OBJECTIVES: Atypical antipsychotic-induced weight gain and metabolic side effects are key contributors to discontinuations and relapses among patients with schizophrenia. Current treatment guidelines in Scotland recommend aripiprazole for adults with schizophrenia who are at risk of weight gain. Lurasidone is an atypical antipsychotic associated with a favourable metabolic side effect profile. The objective of this study was to compare cost-utilization and resource use between lurasidone and aripiprazole, and a budget impact analysis of introducing lurasidone treatment to patients with schizophrenia in the Scottish setting. METHODS: A 10-year Markov model was constructed for a phased approach and a maintenance phase across three health states: stable on treatment, stable not on treatment, and relapse), was constructed. Baseline risks of discontinuation and relapse were derived from lurasidone clinical studies. Relative efficacy was taken from indirect comparisons. Costs included drug therapy, relapse; outpatient, primary care; and inpatient care estimates were taken from literature. The budget impact analysis considered the difference between the acquisition cost of lurasidone per patient per year (PPPY) and aripiprazole over a period of one year. It was assumed that the uptake rate of lurasidone would be approximately 66% of that seen for aripiprazole in its first five years in the UK. RESULTS: Lurasidone yielded a cost saving of £554 and a small quality-adjusted life-year (QALY) improvement compared with aripiprazole. A total of £1,182 PPPY. Lurasidone was therefore a budget neutral treatment option. CONCLUSIONS: Our analyses indicate that lurasidone is a clinically and cost-effective treatment option, which should have limited impact on prescribing budgets, when compared with aripiprazole.

PMH17
THE ACTUAL COST OF A “FORCED SWITCH” OF PSYCHIATRIC PATIENTS TO A NEW THERAPY: A MARKOV CHAIN – MONTE CARLO SIMULATION
Anneli M, Pugils S
Keyphrases: Monte Carlo Simulation
OBJECTIVES: The low reimbursed price of some “typical” antipsychotics could lead pharmaceutical companies to withdraw them from a given market, as a consequence of an unfavorable cost-benefit ratio. Aim of this work was to evaluate the clinical and economic implications of such an occurrence, i.e. of the “forced switch” of stable psychiatric patients. METHODS: A Markov model was developed to identify all the possible scenarios related to the transition process from chlorpromazine and haloperidol to aripiprazole (as pharmacological reference) to replicate the “history” of a large number of hypothetical individual patients, a Monte Carlo simulation was performed. The outcomes of the switching and their impact were assessed using the estimated mean frequencies of the ‘lost to follow-up’, ‘died’ and ‘stable condition’ states, plus the estimated overall number of visits and ADRs. Transition probabilities and costs, from the perspective of NHS, were taken from published literature. A sensitivity analysis was also performed. RESULTS: The ‘work’ runs were performed with 500 cohorts of 2000 subjects each, the simulations reached convergence after 26 cycles (corresponding to one year). Data analysis allowed to infer that 91% of the patients in treatment with chlorpromazine and haloperidol would be in stable conditions after one year from switching to quetiapine and that the incidence of ADRs would be 24 for 100 patients. During the first year of treatment each patient would return to the prescribing physician between 2-3 times. The “once-only” direct cost of the transition would be estimated to €75 million euros in Italy, followed by 5-7 million per year for new drug costs. CONCLUSIONS: This simulation confirms that, for both patients and NHS, “staying” with the present therapy would represent a better and more cost effective solution than switching, even if a higher reimbursed price were to be granted.

PMH18
OBSERVATIONAL STUDY OF RESOURCE USE AND COST OF ALZHEIMER’S DISEASE IN EUROPE: 1-MONTH базис results from the french cohort - Rapp T, Vellas B, Andrieu S, Chartier P, Baralle L, Belger M 1University of Paris Descartes, Paris, France, 2Toulouse University Hospital, Toulouse, France, 3Eli and Lilly, Neurally-Unité Cérez, France, 4Eli Lilly Company Ltd, Windlesham, UK 2Objective: To describe 18-month health care resource use and costs associated with Alzheimer’s disease (AD) for patients and caregivers in France, stratified by AD severity at baseline. METHODS: 18-month, prospective, multi-center, cohort study conducted in France, Germany and UK. Enrolled outpatients were ≥55 years, diagnosed with probable AD (NINCDS-ADRDA) and had an informal caregiver available. Patients were categorized according to baseline disease severity using MMSE score: mild (21-26), moderate (20-25), moderately severe (15-19). Costs associated with patient and caregiver health care, patient social care and informal care were evaluated using information from the Resource Use in Dementia instrument (RUD) and the data collection form. The primary objective was the estimation of total cost over the 18-months period. Total cost was estimated by applying country-specific unit costs. Supervision time and caregiver medical costs were excluded from the base case analysis. Imputation methods were used for missing cost data. RESULTS: 119 model patients were enrolled (2010-2011) in 33 centers in France, 289 (69%) remained in the study at 18 months. Reasons for discontinuation were subject institutionalization (n=65), death (n=21) or other reason (n=44). Total mean cumulative costs over the 18-month period were estimated to be respectively 24140€ (21561-26663€), 3428€ (3087-3769€), and 44171€ (40500-48753) for mild, moderate and moderately severe/severe patients (p<0.001 with caregiver informal care cost accounting for approximately half of the total costs (52%, 53%, 51% respectively) (excluding supervision time). A significant increase in costs (p<0.001) was observed across each severity group, mainly driven by supervision time without significant difference between severity groups in terms of change from baseline. CONCLUSIONS: This longitudinal study showed that costs increase with AD severity. Informal care costs represent the largest part of total societal cost at each intermediate time point.

PMH19
THE ECONOMIC BURDEN OF MENTAL DISORDERS IN KOREA
Lee S, Ho SH, Kim H
South Korea National Rehabilitation Center, National Rehabilitation Research Institute, Seoul, South Korea 1Objective: In recent years, mental health problems have increased and people with mental disorders become more prevalent. This study aims to estimate the economic burden of people with mental disorders in Korea. METHODS: The study evaluated the economic burden of mental disorders among the Korean adult population and its associated costs and future studies are needed to investigate pharmacological and other social costs for mental disorders.

PMH20
COSTS OF MENTAL DISORDERS IN POLAND AND THEIR COMPLICATIONS
Lacziowska J
Kozinski University, Warsaw, Poland 1Objective: Mental disorders constitute a major health problem with severe complications and a significant impact on quality of life. This study is the first comprehensive analysis on the direct and indirect costs of mental disorders in Poland. Methods: Direct and indirect costs were estimated using a prevalence-based approach and calculated based on the four nationwide databases for people with disabilities (Korea National Rehabilitation and the National Health Insurance Corporation, the Ministry of Health and Welfare, the Korea National Statistical Offices’ records of cause of death, and National Survey on Persons with disabilities). The direct costs stem from both primary medical and non medical expenditures directly associated with mental disorders. Indirect costs were estimated based on costs of lost productivity due to morbidity and premature mortality by applying a 3% of discount rate. RESULTS: The results showed increases in both the prevalence of mental disorders by 1.2 times (from 57.16% to 81.02%) and total economic burden by 1.6 times (from €349.2 million to €562.6 million) during 2008-2011. The proportions of direct costs over total economic burden were 88% (€510.9 million) in 2008 and 91% (€512.0 million) in 2011 and the proportions of indirect costs were 11% (€38.4 million) and 9% (€50.6 million) respectively. In addition, the highest costs for male were found in manic depressive illness, and the highest total socioeconomic costs €334.8 million-201.4 million) were incurred by people 40-49 years. CONCLUSIONS: The prevalence and economic burden of mental disorders associated with direct costs increased for the years 2008 and 2011 in Korea. These findings provide underlying evidence for mental health care improve- ments and future studies are needed to investigate pharmacological and other social costs for mental disorders.
for people with moderate to severe conditions. The aim of this research was to estimate the impact of schizophrenia to the Australian public health care expenditures. We used the most frequently prescribed drugs for the three most prevalent mental illnesses: depression, anxiety-related, and substance use disorders.

**METHODS:** The National Survey of Mental Health and Wellbeing (NSMHWB) has been conducted every 10 years since 1997. The last NSMHWB was conducted in 2007. Respondents diagnosed within the preceding 12 months with depression (D), anxiety-related disorders (AXN), and substance use disorders (SUB) by ICD-10 in NSMHWB 2007 were included in the analysis. The NSMHWB 2007 reported the duration and the number of up to five drugs used during the past 12-month period. In order to adjust for inflation, 2013-14 reference year was used for the unit cost of each drug obtained from Pharmaceutical Benefit Scheme (PBS).

**RESULTS:** About 3% of respondents used medications for a total cost to the society of AUD 101 million (SE 11.9). Citalopram was the most frequently prescribed drug (7.1%), followed by venlafaxine (15.6%), sertraline (14.4%), and temazepam (10.5%). Respectively, mean total costs of D-AXN-SUB in patients with depression, anxiety-related, and substance use disorders were $4,989, $4,748, and $4,776, respectively.

**CONCLUSIONS:** The high prevalence of ANX contributed to the large proportion of medication cost for this condition.

**PMH21**

**COST EFFECTIVENESS ANALYSIS OF ARIPIPRAZOLE ONCE-MONTHLY VERSUS PALIPERIDONE PALMITE IN SPAIN**

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**OBJECTIVES:** To develop a 20-year Markov cohort model with yearly cycle length and four states: depression, anxiety-related, and substance use disorders.

**Methods:** We performed a cost-effectiveness analysis of Aripiprazole versus paliperidone palmitate (PP) in the maintenance treatment of schizophrenia in Spain. **METHODS:** This pharaco-economic analysis was conducted along Open-label, randomised, rater-blind, controlled study comparing Aripiprazole 400mg and PP (50-150mg) in stabilised adults with schizophrenia. Effectiveness outcomes of the cost-effectiveness analysis included changes in Heinrichs-Carpenter Quality of Life Scale (QLS-Primary CEA) and Clinical Global Impression-Severity (CGI-S), respectively. In week 28, all caregivers, out- and in-patient services were collected using a health economic assessment questionnaire (HEA). Healthcare services unit costs from the Basque Country were used (2014 costs). However, all patients with at least one valid post-baseline HEA were eligible for analysis. Bonferroni corrected confidence intervals were generated from 10,000 simulations, as well as cost-effectiveness acceptability curves.

**Results:** Over the total 28-week period, AOM was associated with significantly reduced total healthcare costs compared to PP (mean per-patient cost: €1,935 vs. €2,475, respectively, p<0.001). This cost reduction was primarily due to significant reduction in drug acquisition costs (€1,237 vs. €1,889, p=0.001). The other cost categories (healthcare provider costs, out- and in-patient costs) were not statistically different between drugs (p=0.528, p=0.102 and p=0.194, respectively). In the primary CEA, AOM dominated PP (being more effective on the QLS scale and less costly). This result was confirmed when using CGI-S as effectiveness measure. The cost-effectiveness acceptability curves supported AOM as the treatment of choice compared to PP, and the threshold value to pay for additional QALYs was €4,000 per QALY gained. **Conclusions:** Over 23% of respondents used medications for a total cost to the society of AUD 18,935 vs. 1,889; p=0.394, 0.623, 0.615) and QALYs (0.8227, 0.7985, 0.7585, 0.7609). Expected costs were £2,093 and £2,954 for AOM and PP, respectively. Mean total costs per-patient were £2,093 and £2,954 for AOM and PP, respectively. Mean total costs per-patient were £2,093 and £2,954 for AOM and PP, respectively.

**PMH22**

**ECONOMIC ANALYSIS OF PALIPERIDONE LONG-ACTING ACTING INJECTABLE FOR USE IN CHRONIC SCHIZOPHRENIA IN PORTUGAL**

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**OBJECTIVES:** Patients with chronic schizophrenia are difficult to manage and costly to the health system. The European Medicines Agency has approved paliperidone palmitate (PP-LAIt, Xeplion®), an antipsychotic psychiatric depot which is administered monthly. The economic impact of paliperidone palmitate in Portugal is unknown. Therefore, we conducted a cost-effectiveness analysis from the analytic viewpoint of the Portuguese National Health Service.

**METHODS:** PP-LAIt was compared with long acting injectable forms of risperidone (RIS-LAIt) and haloperidol (HAL-LAIt) as well as the current decision-making framework in Europe and adapted to Portugal with guidance from clinical experts. We obtained clinical information and costs from literature sources and published databases. Clinical outcomes included relapses (both requiring and not requiring hospitalization), days in relapse, and quality-adjusted life-years (QALYs). Costs were expressed in 2015 euros. Economic outcomes included a cost-utility (incremental cost/QALY) and cost-effectiveness analyses (incremental cost/relapse as well as hospitalization avoided). **RESULTS:** PP-LAIt had higher mean costs for all negative events. Respective outcomes for PP-LAIt, RIS-LAIt, HAL-LAIt and oral-OLZ included relapse days (7.9, 5.1, 7.8, 7.5, 7.8, 7.8), Emergency Room visits (0.122, 0.168, 0.250, 0.242), hospitalizations (0.288, 0.355, 0.526, 0.581), CGI-S (4.6, 4.785, 7.785, 7.585, 7.985, 7.585), QLS (4.477, 4.447, 5.447, 5.747, 5.447) and Clinical Global Impression − Severity (CGI-S). To assess cost-effectiveness, minimal clinically important differences (MCIDs) were sought from the literature in the respective assessment scales. Treatment response was defined as a change from baseline to week 8). The other cost aggregates (healthcare provider costs, out- and in-patient costs) were not statistically different between drugs (p=0.528, p=0.102 and p=0.194, respectively). In the primary CEA, AOM dominated PP (being more effective on the QLS scale and less costly). This result was confirmed when using CGI-S as effectiveness measure. The cost-effectiveness acceptability curves supported AOM as the treatment of choice compared to PP, and the threshold value to pay for additional QALYs was €4,000 per QALY gained. **Conclusions:** Over 23% of respondents used medications for a total cost to the society of AUD 18,935 vs. 1,889; p=0.394, 0.623, 0.615) and QALYs (0.8227, 0.7985, 0.7585, 0.7609). Expected costs were £2,093 and £2,954 for AOM and PP, respectively. Mean total costs per-patient were £2,093 and £2,954 for AOM and PP, respectively. Mean total costs per-patient were £2,093 and £2,954 for AOM and PP, respectively.