

OBJECTIVE: Hospitalization and inpatient charge comparisons for bipolar and manic patients receiving atypical and conventional antipsychotics. **METHODS:** Analysis of a claims database (1999–2003) representing 50 million US insured patients identified 12,835 treatment episodes of monotherapy for bipolar and manic disorders with atypicals (risperidone, olanzapine, quetiapine, ziprasidone) and conventionals (haloperidol, perphenazine, thioridazine, thiothixene). Hazard ratios (HR) for hospitalization risks were estimated with Cox regression adjusting for patient characteristics. Inpatient charges were based on these estimates and estimated hospital stays. **RESULTS:** Risperidone and olanzapine had significantly ($P < 0.05$) higher risks of hospitalization than quetiapine (HR 1.185 and 1.187, respectively) and trended ($P < 0.10$) toward higher risks than ziprasidone (HR 1.443 and 1.447, respectively), translating into higher inpatient charges of \$194–\$389 per patient per year. On comparing the atypicals in manic rapid cyclers (a high hospitalization subgroup), risperidone had a significantly ($P < 0.05$) higher risk of hospitalization than olanzapine (HR = 3.309) and olanzapine trended ($P < 0.10$) toward longer stays than quetiapine (7.56 days longer), both translating into higher inpatient charges. **CONCLUSION:** In treating bipolar and manic disorders, risperidone and olanzapine may have higher risks of hospitalization than quetiapine. In treating manic rapid cyclers, olanzapine may have a lower risk of hospitalization than risperidone, but longer stays than quetiapine.

PMH12

PREVALENCE AND COST OF BIPOLAR DISORDER AND TREATMENT WITHIN A MANAGED CARE ORGANIZATION

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OBJECTIVES: To determine the prevalence of patients with bipolar disorder (BD) and compare their annual health care costs to patients with other mental health disorders, in a large United States managed care organization. **METHODS:** This was a retrospective claims analysis of approximately 1.4 million commercial health plan members with mental health benefits. Adults with a primary or secondary diagnosis of a mental health disorder in 2002 were identified and the prevalence of BD calculated. Those continuously enrolled throughout 2003 (follow-up period) were stratified to one of two cohorts: “BD” (Bipolar Disorder) or “OMHD” (Other Mental Health Disorder). Patient demographics, pharmacological treatments, and health care charges were compared between cohorts, adjusting for potential confounding factors of age, gender, and comorbidity. **RESULTS:** During 2002, there were 6581 patients (mean age 40.3 years; 65.7% female) with BD, yielding an overall prevalence rate of 4.68 per 1000 members. Among the 64,434 continuously enrolled mental disorder patients in 2003, 3,043 (4.7%) were classified as “BD” and 61,391 (95.3%) were classified as “OMHD”. Patients in the “BD” group were younger (41.7 vs. 43.0 years; $p < 0.0001$) with higher Charlson comorbidity index (0.56 vs. 0.47; $p < 0.0001$) compared to the “OMHD” group. Less than half (38.3%) of “BD” patients received a mood stabilizer (lithium, valproate, or carbamazepine) and 20.0% received no psychotropic medication. Adjusted pharmacy, medical, and total health care charges were higher in the “BD” group compared to “OMHD”: \$2641 vs. \$1071, \$13,419 vs. \$8422, and \$16,059 vs. \$9493 respectively ($p < 0.0001$ for all three comparisons). **CONCLUSIONS:** Compared to the national prevalence rate of 1%, BD may be under-diagnosed, and pharmacologic therapy underutilized within managed care. Patients with BD incurred greater health care charges compared to other

mental health disorders. Efforts aimed at improving diagnosis and treatment of BD may optimize care and cost of managing this patient population.

PMH13

THE CLINICAL AND ECONOMIC OUTCOMES OF SECOND-GENERATION ANTIDEPRESSANT USE FOR BIPOLAR DISORDER

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OBJECTIVES: Existing research offers little empirical evidence to support national practice guidelines about antidepressant use in patients with bipolar disorder. This study assessed the clinical and economic impact of second-generation antidepressant use for bipolar depressed adult patients. **METHODS:** Bipolar disorder subjects were identified with a new depressive episode in a national managed-care plan between January, 1998 and December, 2002. In total, 3737 patients were defined with the index of interested medication initiation and at least three-months pre-index and 12-month post-index continuous enrollments. Logit model with a difference-in-difference approach was employed to identify the relationship between treatment types (antidepressant monotherapy, mood stabilizer monotherapy, and antidepressant-mood stabilizer combination therapy) and the probability of mania-related visits. In addition, negative binomial model and log-transformed OLS model were used to predict number of depression-related visits and health care costs respectively. **RESULTS:** Probability of mania-related visits increased significantly from pre-index to post-index period with odds ratio 2.40 (95% CI: 1.52–3.79) for antidepressant monotherapy compared to mood stabilizer monotherapy, controlling for time fixed-effect, demographics, clinical-related and health-related variables. However no significant difference was identified between combination therapy and mood stabilizer monotherapy. Patients with antidepressant monotherapy and combination therapy had significantly lower incidence rate ratios of 0.68 (95% CI: 0.56–0.82) and 0.65 (95% CI: 0.52–0.81) respectively for depression-related visits, but significantly higher bipolar-related costs (232% and 72% respectively) compared to patients with mood stabilizer monotherapy. **CONCLUSIONS:** This study adds to the literature of bipolar depression treatment by providing empirical evidence at the national level to support the current practice guidelines. Second-generation antidepressant monotherapy indicated a risk of induced manic-switching, which can be costly in terms of overall health care resources. Since the safety and efficacy of antidepressants in bipolar disorder have not been firmly established, medical practitioners and policy makers should take precautions regarding the appropriate use of new antidepressants.

PMH14

A CASE-CONTROL STUDY ON SECOND-GENERATION ANTIDEPRESSANT USE IN PATIENTS WITH BIPOLAR DISORDER

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OBJECTIVES: To assess the clinical outcomes of modern second-generation antidepressant medication use in bipolar disorder, with a focus on the risk of induced manic-switching for adult patients with bipolar depression. **METHODS:** Bipolar disorder subjects were identified with a new depressive episode in a national managed care plan between January, 1998 and December, 2002. A case-control study design was applied for which cases and controls were defined by whether having mania-related visits in the 12-months continuous enrollment after