

ance claims database (TruvenHealth MarketScan® Medicaid) from January 2007 to June 2012. Patients with at least two treatment episodes in the first year after the initial filled prescription were identified. The end of a treatment episode was defined as a period of 60 days with no filled BUP/NAL prescriptions following the theoretical end of the last filled prescription. An ordered logistic regression model was used to analyze the impact of initial treatment episode duration on the number of new episodes in the year following the end of the first episode. Health care resource utilization and related costs during the first year after initiation were compared between the two groups. **RESULTS:** 2,223 patients were included in the analysis. During the first year, 86% of patients had only one treatment episode, 13% had two and 1% had three. Compared to patients treated continuously over 12 months, the multiple treatment episode groups had lower medication costs (-\$2,877) but higher psychiatric inpatient costs (+\$720), non-psychiatric inpatient costs (+\$2001) and emergency room costs over 12 months. Total health care costs over 12 months were higher among multiple treatment episode patients (\$16,583 vs. \$15,123, $p=0.0004$). **CONCLUSIONS:** Despite lower medication costs, total health care costs over 12 months were higher among patients with multiple treatment episodes compared to patients treated continuously.

PMH43

HEALTH CARE COST SAVINGS ASSOCIATED WITH ARIPIRAZOLE ONCE-MONTHLY (AOM) TREATMENT AMONG SCHIZOPHRENIA PATIENTS WITH PSYCHIATRIC HOSPITALIZATIONS PRIOR TO AOM TREATMENT INITIATION

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OBJECTIVES: Preliminary data from a multicenter, open-label mirror study of patients with schizophrenia aged 18–65 years (Kane et al. *J Med Econ.* 2013;16:917) demonstrated that switching from oral standard of care (SOC) antipsychotics to aripiprazole once-monthly (AOM) reduced total psychiatric hospitalization rates from 41.5% in the SOC 6-month retrospective period to 14.2% in the AOM 6-month prospective period ($p<0.0001$). A subgroup of patients with at least 1 psychiatric hospitalization while receiving oral SOC in the retrospective period was analyzed to estimate health care cost savings associated with AOM treatment initiation. **METHODS:** An economic model was developed to examine the impact on costs and outcomes of switching to AOM. Cost for hospitalizations, hospital length of stay, and cost of drug therapy were estimated for a subgroup of 76 patients with schizophrenia who entered the ongoing mirror study (NCT01432444) and had at least 1 psychiatric hospitalization during the retrospective period. Cost estimates were obtained from HealthCare Costs and Utilization Project, published literature, and US Bureau of Labor Statistics. Adjustments were made to estimate additional resource use for patients who discontinued the study (lost to follow-up, adverse events, met protocol/investigator withdrawal criteria, protocol deviation, lack of efficacy) and thus did not have complete data on resource use from the trial. **RESULTS:** Among the 76 patients with hospitalizations during the retrospective period, hospitalizations were reduced to 22.4% (17/76, $p<0.0001$) in the prospective AOM period. Total cost during the prospective period (\$23,313) after switching to AOM was lower than that in the retrospective period (\$36,415) by \$13,102 per patient. Hospitalizations per patient were reduced from 1.16 to 0.53. Increased cost due to AOM initiation (\$6,010) was offset by reduced cost for hospitalizations (-\$19,112). **CONCLUSIONS:** Among patients with previous psychiatric hospitalizations, treatment with AOM may reduce total cost of care for health plans.

PMH44

PHARMACOECONOMIC ANALYSIS OF PALIPERIDONE PALMITATE FOR CHRONIC RELAPSING SCHIZOPHRENIA IN FINLAND

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OBJECTIVES: Management of patients with chronic relapsing schizophrenia is difficult and costly. We assessed the cost-effectiveness of paliperidone palmitate long-acting injectable (PP-LAI) versus risperidone depot (RIS-LAI), olanzapine pamoate (OLZ-LAI), oral olanzapine (oral-OLZ) and oral clozapine (CLOZ) from the viewpoint of the Finnish National Health Service. **METHODS:** We expanded and adapted a 1-year decision tree model that had been previously validated for Finland, with assistance from an expert panel. Patients started in a stable state and were treated as per standard procedures in Finland. Drug doses, success and relapse rates were determined from published clinical studies. Patient management was guided by expert opinion. Health state utilities were derived from the literature. Only direct costs were considered, including hospitalization and other institutional care, medical and nursing care, and drugs. Prices were obtained from standard lists. Outcomes included quality-adjusted life-years (QALYs), rates of rehospitalization and days with stable disease. The primary economic outcome was the incremental cost/QALY. One-way sensitivity analyses were performed on all pertinent costs and clinical inputs. Results between drugs were tested in a pairwise fashion with 10,000 Monte Carlo simulations each, using standard distributions for all variables. **RESULTS:** Expected costs were €10,691 for PP-LAI, €12,462 for RIS-LAI, €12,496 for OLZ-LAI, €27,270 for oral-OLZ and €23,258 for CLOZ. QALYs were 0.829, 0.813, 0.821, 0.739 and 0.523, respectively. Rehospitalizations were 0.25, 0.30, 0.29, 0.61, and 1.88, respectively and days with stable disease were 329.3, 326.2, 325.1, 283.9 and 215.6, respectively. In the base-case, PP-LAI dominated all other drug choices. One-way sensitivity analyses indicated that results were insensitive to drug costs but sensitive to plausible changes in rates of adherence or hospitalization. In probability sensitivity analyses, results were robust overall with ICERs significantly favouring PP-LAI ($P<0.001$). **CONCLUSIONS:** PP-LAI was cost-effective in Finland for chronic relapsing schizophrenia.

PMH45

COST-EFFECTIVENESS ANALYSIS OF LURASIDONE VERSUS QUETIAPINE XR IN PATIENTS WITH BIPOLAR DEPRESSION

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OBJECTIVES: Bipolar disorder imposes high economic burden, with direct costs estimated at \$30.7 billion. Lurasidone is an atypical antipsychotic approved for the treatment of depressive episodes associated with bipolar I disorder. The objective of this study was to compare the cost-effectiveness of lurasidone and quetiapine XR in patients with bipolar depression. **METHODS:** A cost-effectiveness model was developed to compare lurasidone to quetiapine XR over a 3-month time horizon from a US payer perspective. Effectiveness inputs were based on indirect comparison of the proportion of patients achieving remission (MADR5 total score ≤ 12 by week 6–8), obtained from lurasidone and quetiapine XR pivotal trials versus placebo. Resource utilization (emergency room visits, hospitalizations, and office visits) were obtained from an expert panel study. Drug costs were estimated using mean dose from clinical trials and wholesale acquisition costs. Costs of resources were obtained from a retrospective database study of bipolar depression patients. Model results were tested using deterministic and probabilistic sensitivity analyses. **RESULTS:** Over the 3-month time horizon of the model, 52.0% of lurasidone patients achieved remission versus 43.2% of quetiapine XR patients. Mean emergency room visits, inpatient days, and office visits were lower for lurasidone patients (0.48, 2.1, 9.3) than quetiapine XR patients (0.50, 2.2, 9.6), respectively. Total costs were lower for lurasidone patients (\$4,447) than quetiapine XR patients (\$4,546). Cost-effectiveness results showed that lurasidone was dominant over quetiapine XR. Model testing showed that the results were robust to changes in other parameters. One-way sensitivity analysis showed that the model may be sensitive to the drug cost/month, remission rate, or hospital cost/day. Probabilistic sensitivity analyses showed lurasidone has a 97.4% probability of being cost-effective compared to quetiapine XR at a willingness-to-pay threshold of \$5,000 per remission. **CONCLUSIONS:** Based on this model, lurasidone is cost-effective compared to quetiapine XR in patients with bipolar depression.

PMH46

COST-EFFECTIVENESS ANALYSIS OF ESCITALOPRAM VERSUS PAROXETINE IN TREATMENT OF GENERALIZED ANXIETY DISORDER (GAD) IN THE UNITED STATES

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OBJECTIVES: Generalized Anxiety Disorder (GAD) affects around 6.8 million U.S. adults. It places a considerable economic burden upon patients and payers alike. Selective serotonin reuptake inhibitors (SSRIs) are among the first-line therapy for treating GAD. Currently, Escitalopram and Paroxetine are the only SSRIs approved by U.S. FDA for treating GAD. To assess, from a third party payer's perspective, the cost-effectiveness of Escitalopram and Paroxetine in the treatment of GAD in the U.S. **METHODS:** A decision analytic model with a 12 month time horizon, adapted to the U.S. setting was constructed. Outcome measured as a reduction in Hamilton Anxiety Scale (HAMA) scores, and adverse event probabilities were obtained from a head-to-head randomized trial. Resource utilization and associated costs were estimated from standard national sources. Analyses from a third party payer's perspective focused on the direct medical cost of treatment e.g. drugs, physician visits and dispensing cost. Annual cost per person for the treatment was calculated and the cost-effectiveness of the treatment options was measured. All costs were reported in 2013 US Dollars. Cost-effectiveness was expressed as the incremental cost-effectiveness ratio (ICER). Sensitivity analysis on key input parameters and Monte Carlo simulation was performed to measure the robustness of the model. **RESULTS:** Escitalopram dominated Paroxetine by having both, lower total annual cost (\$4587 vs. \$5243, respectively) and better outcomes (14 HAMA vs. 13 HAMA point reduction, respectively). The ICER was found to be -\$656/HAMA point which indicates improved effectiveness along with reduction in costs by adopting Escitalopram over Paroxetine. Sensitivity analysis demonstrated the robustness of the model. **CONCLUSIONS:** Escitalopram appears to be cost-effective compared with Paroxetine in treatment of GAD in the U.S. from a third party payer's perspective.

PMH47

COST-EFFECTIVENESS OF ATYPICAL ANTIPSYCHOTICS IN ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AFTER STIMULANT FAILURE: A DECISION ANALYSIS

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OBJECTIVES: The objectives of this study are: (1) to estimate the expected health outcomes of atypical antipsychotics (AAPs) and other non-stimulant attention-deficit/hyperactivity disorder (ADHD) medications based on trade-offs between clinical effectiveness and adverse effects and (2) to evaluate the cost-effectiveness of AAPs compared to other non-stimulant ADHD medications. Both aims target children and adolescents with ADHD who have failed prior stimulant therapy. **METHODS:** We used decision analysis to compare three alternatives for treating children and adolescents with ADHD who failed initial stimulant treatment: (1) AAPs (2) a selective norepinephrine reuptake inhibitor (atomoxetine), and (3) selective α_2 -adrenergic agonists (clonidine and guanfacine). Probability estimates and quality adjusted life year (QALY) weights were derived from a literature review. One-way deterministic sensitivity analyses were performed to evaluate the robustness of the results. Cost-effectiveness was estimated using the expected health outcomes derived from the decision analysis and expected costs from the literature. A Monte Carlo simulation was performed as a probabilistic sensitivity analysis. **RESULTS:** After one year of ADHD pharmacotherapy, clonidine/guanfacine provided the highest expected QALY (0.95) followed by atomoxetine (expected QALY 0.94). Atypical antipsychotics yielded the lowest health outcome with an expected QALY of 0.84. In the cost-effectiveness analysis, the AAP strategy was dominated as it was less effective and more costly