MISDIAGNOSIS OF BIPOLAR DISORDER AS UNIPOLAR DEPRESSION
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Bipolar disorder is frequently misdiagnosed as unipolar depression, in part, because of its episodic and cyclical nature. When a patient presents with symptoms of depression, a history of bipolar disorder precludes a unipolar depression diagnosis.
OBJECTIVE: The objective of this study was to examine the rate that bipolar patients are misdiagnosed with unipolar depression in current practice. METHODS: To examine patterns of diagnosis, the PharMetrics Integrated Outcomes Database of adjudicated medical and pharmaceutical claims for over 3 million patients from 11 U.S. health plans was utilized. In this database, 3679 patients had two claims with ICD-9 diagnostic codes for bipolar disorder (296.0, 296.1, 296.4-296.8) that were not accompanied by a unipolar depression diagnostic code, age between 10 and 64, and 1 year of continuous eligibility prior to and following the initial bipolar diagnosis claim. RESULTS: In the 12 months prior to their initial bipolar diagnosis, 14% of patients had at least two claims for unipolar depression. In the 12 months following the initial bipolar diagnostic claim 32% had at least two unipolar depression claims. When examining only patients who were diagnosed with bipolar disorder during an inpatient hospital stay, 47% were diagnosed with unipolar depression in the following 12 months. CONCLUSION: A disproportionately high proportion of bipolar patients were diagnosed with unipolar depression following their initial bipolar diagnoses. These results suggest that greater physician education is needed regarding bipolar disorder and the importance of obtaining a history when patients present with symptoms of depression.

SSRI USERS
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OBJECTIVES: Prior research documents that discontinuation rates among selective serotonin reuptake inhibitor (SSRI) users are high, but little is known about the likelihood of refilling at least one prescription. This study compares rates of first refills across SSRLs that remain on patent. METHODS: This retrospective cohort study used an administrative database from January 1, 1999 to June 30, 2002. Patients were followed up to 6 months after the first branded SSRIs. “Refill” was defined as having a history when patients present with symptoms of depression.

REFERENCES

To assess the national trend and regional variations in the length of stay (LOS) and medical practices for schizophrenia in the United States. METHODS: Schizophrenia inpatient care records were selected from the 1988 through 2000 National Inpatient Sample of Hospital Care Utilization Project (HCUP), a database that approximates a 20% sample of all US community hospitals. Using hospital and discharge sampling weights, national level estimates were produced to demonstrate the changes and patterns in LOS, medical practices, and associated demographic and clinical characteristics. RESULTS: The national average LOS for schizophrenia was found to have decreased from 16.22 days in year 1988 to 11.16 days in year 2000. Significant drop in LOS was observed from 1994 to 1998, but in all other years the changes were very small. The LOS varied substantially across geographical areas. In year 2000, the lowest LOS was 8.75 days in the Midwest, whereas in the Northeast LOS was nearly doubled at 16.18 days, and topped the national level. This difference was also accompanied by a sharp difference in medical practice between the two regions, that in the Midwest, individual psychotherapy (ICD-9-CM procedure code 9439) and electroshock therapy (code 9427) were the two most commonly used principal procedures, accounting for 27% and 15% respectively, whereas in the Northeast, psychiatric drug therapy (code 9425) was most common (38%), followed by other counseling (code 9449, 14%). In addition, there existed some regional differences in demographic and clinical characteristics. CONCLUSIONS: LOS for schizophrenia patients has decreased considerably from year 1988 to 2000 and differed significantly between different regions. These findings carry important policy implications regarding the relative efficiency, appropriateness and quality of hospital care in treating schizophrenia patients. Further studies are warranted to assess the patient health outcomes associated with the varied treatment patterns.

COMPARISON OF FIRST REFILL RATES AMONG BRANDED SSRIS
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OBJECTIVES: This study compares switching and discontinuation rates for patients who had already switched from fluoxetine to other branded selective serotonin reuptake inhibitors (SSRIs). METHODS: Retrospective analysis of claims in an administrative database from January 1, 1999 to June 30, 2002. Claims for patients on fluoxetine who switched to sertraline, paroxetine or citalopram were analyzed to compare rates of discontinuation or second switch to another SSRI. We used Cox proportional models and life table survival curves. Definition of switching or discontinuation was based on SSRI refill within 15 days or 2 days supply. RESULTS: Paroxetine patients (N = 217) were significantly more likely to switch (HR = 1.47, p = 0.033) than sertraline patients (N = 227). The likelihood of switching (HR = 0.98, p = 0.917) was not significantly different for patients on citalopram (N = 291) than on sertraline. Patients were as likely to discontinue when on sertraline (N = 324), paroxetine (N = 293) or citalopram (N = 437). Average number of distinct drugs (p = 0.0003) and average number of claims (p = 0.0006) were significant predictor of discontinuation, while age, gender and co-payment were not. CONCLUSIONS: Patients on fluoxetine who had switched to paroxetine were significantly more likely to switch again than those who had switched to sertraline. The likelihood of discontinuation was similar among patients on sertraline, paroxetine or citalopram.
< 0.05 level. CONCLUSIONS: The likelihood of refilling an SSRI varies by the specific SSRI and may vary by age, gender, and copayment amount. Patients are more likely to refill the first prescriptions for sertraline or citalopram than for paroxetine.

PMH67
DEPRESSION DIAGNOSIS IN PRIMARY CARE VISITS NOT FOR MENTAL HEALTH REASONS
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OBJECTIVE: To examine factors associated with diagnosis of depression at a primary care visit for reasons unrelated to depression. METHODS: We used the 1998–2000 National Ambulatory Medical Care Survey for office-based physician visits. We included visits to their primary care physician for patients with no indication of prior episodes of depression. We excluded patients under 15 years old and visits where the major reason for the visit was for mental health or social problems. We created a multivariate logistic regression model to examine which factors were associated with a depression diagnosis. Study variables included: age, race, sex, geographic region, urban setting, payment source, time spent with physician, new patient, HMO status, capitated visit, and major reason for the visit. RESULTS: There were 18,612 patients meeting study criteria, of whom 11,365 (61%) were female, 2,037 (11%) black, 1,940 (10%) were under age 25 and 5,629 (30%) were at least 65 years old. A total of 234 (1.5%) patients received a depression diagnosis. Multivariate analysis showed that younger (age 15–24; OR = 0.486, p = 0.0177) and older patients (age 65+; OR = 0.517, p < 0.0001) were less likely to receive a depression diagnosis. Factors associated with increased likelihood of depression diagnosis: female (OR = 1.81, p < 0.0001), self-pay (OR = 1.64, p = 0.532), and major reason for visit a chronic problem, both routine (OR = 2.24, p < 0.0001) and flareup (OR = 1.58, p = 0.0349). There were non-significant trends towards reduced rate of diagnosis in blacks (OR = 0.643, p = 0.0811) and visits related to surgery/injury (OR = 0.543, p = 0.0620), and towards higher rates in the West (OR = 1.38, p = 0.0847). There was no association between diagnosis of depression and urban setting, new patient, capitated visit, HMO enrollment. Association of time between seeing the physician and depression diagnosis was marginal, though statistically significant. CONCLUSIONS: When seeing their primary care physician for reasons unrelated to mental health or social problems, patients who were age 25–64, female, self-pay or visiting for a chronic illness were substantially more likely to be diagnosed with depression.

PMH68
TRENDS IN PHARMACOLOGIC TREATMENT FOR PATIENTS WITH BIPOLAR: 1992–2002
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OBJECTIVE: Assess trends in pharmacologic treatment for patients with bipolar disorder. METHODS: A large claims database of insured individuals from October 1992 to September 2002 was analyzed to identify patients diagnosed with bipolar disorder (ICD9-CM: 296.4x–296.8x). Treatment regimens were examined for six-classes of psychotropics (antidepressants, mood-stabilizers, atypical and typical antipsychotics, anxiolytics and hypnotics). RESULTS: Of 6373 patients (56.4% female, mean age 49.2 years), 19.4% were depressed, 14.2% manic, 21.2% mixed, and 45.1% other episodes; 9.1% didn’t receive psychotropic treatment. Among treated patients, 66.0% received antidepressants, 64.0% mood-stabilizers, 48.2% anxiolytics, and 42.1% atypical antipsychotics. Valproate (40.3%) and olanzapine (22.0%) were top two most commonly prescribed psychotropics. Only 22.7% received single-class therapy, 44.2% received ≥3 classes and 19.8% received ≥5 classes of psychotropics. Among depressed patients, 76.7% received antidepressants, 59.2% received mood-stabilizers and 39.9% received atypical antipsychotics versus 45.4%, 71.2% and 54.4% in manic patients, respectively. Surprisingly, 52.3% of depressed patients received anxiolytics—the highest percentage among all sub-types of bipolar patients. CONCLUSIONS: Pharmacotherapy for bipolar patients is complex. Nearly half of bipolar patients were treated with ≥3 classes of psychotropics. Depressed patients were more likely to receive antidepressants and anxiolytics but less likely to receive mood-stabilizers.

PMH69
PATTERNS OF PHARMACOLOGIC TREATMENT FOR PATIENTS WITH BIPOLAR DISORDER
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OBJECTIVE: Assess recent pharmacologic treatment patterns for patients with bipolar disorder. METHODS: A large claims database of insured individuals from October 1998 to September 2002 was analyzed to identify patients diagnosed with bipolar disorder (ICD9-CM: 296.4x–296.8x). Treatment regimens were examined for six-classes of psychotropics (antidepressants, mood-stabilizers, atypical and typical antipsychotics, anxiolytics and hypnotics) during the year post-diagnosis. Differences in medication use among sub-types of bipolar were compared. RESULTS: Of 6373 patients (56.4% female, mean age 49.2 years), 19.4% were depressed, 14.2% manic, 21.2% mixed, and 45.1% other episodes; 9.1% didn’t receive psychotropic treatment. Among treated patients, 66.0% received antidepressants, 64.0% mood-stabilizers, 48.2% anxiolytics, and 42.1% atypical antipsychotics. Valproate (40.3%) and olanzapine (22.0%) were top two most commonly prescribed psychotropics. Only 22.7% received single-class therapy, 44.2% received ≥3 classes and 19.8% received ≥5 classes of psychotropics. Among depressed patients, 76.7% received antidepressants, 59.2% received mood-stabilizers and 39.9% received atypical antipsychotics versus 45.4%, 71.2% and 54.4% in manic patients, respectively. Surprisingly, 52.3% of depressed patients received anxiolytics—the highest percentage among all sub-types of bipolar patients. CONCLUSIONS: Pharmacotherapy for bipolar patients is complex. Nearly half of bipolar patients were treated with ≥3 classes of psychotropics. Depressed patients were more likely to receive antidepressants and anxiolytics but less likely to receive mood-stabilizers.

PMH70
PHARMACOLOGIC TREATMENT PATTERNS FOR BIPOLAR DISORDER
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OBJECTIVE: To examine managed-care treatment patterns for patients diagnosed with bipolar disorder. METHODS: We examined the PharMetrics Integrated Outcomes Database of adjudicated medical and pharmaceutical claims for over 3 million patients from 11 U.S. health plans. We identified 4,455 bipolar patients based on the following criteria: two claims with ICD-9-CM diagnosis for bipolar disorder (296.0, 296.1, 296.4–296.8), age between 10 and 64, and 1 year of continuous eligibility prior to and following the initial bipolar diagnosis with claims beginning January 1, 1999. RESULTS: Of the 4455 bipolar patients, 80% (3555) received medication-based treatment in a 13-month window around the index diagnosis (12 months post and 1 month pre). A total of 38% of bipolar patients used 4 or more medications during the 13 months. On average each patient