CONCLUSIONS: In this post-hoc analysis, paliperidone ER was associated with a statistically significant reduction in emergency visits, as well as higher drug and total health care costs patients who switched to a SNRI had more MDD-related emergency visits, as well as higher drug and total health care costs during the 3-month post-therapy change period.

PMH43
MENTAL HEALTH CARE RESOURCE USE BEFORE AND AFTER INITIATION OF PALIPERIDONE ER IN PATIENTS WITH SCHIZOPHRENIA
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OBJECTIVES: Schizophrenia care produces a substantial economic burden. Interventions that reduce the need for resource use are of interest to clinicians and payers. This study assessed changes in mental health resource use following initiation of paliperidone extended-release tablets (paliperidone ER) in the three double-blind (DB) trials and their open-label extensions (OLE). METHODS: A retrospective chart review generated data on resource use during the 12 months before and after the DB trials. Additional IRB approval and informed consent were obtained for these reviews. Average number of inpatient and ambulatory care services in the pre- and post-periods was calculated, including use of bootstrap resampling methods to assess statistical significance of differences. Total person years were calculated for the pre- and post-periods to account for different lengths of observation. Separate analyses were also performed by country. RESULTS: In this analysis, patients (n = 79) were from the United States (38.0%), Canada (19.0%) and Malaysia (43.0%). Mean (±SD) patient age was 38.0 (±10.4) years; and the majority of patients were male (73.4%). Most (70.9%) patients received prior treatment with antipsychotics. During the OLE, the mean paliperidone ER treatment duration (±SD) was 226.4 (±142.3) days, and the mean dose was 11.5 (±2.2) mg. Overall, paliperidone ER patients used fewer resources after drug initiation (mean reduction per person year: days hospitalized = 12.1, p = 0.002; number of emergency room visits = 0.3, p = 0.038; number of psychiatric-related office visits = 2.3, p < 0.001; number of psychotherapy sessions = 0.4, p = 0.004). Subgroup analyses revealed that the greatest reduction in most resource categories was found in the US sites (e.g. mean reduction in days hospitalized per person year = 19.7 in the US, 6.3 in Canada, and 7.1 in Malaysia). CONCLUSIONS: In this post-hoc analysis, paliperidone ER was associated with a statistically significant reduction in mental health resource use. Prospective studies are needed to confirm the findings.

PMH44
HEALTH CARE RESOURCE UTILIZATION AND COSTS COMPARISON FOR MDD PATIENTS ON 10 MG ESCITALOPRAM WHO INCREASED TO 20 MG DOSE VS. THOSE WHO WERE SWITCHED TO SNRI
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OBJECTIVE: To compare health care resource utilization and costs of Major Depressive Disorder (MDD) adult patients treated with escitalopram 10 mg who increase to 20 mg vs. those who were switched to a SNRI. METHODS: Adult MDD patients initiated on escitalopram 10 mg who either increased to 20 mg escitalopram or switched to a SNRI were identified in the IHCIS National Managed Care Database (2003–2006). Patients who changed therapy within 60 days from escitalopram initiation date (index date) were excluded. Outcomes included rates of hospitalization and emergency visits, number of emergency visits days, and health care costs, and were reported for all cause and MDD-related. All outcomes were estimated over a 3 months period post-therapy change (dose increase or switching) and were descriptively compared between the two groups. Multivariate regression analyses were performed to further adjust for patient demographics, comorbidities and baseline health care resource use. RESULTS: Study samples included 9379 patients who increased escitalopram from 10 mg to 20 mg and 1215 patients who were switched from 10 mg escitalopram to a SNRI. Compared to patients who increased escitalopram dose, SNRI switchers experienced higher rates of MDD-related hospitalizations (RR = 1.2, p = 0.566), higher rates of MDD-related emergency visit (RR = 1.6, p < 0.05), and higher number of emergency visit days (RR = 1.5, p < 0.01) in the 3-month post-therapy change period. Patients who switched to SNRI also had on average $413 higher total costs (p < 0.001), which include $390 higher drug costs (p < 0.001). Results from multivariate regression analyses were consistent with findings from descriptive analyses. SNRI switchers incurred $430 higher risk-adjusted total costs (p = 0.0001). CONCLUSION: Compared to adult MDD patients who increased escitalopram from 10 mg to 20 mg, patients who switched to a SNRI had more MDD-related emergency visits, as well as higher drug and total health care costs during the 3-month post-therapy change period.

PMH45
COST OF PSYCHIATRIC HOSPITALIZATIONS IN THE UNITED STATES IN 2006
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OBJECTIVE: Acute psychiatric hospitalizations represent a major cost driver of care for psychiatric disorders. This analysis characterized the costs of psychiatric hospitalization in the United States by major psychiatric disorders and payer type. METHODS: The analysis utilized Premier’s Perspective database of de-identified inpatient administrative claims. Data from 263,232 psychiatric hospitalizations were classified into: Schizophrenia, Bipolar Disorder, Depression, Substance Use, and Other Psychiatric Disorder based on All Patient Refined—Diagnosis Related Group codes. Results were inflated to national estimates by weighting each hospitalization based on representative demographics of all hospitals in the nation. Because reimbursed values were not available, the primary metric for analyses was the cost of providing service rather than charges. RESULTS: The total cost of all psychiatric hospitalizations in 2006 dollars was $10.6 billion with charges of $26.5 billion. Public payers covered most psychiatric hospitalizations, particularly for schizophrenia with a much smaller difference for bipolar disorder, depression, and substance use disorders. Length of stay was longest for schizophrenia (11.0 days) followed by bipolar disorder (7.8 days), depression (6.2 days), and substance use disorders (5.0 days). Regardless of disorder, length of stay was longer for public payers (8.7 days) than private payers (5.6 days) or self-pay (4.6 days). The average per day was inversely related to length of stay with the highest cost for substance use disorders ($1034) followed by depression ($888), bipolar disorder ($852), and schizophrenia ($806). CONCLUSION: The cost of delivering care for psychiatric hospitalizations in the US was approximately $10.6 billion in 2006. This estimate does not include some physicians fees and does not capture the amount reimbursed to the hospitals. Although most of
the cost is covered by public payers, a sizable proportion (33–37%) of the hospitalizations for bipolar disorder, depression, and substance use disorders are covered by private payers.

Mental Health—Patient-Reported Outcomes

PMH46

Predictors of Medication Adherence Among Schizophrenia Patients Treated with Conventional and Atypical Antipsychotics in a Large State Medicaid Program

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Objective: This study evaluated antipsychotic use in Medicaid beneficiaries with a schizophrenic disorder and identified factors associated with poor adherence. Methods: This study involved a retrospective cohort analysis of non-dual Florida Medicaid recipients who had a medical claim indicating a schizophrenic disorder (ICD-9-CM 295.XX) and received an antipsychotic (APS) medication between July 1, 2004 and June 30, 2005. Patients were followed for one year after the first APS prescription. Adherence was measured using the Medication Possession Ratio (MPR: defined as unduplicated ambulatory treatment days divided by the number of ambulatory days in the period), medication persistence (days between the first and last antipsychotic in the follow-up period), and number of untreated days. Logistic regression models were used to identify predictors of poor adherence (MPR < 0.80). Results: A total of 8828 patients met inclusion criteria. Mean (±SD) age was 42.3 (±13.7) years, 49% were female, and 36.8% were white. Approximately 18% and 39% had pre-existing diagnoses of substance abuse or other psychiatric conditions, respectively. Mean (±SD) MPR was 0.72 (±0.3). The mean number of untreated days was 47.4 (±60.8), and mean persistence was 311.9 (±102.5) days. Approximately 57% of patients had MPR values between 0.8 and 1. Logistic regression indicated that younger patients (<18 years), females, nonwhites, those with a substance abuse diagnosis or who received antidepressants, and those newly starting APS therapy were significantly more likely to be poorly adherent, while those treated with atypical or injectable antipsychotics (vs. conventional orals) were less likely to be poorly adherent. Conclusion: Several patient characteristics are predictive of poor adherence to APS therapy. Study findings may be informative to health plan administrators interested in identifying patients at risk for medication non-adherence.

Better Persistence on Treatment with Escitalopram Compared with Citalopram

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Objective: Guidelines recommend use of antidepressants for a minimum of six months in major depressive disorder in order to decrease the risk of relapse. Persistence on treatment depends both on efficacy and tolerability. In clinical trials, escitalopram has shown a better efficacy and equivalent tolerability compared with citalopram. This work compares persistence on treatment at six months and associated economic consequences, for treatment with escitalopram vs. citalopram. Methods: Using US denominator-based claims database PharMetrics (includes data from 86 managed care health plans covering 45 million patients), we included adult patients diagnosed with depression who started escitalopram or citalopram between January 1, 2003 and December 31, 2004. Six-months persistence was defined as the percentage of patients still on treatment at 6 months. We compared persistence over time using Cox model, and health care costs at 6 months using log-linear regression. Propensity scoring was used to account for channelling by indication. Results: A total of 13,227 patients started escitalopram; 3,624 patients started citalopram. Persistence at 6 months was 20.4% with escitalopram vs. 16.2% with citalopram (p < 0.001). Escitalopram-treated patients were more likely to be persistent over 6-months than citalopram-treated patients adjusted for their baseline characteristics (HR = 0.896; 95% CI: 0.843–0.955). Incremental improvements in MPR from 0.75 to 0.95 were associated with corresponding reductions (20 to 30%) in the risk of any hospitalization or ER visit. Conclusion: As medication adherence improved, risk of hospitalization or ER visit declined, illustrating the link between adherence and better outcomes among patients with bipolar disorder.

The Relationship Between the Antipsychotic Medication Adherence and Patient Outcomes Among Bipolar Disorder Patients

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Objective: To examine the impact of antipsychotic medication adherence on outcomes among individuals diagnosed with bipolar disorder. Methods: An administrative claims database for a commercially-insured population was used to identify patients with bipolar disorder who were newly initiating treatment with antipsychotics (January 2000–December 2006). Patients were included if they were aged between 18–64 years, had no diagnoses of dementia or schizophrenia, and were continuously insured from 6 months prior through 12 months post-index date (N = 7769). Logistic stepwise regressions examined the association between achievement of adherence goals and patient outcomes (hospitalization or emergency room (ER) visit for any reason, mental-health related hospitalizations or ER visit), while controlling for demographic characteristics, type of bipolar disorder, general health, and comorbidities. Adherence was measured by the medication possession ratio (MPR). Results: The mean MPR was 41.65%, with 61.68% of individuals having an MPR of less than 0.50 and 78.67% having an MPR of less than 0.75. A significant reduction in the risk of hospitalization (odds ratio [OR = 0.854]; 95% CI: 0.746–0.978) or an ER visit for any cause (OR = 0.843; 95% CI: 0.744–0.953) was associated with an MPR of 0.75 or more. An MPR of 0.80 or more was associated with a significant reduction in the risk of a mental-health related hospitalization (OR = 0.817; 95% CI: 0.699–0.954) while an MPR of 0.90 or more was associated with a significant reduction in the risk of a mental-health related ER visit (OR = 0.705; 95% CI: 0.544–0.912). Incremental improvements in MPR from 0.75 to 0.95 were associated with corresponding reductions (20 to 30%) in the risk of any hospitalization or ER visit. Conclusion: As medication adherence improved, risk of hospitalization or ER visit declined, illustrating the link between adherence and better outcomes among patients with bipolar disorder.