

from a large commercial administrative claims database were classified as initiators of duloxetine ($n = 7,567$), venlafaxine XR ($n = 6,106$), escitalopram ($n = 10,239$), or generic SSRIs ($n = 20,114$) during the calendar year 2006. Patients who had used the same antidepressant in the 3 months prior to initiation date were excluded. Adherence was defined as the medication possession ratio (MPR) ≥ 0.8 , and persistence was defined as the length of therapy without exceeding a 15-day gap in the post 1 year. Pair-wise comparisons were performed with and without adjustment for demographic and clinical covariates. **RESULTS:** Adherence rate in the post 1 year was significantly higher in duloxetine recipients (38.1%) than those patients treated with venlafaxine XR (34.0%), escitalopram (25.4%), or generic SSRIs (25.5%) (all p values $< .01$). Duloxetine recipients stayed on the medication longer (158.5 days) than those who received venlafaxine XR (149.6 days), escitalopram (129.1 days), or generic SSRIs (130.2 days) (all p values < 0.01). Compared with patients treated with escitalopram or generic SSRIs, venlafaxine XR recipients had better adherence and longer persistence ($p < 0.01$). After adjustment for baseline demographics, prior medications, and comorbid conditions, duloxetine still had better adherence and longer persistence than venlafaxine XR, with escitalopram and generic SSRIs having lower adherence and persistence. **CONCLUSIONS:** Duloxetine-treated patients may have better adherence and longer stay on the medication than those patients treated with venlafaxine XR, escitalopram, or generic SSRIs. Further research is needed to examine clinical and economical benefits of adherence and persistence with antidepressant therapy.

PMH62

DISRUPTIONS IN ANTIPSYCHOTIC ADHERENCE ARE JOINTLY RELATED WITH REDUCED ADHERENCE FOR OTHER CHRONIC CONDITIONS

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OBJECTIVES: Antipsychotic non-adherence has been associated with poor health outcomes in patients with chronic comorbid conditions. We explored the relationship between antipsychotic adherence and adherence with medications for chronic comorbid illness in the North Carolina Medicaid program. **METHODS:** Medicaid claims were used to identify continuously enrolled patients with schizophrenia from 2001–2003. The annual prevalence of comorbid diabetes, hyperlipidemia, and hypertension was evaluated among these patients. The relationship of antipsychotic adherence with comorbid medication adherence was examined descriptively using the proportion of days covered (PDC). In addition, patients with comorbid illness who experienced a 90 day gap in antipsychotic treatment were compared to patients without a 90 day gap. Difference-in-difference regression was used to compare comorbid medication adherence 10 months pre- and post-antipsychotic gap between patients with and without a 90 day antipsychotic treatment gap. **RESULTS:** Of the 6841 continuously enrolled Medicaid patients identified with schizophrenia in 2001, the prevalence of comorbid hypertension, hyperlipidemia, and diabetes was 13.9%, 16.6%, and 18.9% respectively in 2002 and 15.3%, 20.0%, and 21.0% respectively in 2003. Descriptive trends suggested a correlation between antipsychotic and chronic comorbid medication adherence. Patients with a 90 day antipsychotic gap experienced a decline in adherence to comorbid medication following the gap. In comparison to patients without a gap, patients who discontinued antipsychotic treatment for 90 days or more experienced a 4.5% [95% Confidence Interval: (-16.0, 7.1)], 1.5% (-8.6, -0.04) reduction in antihypertensive, antihyperlipidemic, and antidiabetic PDC respectively following the gap. **CONCLUSIONS:** While non-adherence is a behavioral phenomenon affecting both the treatment of schizophrenia and comorbid conditions, we observed an incrementally larger decline in comorbid medication adherence among patients with antipsychotic treatment gaps. Larger sample sizes, additional control for confounding, and assessment of corresponding health outcome measures are needed to further explore the magnitude of this problem.

PMH63

EVALUATING PATIENT ADHERENCE TO ANTIDEPRESSANT THERAPY AMONG UNINSURED WORKING ADULTS DIAGNOSED WITH MAJOR DEPRESSION: 12-MONTH RESULTS FROM THE TEXAS DEMONSTRATION TO MAINTAIN INDEPENDENCE AND EMPLOYMENT (DMIE) STUDY

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OBJECTIVES: The Texas DMIE study examines whether participants with potentially disabling physical and/or behavioral conditions receiving a coordinated set of health and employment supports can avoid dependence on federal disability benefits. This study examines differences in antidepressant adherence and persistence between intervention and control participants enrolled in the Texas DMIE study. **METHODS:** DMIE is a randomized controlled trial with 1616 participants aged 21–60; working a minimum average of 40 hours per month; diagnosed with behavioral health and/or physical health conditions; and who are not currently receiving disability. A subgroup with a major depression diagnosis and prescribed antidepressant medication 12-months prior and 12-months post enrollment was examined. Drug adherence was measured using proportion of days covered (PDC) for each patient during the 365-day pre- and post-enrollment observation periods. Medication persistence measured the duration of time from initiation to discontinuation of antidepressants based on a ≥ 35 -day refill supply gap. Covariates included overall health morbidity, age, race/eth-

nicity, gender, occupation, serious mental illness status, and recruitment method (mail/telephone versus in-person). Findings were based on analysis of covariance for adherence and survival analysis for persistence. **RESULTS:** This study sample included 166 DMIE participants (Intervention $n = 101$ and Control $n = 65$), with a mean age of 47.8 years. The model showed ($F[1148] = 4.47$, $p < 0.05$) intervention participants recruited in-person at community health clinics with a higher mean PDC (70%) compared with control group participants (54%). Variation in persistence were statistically significant among older ($HR = .97$, $p < 0.05$) and higher education ($HR = .71$, $p < 0.01$) participants, however, group differences were not found between the cohorts. **CONCLUSIONS:** Adherence rates differed between intervention and control based on recruitment cohort which may reflect lower motivation level on the mail/telephone recruited participants. Findings may help guide implementation of health care reform targeted toward low-income working adults lacking health insurance.

PMH64

USE OF PATIENT SUPPORT SYSTEM TO INCREASE COMPLIANCE FOR OPIOID ADDICTED PATIENTS

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OBJECTIVES: Despite the availability of highly efficacious treatment options for Opioid addicted patients, these patients often suffer from poor outcomes due to low rate of compliance. To improve compliance and achieve better health outcomes we developed a patient supported system that assisted patients with drug information, training and timely reminders. **METHODS:** The current compliance rates were reviewed using published literature. Information on standard of care was collected from prescribers and treatment centers. 2000 patients were enrolled 50:50 in study and control arm. Duration of study was six months. The data for number of missed appointments, prescription refills and health outcomes were collected from both arms. A comparative analysis was used to determine a need for additional treatment support. **RESULTS:** The support system provided telephonic support and care coaching to opioid addicted patients. Trained staff of RN's and CDC's were able to discuss treatment, disease and other issues in an effort to keep patients compliant and on therapy. As compared to the control arm, patients in the study arm stayed on therapy for an additional average 3 months. This support system reduced the need for ancillary support and led to 30% cost savings for the system. **CONCLUSIONS:** Patient support systems can significantly improve patient compliance by providing support, training and reminders to patients. Such programs also provide valuable "real world" data and save costs for treating patients. Results of this program demonstrate that it is more cost effective for payers to pay for additional levels of drug therapy than to treat patients for relapse in other care settings.

PMH65

ADHERENCE AND PERSISTENCE TO TREATMENT IN PATIENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER; ANALYSES WITH THE RAMQ DATABASE

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OBJECTIVES: Approved treatments in Canada for attention-deficit/hyperactivity disorder (ADHD) include three classes of drugs: short-acting (SA) and long-acting (LA) stimulants and a LA nonstimulant medication. Since ADHD is a chronic condition requiring continuing treatment, compliance to the treatment regimen is important. The objectives of this study were to estimate adherence and persistence to ADHD treatments. **METHODS:** A retrospective prescription claims analysis of a random sample of 15,838 ADHD patients from the Quebec provincial health plan (RAMQ) database was conducted. Patients with ≥ 1 physician claim with a diagnosis of ADHD and a drug claim for a treatment approved for ADHD from July 2004 to June 2009 were considered. Only those patients with no prescription claim in the 3 months prior to the index date (date of first prescription fill) were eligible for inclusion in the analysis. Treatment compliance was estimated using medication possession ratio over a one-year period. Patients were considered nonpersistent if they had not used the ADHD medication for a period of at least 3 months. Proportion of patients who were persistent was estimated at 3, 6, and 12 months after index prescription. **RESULTS:** The mean age of the study sample was 14.0 years ($SD = 8$) and 72.6% were males. The proportion of patients who were $\geq 80\%$ compliant on SA stimulants (39.4%) was lower compared with LA stimulants (63%, $p < 0.001$) and LA nonstimulants (60.2%, $p < 0.001$). The proportion of patients who were persistent on LA stimulants (81.1%) at 12 months was higher when compared with those on LA nonstimulants (61.7%; $p < 0.001$) and SA stimulants (59.6%; $p < 0.001$). Similar trends were observed at all time points examined. **CONCLUSIONS:** Results of these prescription claims analyses indicate that adherence to ADHD treatments is poor, however improved adherence and persistence are observed with LA stimulant formulations. Supported by funding from Shire Development Inc.