (in 20–40% of patients, each; all p < 0.001; relative risks compared to control cohort 3–8) included mood and affective disorders, conduct disorders, specific developmental disorders, including those of scholastic skills. Significant associations (similar magnitude) were also found for ADHD and adjustment disorders, habit and impulse disorders, tic disorders, sleep disorders, disorders associated with sexual development, maltreatment syndromes, mental retardation, lack of expected normal physiological development and disorders due to brain
damage—though these occurred less commonly (<10% of patients each). The analyses also revealed significantly increased relative risk (25–100%) for non-psychiatric disorders involving immune mechanisms, neurological disorders, metabolic disorders, diseases of the skin and ear, pulmonary and upper respiratory diseases, certain gastrointestinal diseases, diseases of the blood and blood-forming organs, and accidents and injuries (all p < 0.001). Detailed findings by age and gender will be presented.

CONCLUSIONS: These data indicate substantial comorbidity associated with ADHD in children and adolescents. They provide a basis for further epidemiological research and for analyses of the cost associated with ADHD.

PMH5

A MODELLLED ECONOMIC EVALUATION OF ATOMOXETINE (STRATTERA) FOR THE TREATMENT OF THREE PATIENT GROUPS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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OBJECTIVE: To estimate the cost-effectiveness of atomoxetine for the treatment of children and adolescents with Attention Deficit/Hyperactivity Disorder (ADHD) in Norway.

METHODS: A modeled economic evaluation calculated the incremental cost per quality-adjusted life years (QALYs) gained of atomoxetine compared to two stimulant therapies and “no medication”. Treatment algorithms with and without atomoxetine were compared in patient subgroups stratified by prior treatment history and whether stimulant medication was appropriate. A Markov process incorporated fourteen health states representing hypothetical treatment outcomes for which utility values were sought from parents of patients through survey. Aspects of effectiveness and safety of each medication were based on a review of controlled clinical trials and other clinical literature. Monte-Carlo simulation was run over a one-year duration from the perspective of the Norwegian health care system.

RESULTS: In stimulant-naive patients, the incremental cost per QALY of atomoxetine was NOK 199,178 and NOK 149,892 when compared to immediate-release (IR) and extended-release (XR) methylphenidate, respectively. In stimulant-failed patients, the incremental cost-effectiveness of atomoxetine was NOK 168,154 per QALY gained. The incremental cost per QALY of atomoxetine compared to no medication in patients contra-indicated for stimulants was NOK 175,105. Sensitivity analysis showed that the utility values for each treatment were important determinants of the cost-effectiveness of atomoxetine.

CONCLUSIONS: Results of the modeled economic evaluation suggest atomoxetine offers a value-for-money alternative in the treatment of children with ADHD in Norway.

PMH6

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?

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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: A total of 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 €2088 (or €17,850-32,630/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 QALY gained in the range of €474,000–866,000.

PMH7

THE BAD STUDY: SOCIAL AND ECONOMIC BURDEN OF ATTENTION DEFICIT AND HYPERACTIVITY DISORDER (ADHD) IN ITALY

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OBJECTIVES: To measure the social and economic burden of ADHD in the perspective of families, NHS and Italian society.

METHODS: Cost of illness and quality of life analysis based on an observational case-control, parallel groups, retrospective data collection on the use of medical resources and social services over 12 months. The study underwent EC approval and informed consent was obtained. Consecutive patients of age 5 to 18 years, were recruited at 4 neuro-psychiatry clinics, and allocated to 4 groups: K (controls) including subjects with mild anxiety/depression (C-GAS < 50); A, subjects with recently diagnosed ADHD; B, ADHD managed by psycho-educational interventions; C, ADHD managed by pharmacological treatment+psychoeducational interventions. Resource utilisation was measured with a structured questionnaire administered to parents and QoL with the CHIP-CE, Parent Form. RESULTS: (Only ADHD data vs. controls are presented) 244 subjects were enrolled: K: age = 12.2yrs (SD ± 3.3), ADHD = 175 age = 10.9 (SD ± 2.6). ADHD patients were mostly male children, living in large, well-off families showing higher probability vs. controls of needing hospital admissions (OR = 3.0; 95%CI 1.4–6.3, p = 0.005), psychological consultations (OR = 4.9; 95%CI 2.2–10.9, p = 0.001), lab tests (OR = 2.6; 95%CI 1.4–4.7, p = 0.005) and ECG (OR = 2.2; 95%CI 1.2–4.2, p = 0.011). ADHD patients also showed