

z-scores and odds of  $\geq 0.5$  change in baseline to follow-up z-scores were estimated. **RESULTS:** A total of 1179 eligible patients were identified with mean age 15.2 years (SD, 2.16) and 51% female. The distribution was: FGA's 19% (n = 253), aripiprazole 11% (n = 129), olanzapine 15% (n = 182), quetiapine 25% (n = 297), risperidone 26% (n = 308), and ziprasidone 3% (n = 32). In the linear model, adolescents on olanzapine experienced a significant increase in BMI [0.84 kg/m<sup>2</sup> (CI, 0.17–1.52)] compared to those on aripiprazole. Logistic model results indicated a significant likelihood of a 5 to 20% increase in BMI for those on olanzapine [OR: 1.54 (CI, 0.96–2.5) to 4.53 (CI, 1.79–11.48)] and a 10 to 20% increase for those on risperidone [OR: 1.84 (CI, 1.15–3.0) to 2.18 (CI, 1.21–3.96)], compared to aripiprazole. In the BMI z-score analysis, adolescents on olanzapine experienced a significant increase in BMI [OR: 1.65 (CI, 1.02–2.67)]. Results for FGA's, quetiapine, and ziprasidone were not statistically significant. **CONCLUSION:** Potential for weight gain varies by antipsychotics and should be taken into account while prescribing these medications to adolescents.

## MH2

#### ECONOMIC AND CLINICAL CONSEQUENCES ASSOCIATED WITH POTENTIAL DRUG-DRUG INTERACTIONS BETWEEN ANTIPSYCHOTICS AND CONCOMITANT MEDICATIONS IN PATIENTS WITH SCHIZOPHRENIA

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**OBJECTIVE:** Inhibiting or inducing antipsychotic metabolism via the hepatic cytochrome P450 (CYP450) may have clinical and economic consequences. This study examined whether drug-drug interactions (DDIs) between oral antipsychotics and non-antipsychotic concomitant medications that are inhibitors or inducers of CYP450 isoenzymes are associated with increased health care utilization and costs in schizophrenics or schizoaffective-disorder patients. **METHODS:** Ohio State Medicaid data contributed patients (18  $\leq$  age < 65) who had schizophrenia or schizoaffective disorder and received an antipsychotic from 2000 to 2003 (N = 31,716). Clinically significant DDI pairings (Facts & Comparisons 4.0) were examined, with concomitant exposure for an antipsychotic prescription overlapping with an interacting medication. Three adverse events (AEs) (extrapyramidal symptoms, increased seizure risk and QT-prolongation or arrhythmias) associated with DDIs were studied. Utilization and costs for inpatient and ambulatory care during a 90-day follow-up were examined. Regression analyses were used to adjust for confounding factors between patient groups. **RESULTS:** Most patients had non-DDI (26,546); 7060 had a DDI (no AE) and 110 experienced DDI + AE. Length of stay and emergency room visits (mean  $\pm$  SD) were highest for DDI + AE (25 days  $\pm$  17.8; 3.4  $\pm$  4.1) and lower for the DDI (11 days  $\pm$  9.9; 1.5  $\pm$  1.0) and non-DDI (3.6 days  $\pm$  15.6; 0.5  $\pm$  2.8) groups. Health care costs were higher with DDI + AE (\$9699) or DDI (\$2962) compared with non-DDI (\$2201). Regression analysis indicated that patients with DDI + AE or DDI had significantly higher health care utilization and costs than patients without DDI (P < 0.001). Stepwise regression showed that patients with a DDI or DDI + AE associated with olanzapine, risperidone and quetiapine had higher total costs than patients without a DDI. **CONCLUSION:** These data suggest that antipsychotic DDIs are related to higher health care utilization and costs. Efforts to avoid potential DDIs associated with some antipsychotics are critical for clinical practitioners to prevent costly clinical and economic consequences.

## MH3

#### WORK ABSENTEEISM AND BED DAYS IN CHRONIC MEDICAL DISORDER PATIENTS WITH AND WITHOUT DEPRESSION IN THE UNITED STATES, 2004–2005

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**OBJECTIVE:** Study of depression on disability days and work absenteeism in patients with chronic medical disorders (CMDs) is limited. Our objective was to compare annual bed days and missed workdays in CMD patients with and without depression. **METHODS:** For retrospective analysis, we extracted data on  $\geq 18$  year-old employed adults from the pooled 2004–5 Medical Expenditure Panel Survey. Data included ICD-9-CM-coded CMD (hyperlipidemia, heart-disease, arthritis/other joint-disorders, chronic obstructive pulmonary disease, hypertension, diabetes), and depression; number of missed workdays and bed days, age, gender, race, poverty level, health insurance, health status (physical, mental), urban residence, and any depression treatment (psychotherapy/antidepressant). For 6786 CMD patients with and without depression, we compared rates with one or more missed workdays and bed days, and mean number of missed workdays and bed days. Weighted sample estimates and 95 percent confidence limits (CL) were calculated using the Taylor expansion method. In multivariate logistic regression models, after controlling for other characteristics, we examined association of depression with one or more missed workdays and one or more bed days. **RESULTS:** Compared with those without depression, significantly more CMD patients with depression reported one or more missed workdays [50.26% (SE0.86%) vs. 70.14% (SE2.11%) p < 0.001], and one or more bed days [18.51% (SE0.66%) vs. 34.24% (SE2.2%), p < 0.001]. The mean number of missed workdays (9.93+/-0.94 vs. 5.01+/-0.22) and bed days (4.29+/-0.62 vs. 1.03+/-0.08) were also higher in CMD with versus without depression. In multivariate analyses, after controlling for other characteristics including any depression treatment, depression increased the likelihood of one or more missed workdays (adjusted Odds-Ratio, OR 1.41, 95% CL:1.14–1.75, p = 0.002) and one or more bed days (OR 1.37, 95% CL:1.07–1.75, p = 0.013) in CMD patients. **CONCLUSION:** Depression plays a significant role in both absenteeism and bed days in CMD patients in the United States. Effective identification and treatment strategies require the attention of both providers and payers.

## MH4

#### TREATMENT COST AND COMORBIDITIES ASSOCIATED WITH OBESITY AMONG CHILDREN AND ADOLESCENTS WITH BIPOLAR DISORDER

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**OBJECTIVE:** Childhood obesity as a known risk factor associated with bipolar disorder complicates its treatment. The purpose of this study is to assess treatment costs and comorbidities associated with obesity in children and adolescents with bipolar disorder. **METHODS:** Based on a multi-state managed care medical claims database (PharMetrics), a total of 9895 children and adolescents (6 < age < 19) who had been diagnosed and received medication treatment for bipolar disorder during the period January 1, 1998 to December 31, 2002 were selected for this study. Annual treatment cost per patient was constructed as the sum of reimbursed amounts (in 2002 constant dollars) for hospitalizations, outpatient care, emergency room (ER) visits, physician encounters, laboratory tests, drugs, and other medical services. A stepwise log-linear regression analysis was used to