= 581) and bipolar disorder (N = 2421) received quetiapine monotherapy for at least 4 months at mean initial daily doses of 237 (standard deviation [SD] = 198) mg and 147 (SD = 171) mg, respectively. Both groups showed negative associations between initial daily dose and subsequent mental health charges. For schizophrenia, the relationship approached statistical significance ($P = 0.1097$), with a decrease of $1.28 in mental health charges for each additional milligram of quetiapine. For bipolar disorder, the relationship was statistically significant ($P = 0.0484$), with a decrease of $1.31 per additional milligram. **CONCLUSION:** This study shows that, in the treatment of schizophrenia and bipolar disorder, higher doses of quetiapine may lower levels of mental health resource use, suggesting enhanced efficacy.

PMH22

CONVENTIONAL ANTIPSYCHOTICS CAN BE COST EFFECTIVE FOR BROADLY DEFINED TREATMENT RESISTANT OR INTOLERANT SCHIZOPHRENIA

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OBJECTIVES: To estimate the cost acceptability of conventional antipsychotic (CA) compared to atypical antipsychotic (AA) treatment for people with broadly defined treatment-resistant or treatment intolerant schizophrenia in the UK (poor clinical response or side-effects to one or more antipsychotics, but not considered for cocaine). **METHODS:** A total of 227 adults with broadly defined treatment resistant or intolerant schizophrenia were enrolled into a pragmatic controlled trial of CA and AA and randomised to a class of drug (CA or AA). The treating physician and patient determined the choice of drug within the class. A societal perspective was used; scheduled follow up was 12 months. The primary outcome was quality adjusted life years (Daly's) measured by the Aerosol and population utility tariffs. Direct costs were measured as resource use multiplied by published national unit costs. Censored data were predicted (Cox regression) and missing observations imputed. Incremental cost utility ratios (ICER), net benefit statistic and cost acceptability curves for the intent to teat cohort were calculated. Methods related assumptions (link between costs and QALYS (stepwise regression), association between Aerosol and clinical measures (Spearman's Rho), imputation method, source of unit costs) were tested. **RESULTS:** Utility values were associated with clinical measures ($p < 0.00$). QALY's predicted costs ($\hat{a} = -0.21$; $p < 0.00$). Primary and sensitivity analyses indicated a trend towards QALY gain (0.04–0.08) and cost savings (£1100–£1200) for CA, giving a net benefit statistic of £5500 (2.5th–97.5th percentile: —£2650–£13,000). Complete case analysis indicated a cost of £3300/QALY. The probability that CA was cost-effective ranged from 0.64 at a cost/QALY threshold of £0, to 0.78 at a cost/QALY threshold of £20,000. **CONCLUSIONS:** The analyses suggest CA is likely to be cost-effective in the UK in 64% of cases if decision makers are not prepared to pay for an additional QALY benefit and 78% if they are prepared to pay up to £20,000/QALY gained.

PMH23

COST-EFFECTIVENESS EVALUATION OF LONG-ACTING RISPERIDONE INJECTION

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OBJECTIVE: To assess the cost-effectiveness of long-acting risperidone, oral risperidone (RIS), olanzapine (OLA) and haloperidol decanoate (HAL-DEC) in patients with schizophrenia over a 1-year time period. **METHODS:** Published medical literature, a consumer health database, and a clinical expert panel were utilized to populate a decision tree model. The model captured rates of compliance, relapse, frequency of relapse, duration of relapse, adverse events, resource utilization and unit cost of health care resources. Outcomes are expressed in terms of percentage, number and duration of relapses per patient per year and total cost per patient per treatment arm. **RESULTS:** The proportion of patients predicted by the model to experience a relapse requiring hospitalization in 1 year were 66% HAL-DEC, 41% RIS and OLA, 26% long-acting risperidone, while the proportion of patients with an exacerbation not requiring hospitalization were 60% HAL-DEC, 37% RIS and OLA, and 24% long-acting risperidone. The mean number of days of relapse requiring hospitalization per patient per year were predicted to be 28 HAL-DEC, 18 RIS and OLA, 11 long-acting risperidone, while the mean number of days of exacerbation not requiring hospitalization were 8 HAL-DEC, 5 RIS and OLA, and 3 long-acting risperidone. This translates into cost savings with long-acting risperidone compared to oral risperidone, olanzapine, and haloperidol decanoate of $397, $1742, and $8328, respectively. **CONCLUSIONS:** Predictive modeling suggests that long-acting risperidone can potentially lead to lower rates and fewer days of symptom exacerbation and hospitalization compared to alternative treatments. These lower rates translate into cost savings with the use of long-acting risperidone.

PMH24

UTILIZATION ANALYSIS OF HEALTH CARE RESOURCES FOR PATIENTS TREATED WITH ATYPICAL ANTIPSYCHOTICS

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OBJECTIVE: To compare the utilization of health care resources for patients with schizophrenia receiving olanzapine versus risperidone treatment. **METHOD:** Schizophrenia patients were drawn from North Carolina Medicaid Claims database. Treatment groups were determined based on the first use of olanzapine or risperidone. The use of health care resources was estimated for schizophrenia-related, mental health-related, and all-cause services using the negative binomial regression models. The models were controlled for patient demographic and clinical characteristics, and resource utilization in the baseline period. **RESULTS:** A total of 498 patients (286 in olanzapine cohort and 212 in risperidone cohort) were identified with available data for three-month prior and 18-month after antipsychotic treatment. During the 18-month post-treatment period, patients in olanzapine cohort had significantly fewer hospital admissions (–0.36, $p = 0.047$) and spent significantly fewer days in the hospital (–0.92, $p = 0.018$) than risperidone patients for schizophrenia-related conditions. There were no statistically significant differences between the two cohorts in hospital admissions for mental health-related and all-cause related conditions. The two groups did not differ significantly in terms of emergency room and nursing home visits. In addition, patient demographic and clinical characteristics, and resource utilization in prior treatment period were also found to influence the use of the medical services. **CONCLUSIONS:** Patients treated with olanzapine are found to have both fewer hospital admissions and fewer hospital days for schizophrenia-related conditions as compared to those treated with risperidone, indicating that olanzapine treat-