

## PMH15

**PREVALENCE OF TREATMENT RESISTANT DEPRESSION IN USUAL CARE IN THE UNITED STATES**

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**OBJECTIVES:** The proportion of depressed individuals in usual practice who develop treatment resistant depression (TRD) is not known, in part because of varied definitions. One definition of TRD that has gained some consensus is the failure of two antidepressant trials of adequate dose and duration for the same depressive episode. The objective of this study was to operationalize this definition of TRD in administrative claims data and estimate the prevalence of TRD among individuals with major depression. **METHODS:** Retrospective analysis of PharMetrics Integrated Outcomes Database of adjudicated medical and pharmaceutical claims from multiple commercial U.S. health plans. We identified 168,533 adults (age 18–64) with a diagnosis of major depression (ICD-9-CM 296.20–296.39), treatment with an antidepressant, and with continuous enrollment for one year following the initiation of the antidepressant. TRD was identified based on the initiation of a third antidepressant after treatment with two antidepressants of adequate dose and duration. In sensitivity analyses, we varied the definition of “adequate duration” and the length of gaps between antidepressants. **RESULTS:** There were 12,125 individuals (7.2%) who started a third antidepressant after taking 2 different antidepressants for at least 42 days each, with at least one script of adequate dose, and a gap of less than 30 days between different antidepressant treatments. Increasing the gap between the ending of one antidepressant treatment and the initiation of the next to 60 days or 90 days resulted in identification of 16,494 (9.8%) and 19,273 (11.4%) cases of TRD, respectively. **CONCLUSION:** In usual medical care, 7.2% of individuals who are diagnosed with major depression appear to develop treatment resistant depression. For this small, but meaningful proportion of individuals with major depression, three or more antidepressant trials appear to be needed to sufficiently control symptoms.

## PMH16

**ASSOCIATION BETWEEN ATYPICAL ANTIPSYCHOTIC USE AND TREATMENT-EMERGENT DIABETES, HYPERLIPIDEMIA, AND OBESITY**Lingle EW<sup>1</sup>, Dickson M<sup>2</sup><sup>1</sup>University of South Carolina, Columbia, SC, USA, <sup>2</sup>University of South Carolina, College of Pharmacy, Columbia, SC, USA

**OBJECTIVES:** To assess the relationship between newly initiated atypical antipsychotic (AA) use and subsequent diagnoses for the metabolic disorders (MD) of hyperlipidemia, diabetes, and obesity. **METHODS:** Enrollees in the South Carolina Medicaid program were included if they initiated AA therapy in 2003 or 2004 (index date), did not have a MD diagnosis in the 12 months prior to the index date, used only a single AA drug for the 12 months prior to and following the index date (follow-up), and were continuously eligible during follow-up. A comparison group with the same inclusion criteria was selected except this group did not have a MD during follow-up. Multivariate logistic regression was used for analysis with each of the three MDs as dependent variables. Independent variables included age, race, gender, and AA used with clozapine as the comparator. **RESULTS:** A total of 19,388 patients were identified (1,788 with a MD and 17,600 without MD). The study population was 46.7% male, 52.1% white, and had an average age of 42.7 (SD 24.2). In patients diagnosed with diabetes, olanzapine (OR = 1.59, 95% CI = 1.22–2.08,  $p = 0.001$ ) and risperidone (OR = 1.47, CI = 1.12–1.92,  $p = 0.005$ ) had significantly higher

diagnosis rates. Patients taking risperidone (OR = 1.70, 95% CI = 1.15–2.53,  $p = 0.001$ ) had a significantly higher rate of hyperlipidemia. Patients diagnosed with obesity had a significantly higher rate of diagnosis if they used olanzapine (OR = 1.85, 95% CI = 1.11–3.10,  $p = 0.020$ ) or risperidone (OR = 1.92, 95% CI = 1.15–3.20,  $p = 0.012$ ). **CONCLUSION:** Findings of this Medicaid-based study indicate that higher rates of diabetes, hyperlipidemia, and obesity are associated with use of certain atypical antipsychotics. Additional research is needed to confirm and elaborate the specifics of these metabolic disorders associated with atypical antipsychotic use.

**MENTAL HEALTH—Cost Studies**

## PMH17

**COSTS OF PRESCRIPTION OPIOID ABUSE**

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**OBJECTIVES:** Estimate the costs of prescription opioid analgesic (“RxO”) abuse in the U.S., and costs savings realized from introducing abuse-deterrent formulations (“ADFs”). **METHODS:** The costs associated with RxO abuse were grouped into three major cost categories: health care, lost productivity, and criminal justice. Each category has multiple underlying components. Relying primarily on published data, we used varying methods depending on the cost component considered. In general, cost estimates and potential cost savings due to specific characteristics of ADFs were obtained by either: a) multiplying the relevant number of RxO abusers based on various national surveys (e.g., National Household Survey on Drug Abuse, Treatment Admissions Data Set, Drug Abuse Warning Network) for prevalence estimates by the per abuser cost; or b) determining the overall costs to the U.S. for drug abuse in general and apportioning the share due to RxO abuse. **RESULTS:** Total costs of RxO abuse in the U.S. in 2006 USD were approximately \$10 billion. Of these costs, \$3 billion were health care costs, \$5.2 billion were lost productivity costs, and \$1.8 billion were criminal justice costs. These estimates are conservative in that some cost categories and components are not included. Sensitivity analyses found that costs for the estimated cost categories and components could range higher. **CONCLUSION:** The costs of RxO abuse in the U.S. impose a substantial economic burden to society. Rising trends of RxO abuse internationally suggest an escalating economic and public health burden in coming years, and the development and introduction of ADFs could save much money.

## PMH18

**PRESCRIBING PATTERN OF CITALOPRAM AND ESCITALOPRAM IN THE CANTON OF GENEVA: A POTENTIAL FOR MAJOR SAVINGS**Girardin F<sup>1</sup>, Vernaz-Hegi N<sup>2</sup>, Musciconic D<sup>3</sup>, Salomon JL<sup>3</sup>, Schulz P<sup>1</sup>, Bonnabry P<sup>2</sup><sup>1</sup>Clinical psychopharmacology Unit, Geneva University Hospitals, Chêne-Bourg, Geneva, Switzerland, <sup>2</sup>Pharmacy, Geneva University Hospitals, Geneva 14, Switzerland, <sup>3</sup>OFAC, Geneva, Switzerland

**OBJECTIVES:** Cost evaluation of prescribing patterns for citalopram and escitalopram in two outpatient settings. **METHODS:** Prescribing patterns of citalopram and its enantiomer escitalopram were studied separately in 2 clinical settings from January 2000 to March 2007. Setting 1 included all prescriptions from GPs and specialists installed in the canton of Geneva. All filled prescriptions are systematically recorded by a unique pharmacist’s organisation (OFAC invoice office), which represents 92% of all prescriptions filled in the canton Geneva (around 500,000