

one opioid prescription during their treatment episode. The median total of morphine milligram equivalents (MME) 12 months prior to treatment was 250 mg/per month (IQR 38 to 1347) then declined to 221 mg/per month (IQR 39 to 1034) and 175 mg/per month (IQR 25 to 1106) during and following the treatment episode, respectively. The median MME per opioid day supplied prior to, during and following the first treatment episode remained constant at 40 mg per day. **CONCLUSIONS:** Treatment with buprenorphine/naloxone is associated with reduced non-buprenorphine opioid use. However, a substantial proportion of patients fill prescriptions for non-buprenorphine opioids during and following such treatment.

#### PMH61

##### ADHERENCE AND TREATMENT PATTERNS IN BREXPIPRAZOLE THERAPY IN LONG-TERM CARE PATIENTS WITH SCHIZOPHRENIA: RESULTS FROM A RETROSPECTIVE ANALYSIS OF LONG-TERM CARE DATA

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**OBJECTIVES:** Brexpiprazole, a serotonin-dopamine activity modulator, was approved in 2015 in the United States for the treatment of schizophrenia. This is the first opportunity to examine real-world adherence and treatment patterns in patients with schizophrenia treated with brexpiprazole and atypical antipsychotics (AAPs) in the long-term care (LTC) setting. **METHODS:** Longitudinal LTC pharmacy and outpatient medical claims data from 10-Jul-2015 to 03-Mar-2016 were used. Patients were included if they had a diagnosis for schizophrenia, were  $\geq 18$  years old, and newly initiated brexpiprazole or other AAPs (olanzapine, quetiapine, ziprasidone, risperidone, aripiprazole, or lurasidone). The index date was the date of first AAP fill. Patient characteristics and treatment history were measured in the 12 months pre-index. Post-index adherence was measured as variable medication possession ratio (MPRV) among patients with  $\geq 2$  fills of the index medication. **RESULTS:** 77 patients on brexpiprazole and 21,403 patients on other AAPs (5,018 olanzapine; 4,638 quetiapine; 932 ziprasidone; 5,884 risperidone; 2,117 aripiprazole; 693 lurasidone) were identified. Mean ages (years $\pm$ standard deviation) were 48 $\pm$ 15.2 for brexpiprazole, 54 $\pm$ 15.5 for aripiprazole, 50 $\pm$ 14.2 for lurasidone, 56 $\pm$ 15.6 for olanzapine, 56 $\pm$ 15.4 for quetiapine, 57 $\pm$ 14.8 for risperidone, and 52 $\pm$ 14.4 for ziprasidone. Brexpiprazole was prescribed mainly by psychiatrists/psychologists (68%) while other AAPs, except lurasidone, were prescribed more by PCPs (olanzapine: 52%, quetiapine: 54%, ziprasidone: 50%, risperidone: 56%, aripiprazole: 49%, lurasidone: 41%). 96% of brexpiprazole patients were previously treated with  $\geq 1$  AAP compared to other AAPs (olanzapine: 56%, quetiapine: 65%, ziprasidone: 64%, risperidone: 49%, aripiprazole: 59%, and lurasidone: 72%). Mean MPRV values were 94% in brexpiprazole, 93% in aripiprazole, and 95% in all other AAPs. **CONCLUSIONS:** This is the first study to describe the use of brexpiprazole for schizophrenia in the LTC setting. Brexpiprazole was prescribed mainly by specialists, and most brexpiprazole patients were previously treated with AAPs. Adherence to brexpiprazole was similar to other AAPs.

#### PMH62

##### BREXPIPRAZOLE USE IN LONG-TERM CARE PATIENTS WITH MAJOR DEPRESSIVE DISORDER: RESULTS FROM A RETROSPECTIVE ANALYSIS OF LONG-TERM CARE DATA

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**OBJECTIVES:** Brexpiprazole, a serotonin-dopamine activity modulator, was approved in 2015 in the United States for the treatment of schizophrenia and for use as adjunctive therapy in major depressive disorder (MDD). Characteristics of patients with MDD and their treatment adherence to brexpiprazole have not been previously studied in the long term care setting. **METHODS:** The study used data from longitudinal long-term care pharmacy and outpatient medical databases. Patients aged  $\geq 18$  years, with a diagnosis of MDD, and who initiated brexpiprazole or an older atypical antipsychotic (AAPs; quetiapine, aripiprazole, or lurasidone) between 10-Jul-2015 and 3-Mar-2016 were included. Patient characteristics and prior use of antidepressants were measured in the 12 months prior to therapy initiation. Treatment adherence was measured by variable medication possession ratio (MPRV) over a 3 month follow up among patients with  $\geq 2$  fills. **RESULTS:** 177 brexpiprazole, 14,261 quetiapine, 5,376 aripiprazole, and 1,244 lurasidone patients were identified. Mean age of brexpiprazole patients was 49 $\pm$ 15.4 years (quetiapine: 64 $\pm$ 18.8 years, aripiprazole: 57 $\pm$ 18.4 years, lurasidone: 48 $\pm$ 16.4 years). Anxiety was observed in 54% of brexpiprazole patients. 52% of brexpiprazole patients received their prescriptions from psychiatrists/psychologists compared to other AAPs (25% of quetiapine, 35% of aripiprazole, 45% of lurasidone). More brexpiprazole patients were previously treated with a selective serotonin reuptake inhibitor, and fewer were treated with a selective norepinephrine reuptake inhibitor compared to other AAPs. Mean MPRV values were 94% in brexpiprazole, 94% in quetiapine, 93% in aripiprazole, and 92% in lurasidone. **CONCLUSIONS:** This is the first study to describe the use of brexpiprazole for MDD in the long-term care setting. Patients treated with brexpiprazole were more often treated with a prior selective serotonin reuptake inhibitor and were more often treated by a specialist compared to patients on other AAPs. Adherence to brexpiprazole was similar to that of other AAPs.

#### PMH63

##### USE OF ANTIPSYCHOTICS AMONG SENIORS LIVING IN LONG-TERM CARE FACILITIES, 2014

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**OBJECTIVES:** This analysis examines the use of antipsychotics among seniors living in long-term care (LTC) facilities, and the concurrent use of antipsychotics with other psychotropic drugs, which further increases risk of side effects. It also looks at the characteristics of residents treated with antipsychotics, including diagnoses, behaviours and other functional measures. **METHODS:** Drug claims data from the National Prescription Drug Utilization Information System (NPDUIS) Database, housed at the Canadian Institute for Health Information (CIHI), provide detailed information about antipsychotic use. LTC resident assessment data from CIHI's Continuing Care Reporting System (CCRS) provide detailed resident information. **RESULTS:** Residents with severe cognitive impairment and those exhibiting highly aggressive behaviour were more likely to have used an antipsychotic. However, a large proportion of seniors exhibiting severe aggression were not treated with antipsychotics, suggesting that non-drug alternatives were often considered. Quetiapine was the most commonly used antipsychotic (19.2% of LTC residents), followed by risperidone (14.1%). Among seniors who were chronic users of an antipsychotic, nearly two-thirds (64.3%) were also chronic users of an antidepressant, while roughly 1 in 6 (15.0%) were also chronic users of a benzodiazepine. In Manitoba, antipsychotic use decreased from 38.2% in 2006 to 31.5% in 2014. This was due in part to initiatives implemented by the Winnipeg Regional Health Authority, to reduce inappropriate antipsychotic use in LTC facilities. **CONCLUSIONS:** In September 2014, The Canadian Foundation for Healthcare Improvement began supporting several health care organizations across Canada to adopt initiatives to reduce inappropriate antipsychotic use in LTC facilities. As more facilities start implementing similar strategies, the overall rate of antipsychotics use in LTC facilities may decrease.

#### PMH64

##### RETROSPECTIVE STUDY OF ANTIPSYCHOTICS UTILIZATION IN RUSSIAN FEDERATION

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**OBJECTIVES:** This study aims to analyze the evolution of the consumption pattern of the antipsychotic drugs (APs) in Russian Federation. **METHODS:** The sales data of the antipsychotic drugs in Russian Federation during the period 2010-2015 was retrieved from the DSM-group marketing database and subsequently analyzed. The drugs have been classified into typical antipsychotics (TA), atypical antipsychotics (AA) and sustained-action APs. Consumption data have been expressed in daily-defined dose (DDD) per 1,000 inhabitants per day of treatment (DDD/1000/day) total for hospital, retail and reimbursable pharmaceuticals. The total number of DDD/1000/day was calculated for Russian Federation on the whole, as well as for each federal district, region and republic of the Russian Federation, by adding up the DDD/1000/day for the individual antidepressants. **RESULTS:** Antipsychotic consumption decreased from 3.80 in 2010 to 3.59 DDD/1000/day in 2015 ( $\Delta$  -5.5%). TA consumption decreased (from 61% in 2010 to 55% in 2015) and that of the AA and sustained-action APs ones increased (from 17% (2010) to 19% (2015) and from 22% (2010) to 26% (2015) respectively). In 2010, the most consumed drug was haloperidol oral (0.99 DDD/1000/day). However, during the period 2010-2015 utilization of haloperidol oral decreased by 23%, but it remains the most consumed APs (0.76 DDD/1000/day) in 2015. The drug with the largest increase in consumption was olanzapine oral. Its consumption increased in three times in the period 2010 - 2015 (from 0.027 to 0.080 DDD/1000/day). **CONCLUSIONS:** It was found that the APs consumption in Russian Federation during the period 2010-2015 has not changed significantly ( $\Delta$  -5.5%). At the same time TA (1-st generation drugs) consumption decreased and that of the AA and sustained-action APs ones increased. Therefore, the level of consumption of TA in Russian Federation remains high (over 50% of the total APs consumption).

#### PMH65

##### EFFECT OF ATYPICAL ANTIPSYCHOTIC PRIOR AUTHORIZATION IMPLEMENTATION ON PATIENT OUTCOMES AMONG OHIO MEDICAID BENEFICIARIES

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**OBJECTIVES:** A major concern regarding prior authorization (PA) policies for atypical antipsychotics (AAs) is that they produce undue burden on an already vulnerable population which may worsen outcomes. In October 2008 Ohio Medicaid implemented a PA-policy that contained a unique stipulation exempting psychiatrists. The objective of this study was to determine the impact of this PA-policy on healthcare utilization and cost for patients newly prescribed AAs. **METHODS:** Patient-level data analyzed came from Ohio Medicaid fee-for-service claims files June/2007-September/2009. A difference-in-differences regression approach was used to compare outcomes in the PA-active year to the year pre-implementation between patients treated by psychiatrists and those treated by nonpsychiatrists. Patients were stratified based on index-AA prescribing-physician type, and those treated by PA-exempt psychiatrists served as the control. Patients were included if they were  $\geq 18$ , had an AA claim following 120-days of washout, and had 180 days of post-index healthcare utilization data. Patients with any gap in coverage and those dual-eligible for Medicare were excluded. Logistic regression was used to estimate the policy-attributable effect on all-cause and psychiatric-related hospitalizations, emergency department visits, outpatient visits, and physician office visits. Policy-attributable changes in all-cause and psychiatric-related expenditures were assessed using a generalized linear model with a log-link function and gamma distribution. All regressions included the following covariates to control for confounding: age, sex, race, diagnosis, comorbidities, previous healthcare utilization, index-AA type, and AA-adherence. **RESULTS:** 1,129