group, resulting in cost estimates of $8,580 per abuser compared with $5,878 per non-abusers. **CONCLUSIONS:** Results from this analysis suggest that opioid abuse and dependence was associated with significant work productivity loss and may pose a considerable cost to employers.

**PMH37**

**CHANGES IN HEALTHCARE RESOURCE USE AND COSTS ASSOCIATED WITH THE USE OF ADJUNCTIVE ATYPICAL ANTIPSYCHOTICS IN MAJOR DEPRESSIVE DISORDER**

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**OBJECTIVES:** This study compared all-cause and major depressive disorder (MDD)-related hospitalizations, medical, and pharmacy costs in patients with MDD prior to and in the year following initiation of adjunctive atypical antipsychotic (AAP) treatment. **METHODS:** Adults (≥18 years) with MDD (≥2 diagnoses records) and prior treatment with antidepressant (ADT) who were newly initiated on adjunctive AAP treatment (brexpiprazole, aripiprazole, quetiapine, or lurasidone) between 10/1/2014 and 9/30/2015 were identified in IQVIA's PharMetrics Plus Adjudicated Claims database; the index date was the date of the first adjunctive AAP claim during the selection window. All-cause and MDD-related healthcare resource use and costs were compared between the periods of continuous medical and drug coverage, 12 months before (pre-index) and 12 months after index date (post-index). **RESULTS:** 1,380 patients who initiated adjunctive AAP therapy were included; mean age was 40.4 ± 15.3 years and 59.9% were female. On average, patients initiated adjunctive AAP therapy 1.8 ± 1.4 years after first ADT use. Relative to pre-index, proportions of patients with all-cause and MDD-related hospitalizations decreased 12.2% and 10.4%, respectively, equating to significant reductions in mean hospital costs per patient of 6,217 ± $57,123 and $1,166 ± $11,703, respectively (both p-values <0.001). In the year following adjunctive AAP therapy initiation, the mean all-cause medical costs per patient decreased $4,513 ± $59,116 (p=0.025) while there was a trend for lower MDD-related medical costs ($1,182 ± $323; p=0.263); pharmacy costs per patient increased $4,236 ± $7,605 of which $3,521 ± $3,846 was attributable to psychotropic drug use (both p-values <0.001). **CONCLUSIONS:** Treatment with adjunctive AAP in major depressive disorder is associated with reduced healthcare resource use and medical costs, primarily due to the reduction in hospitalizations.

**PMH38**

**REDUCTION IN HOSPITALIZATIONS AND MEDICAL COST SAVINGS ASSOCIATED WITH EARLY USE OF ADJUNCTIVE ATYPICAL ANTIPSYCHOTICS IN MAJOR DEPRESSIVE DISORDER**

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**OBJECTIVES:** This study compared major depressive disorder (MDD)-related hospitalizations and medical and pharmacy costs in patients with MDD both before and after waiting varying amounts of time to start adjunctive atypical antipsychotic (AAP) treatment. **METHODS:** Adults (≥18 years) with MDD who were newly initiated on adjunctive AAP treatment (brexpiprazole, aripiprazole, quetiapine, or lurasidone) between 10/1/2014 and 9/30/2015 were identified in IQVIA's PharMetrics Plus Adjudicated Claims database; the index date was the date of the first AAP claim. The date of the first antidepressant (ADT) used before the index date was identified. Based on the time from first ADT to first adjunctive AAP use, patients were categorized into 3 groups: AAP initiated in the first year (Y1); in the second year (Y2); and more than 2 years (Y3) of first ADT use. Within each cohort, healthcare resource use and costs were compared between the 12-month period before and after index date. The pre-post changes in resource use and costs were compared between cohorts. **RESULTS:** 506 (36.7%) patients were categorized as Y1; 252 (18.3%) were categorized as Y2; and 622 (45.1%) were categorized as Y3. Significant reductions in the proportion of hospitalized patients were seen in all cohorts of AAP-treated patients relative to pre-index. The highest reductions in MDD-related hospitalizations were seen in the Y1 cohort (-16.4%) compared to the Y2 (-7.5%) and Y3 cohorts (-6.8%). Relative to pre-index, statistically significant reduction in the mean medical cost per patient was only observed in the Y1 cohort (-$10,496 ± $85,022). Similar increase in pharmacy costs was observed in all cohorts. **CONCLUSIONS:** Compared to later use of adjunctive AAP, early use of adjunctive AAP therapy in the first year of first ADT treatment was associated with the largest reductions in MDD-related hospitalizations and medical costs in the year following treatment initiation.

## MENTAL HEALTH - Patient-Reported Outcomes & Patient Preference Studies

**PMH39**

**THE EVALUATION OF ADHERENCE TO TREATMENT AND REAL-WORLD OUTCOMES IN TWO COHORTS OF PATIENTS WITH SERIOUS MENTAL ILLNESS (SMI)**

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**OBJECTIVES:** Evaluate adherence to treatment and real-world outcomes in two cohorts of patients with serious mental illness (SMI). **METHODS:** A retrospective cross-sectional analysis was used to compare patient characteristics and outcomes using a large sample of commercial, Medicare Advantage, and managed Medicaid claims data. Patients were included if they: 1) were enrolled with medical and pharmacy benefits for at least 180 days before and 360 days after the index event; 2) had at least one inpatient or two outpatient claims with a diagnosis for SMI and at least one prescription claim for an antipsychotic anytime between January 1, 2011 and June 30, 2016; and 3) were ≥ 18 and <65 years old at index date. The recently discharged (RD) cohort included patients with ≥1 SMI related hospitalization (first used as index event). The early episode (EE) cohort included patients with ≥ six-months of pre-index enrollment with no evidence of an antipsychotic or SMI diagnosis (first claim with either used as index event). The RD cohort included 11,050 patients:62% female; Age:9% 18-25, 35% 26-45, 56% 46-65. The EE cohort included 40,655 patients:63% female; Age:12% 18-25, 39% 26-45, 49% 46-65. **RESULTS:** Adherence to oral antipsychotic medications (defined as PDC ≥.80) was 52.5% on average in the RD cohort, but only 16.1% on average in the EE cohort. Utilization rates per 1,000 patients were significantly higher in the RD cohort: PCP visits (6,170 vs 5,770); observation stays (400 vs. 160); emergency department visits (2,050 vs 1,170). Inpatient readmission rates were 220/1,000 in the EE cohort compared to 600/1,000 in the RD group. **CONCLUSIONS:** Adherence to treatment is low and variable among SMI patients, resulting in high rates of healthcare utilization. These stratified outcomes can be used by providers to target specific SMI patients to reduce utilization and costs of care.

**PMH40**

**NON-ADHERENCE TO ANTIPSYCHOTICS AND DISEASE COMORBIDITY: A DOUBLE WHAMMY IN SCHIZOPHRENIA MANAGEMENT**

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**OBJECTIVES:** To determine the impact of non-adherence to anti-psychotic (AP) drugs and disease comorbidity on healthcare utilization and health status in schizophrenia. **METHODS:** A retrospective, cross sectional research data was obtained from Medical Expenditure Panel Surveys (MEPS, 2010-2014). Proportion of Days Covered (PDC) measure of adherence was used to identify and classify individuals as adherent (PDC ≥ 80%) or non-adherent (PDC < 80%). Charlson Comorbidity Index(CCI) scores were used to identify disease comorbidity in schizophrenia. Effects of key study variables on medication non-adherence were observed. Group comparisons using Student's t-test were also performed for utilization in two groups—adherent vs nonadherent & comorbid vs non-comorbid populations. The HRQoL was measured in terms of Physical Component Summary (PCS) and Mental Component Summary (MCS) scores using Short Form-12, along with Kessler Index (K6) score for psychological distress. **RESULTS:** 71% of about 1.2 million people who had schizophrenia reported a PDC score of < 80%, representing significant non-adherence concerns. A logistic regression analysis showed that women (OR=3.594, 95% CI 1.33-11.40, p=0.030), married individuals (OR=0.065, 95%CI 0.004-1.11,p=0.0049) and persons with higher education (OR=20.85,95%CI 3.91-111.09,p=0.0005) were more likely to be non-adherent to AP and also reported greater outpatient visits (0.68 vs 1.92,p<0.0001) and office based visits (10.95 vs 18.21,p<0.0001), compared to adherent persons. Additionally, individuals with comorbidity had greater inpatient visits (0.39 vs 0.76,p<0.0001), office-based visits (13.39 vs 19.34, p<0.0001) and ER visits (0.39 vs 1.41, p<0.0001) compared to those without comorbidity. Higher HRQoL scores on both the SF-12 components (MCS: 53.55 vs 32.69, p=0.022; PCS: 38.57 vs 37.35, p=0.7215) and the Kessler Index score of psychological distress (K6: 7.36 vs 7.16, p<0.8916) were observed for the adherent group. **CONCLUSIONS:** Greater medical care resources are utilized by schizophrenia individuals that are non-adherent to anti-psychotic medications and also diagnosed with comorbidities than those without such problems.

**PMH41**

**ATTITUDES AND BELIEFS TOWARDS PSYCHOTROPIC MEDICATION IN PATIENTS WITH DUAL DIAGNOSIS**

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**OBJECTIVES:** To measure dual diagnosis patients' attitudes/beliefs towards psychotropic medication and analyze the effect on patient adherence levels and substance use relapse rates. **METHODS:** The pilot study utilized a cross-sectional interview methodology. Inclusion criteria included male patients at least 18 years of age who were newly admitted at a residential rehabilitation program with a self-reported diagnosis of substance abuse disorder, and either major depressive disorder, bipolar disorder, generalized anxiety disorder, or schizophrenia. The Drug Attitude Inventory (DAI-10) was utilized to measure patient self-reported attitudes and beliefs. Patient's total DAI-10 score along with each individual item were stratified according to total Morisky Medication Adherence Scale (MMAS-8) score, self-reported adherence on a scale of 1 to 10, and self-reported relapse rate. Pearson correlation coefficient was utilized to analyze the relationship between DAI-10 scores with adherence and relapse. SPSS Statistics (IBM Corp; Armonk, NY) was utilized for all analyses, with a two-tailed level of significance at 0.05. **RESULTS:** The final study sample consisted of 38 patients. The mean DAI-10 score was 5.4±3.0, which reflects an overall positive attitude. While there were no significant differences in terms of total DAI-10 scores, there were significance differences at the DAI-10 individual item level in regard to MMAS-8 total score and self-reported adherence. There were no significance differences in relapse rates for any item in the DAI-10. Patients' DAI-10 total scores were significantly correlated with MMAS-8 total score (Pearson's r=0.505, p=0.001). **CONCLUSIONS:** Patients' with dual diagnosis attitudes and beliefs towards their prescribed psychotropic medication play a significant role in adherence rates but no relationship between attitudes/beliefs towards medication and substance abuse relapse was found. A better understanding of this relationship can help interventions target patients more effectively and improve health outcomes.

**PMH42**

**OVERALL TREATMENT SATISFACTION WITH SCHIZOPHRENIA THERAPIES: ANALYSIS FROM PATIENT, PHYSICIAN AND CAREGIVER PERSPECTIVES**

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**OBJECTIVES:** While multiple therapies are currently available for the treatment of schizophrenia, patient adherence is perceived to be low. This analysis aims to