Patient reported outcomes as a measure of quality of clinician reported outcomes appears to be a feasible tactic in a site-based ratings surveillance quality assurance system.

PMH64

MAJOR DEPRESSIVE DISORDER: A COMPREHENSIVE LITERATURE REVIEW OF THE BURDEN OF ILLNESS IN NORTH AMERICA

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OBJECTIVE: Major depressive disorder (MDD) is a leading cause of disability worldwide. This study analyzed the literature describing the burden of MDD in North America (USA and Canada), with particular focus on patients with treatment-resistant depression (TRD). METHODS: Systematic searches were conducted of English-language papers published between 1987 and 2007, utilizing MEDLINE, EMBASE, and the Cochrane Library, relevant websites, and hand searches. Major areas for review were the humanistic and economic burden of MDD. Additional areas for analysis included treatment options and costs, treatment efficacy and response rates, treatment guidelines, and reimbursements. RESULTS: A total of 908 articles were identified, of which 107 studies from North America fulfilled the inclusion criteria (humanistic burden, N = 45; economic burden, N = 49; and treatment guidelines, N = 13). Analysis of these studies identified an increased humanistic and economic burden in patients with MDD and TRD in North America. MDD was associated with a high prevalence (31%), chronic in nature, and had a high frequency of comorbid mental disorders. Health-related quality of life (HRQL) instruments identified a significant negative impact from MDD, including domains of mental well-being (independence, alertness, role emotional, personal/spiritual beliefs) and perceived physical functioning (energy and fatigue, bodily care). In a study that compared HRQL in responders and non-responders to therapy, HRQL was significantly lower in non-responders (P < 0.001). Patients with TRD were particularly severely affected, through higher medical costs and greater losses in work productivity. CONCLUSION: Patients with MDD and their families suffer greater humanistic and economic burden than healthy individuals. Treatment reduces the burden of MDD, although current evidence-based guidelines for MDD offer limited recommendations on the choice of pharmacological treatments based on their potential to reduce burden of illness and resource use.

MENTAL HEALTH—Health Care Use & Policy Studies

PMH65

EFFECT OF PRIOR AUTHORIZATION ON ANTIPSYCHOTIC DRUG USE IN LONG-TERM CARE: POPULATION-BASED NATURAL EXPERIMENT

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OBJECTIVE: Though antipsychotics were originally developed to treat schizophrenia, their use in older adults with dementia has grown substantially. Given concern about the safety of these drugs, we assessed the impact of a prior authorization (PA) policy upon use and choice of antipsychotic medication in long-term care. METHODS: We conducted a retrospective cohort study using administrative data from two Canadian provinces—one in which access to newer antipsychotics (risperidone, olanzapine, and quetiapine) was unrestricted (Ontario), and another in which access required PA (British Columbia (BC)). Subjects were all 37,057 Ontario and 13,569 BC residents aged 66 years or older who were newly admitted to a nursing home between April 1, 1998 and March 31, 2002, who had no history of schizophrenia or psychosis in the 5 years preceding admission, and who had no evidence of antipsychotic drug use in the preceding year. We assessed crude and adjusted exposure to antipsychotic medication over the year following nursing home admission, as well as the types of medications used. RESULTS: Nineteen percent of Ontario residents were newly dispensed an antipsychotic within 100 days of nursing home admission vs. 16% in BC. Male sex, younger age, fewer comorbidities, and history of dementia all were strongly associated with receipt of an antipsychotic. Adjustment for these factors reduced the cross-provincial difference in drug use. However, fewer BC residents received newer antipsychotics, particularly after risperidone received an approved indication for the management of behavioral symptoms of dementia. Olanzapine, which required PA throughout the study, was dispensed to 11% and 3% of Ontario and BC residents, respectively. CONCLUSION: Although BC’s PA policy had negligible impact upon the incidence of antipsychotic drug use as a whole, it appeared to influence drug choice. Questions remain about the impact of such policies upon health outcomes and costs.

ETHNICITY AND THE IMPACT OF HIGHER MEDICATION COPAYMENTS AMONG VETERANS WITH SCHIZOPHRENIA

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OBJECTIVE: The 2002 Veterans Health Care Act raised medication copayments from $2 to $7 for lower priority patients. Veterans with schizophrenia constitute a multiply disadvantaged population; 40% are antipsychotic non-adherent, substantially increasing psychiatric admission risks. Certain patient subgroups might be particularly sensitive to medication costs with significant clinical ramifications. Diverse cultural expressions of health beliefs and priorities contribute additional layers of complexity. This study examines potential inequities stemming from higher copayments. METHODS: All veterans with schizophrenia were followed 33 months Pre and Post copayment increase. Longitudinal models analyzed effects of higher medication costs in copayment veterans versus a natural control group of exempt patients, controlling for demographics, substance abuse, functional status, and other comorbidities. Adjusted means compared prescription patterns and inpatient utilization among four ethnic groups: white (N = 36,452), African-American (N = 17,602), Hispanic (N = 5,225), and Other (N = 10,707). RESULTS: African-Americans were relatively younger with higher substance abuse rates. Hispanic veterans were more likely to be unmarried and have multiple illnesses, though fewer (39%) faced copayments than other patients. Minorities filled 10–35% fewer prescriptions than white veterans, and ethnic differences were evident in pharmacy fills and inpatient days. White veterans reduced psychotropic fills 15% after the policy change, decreasing hospital days by nearly the same amount. However, minorities dropped psychotropics 19%–22% while subsequently
increasing inpatient utilization, the latter especially true for Hispanics. CONCLUSION: Although all veterans dramatically adjusted pharmacy use following the copayment change, ethnic minorities appeared particularly sensitive to drug costs. Similarly, while white veterans appeared to reduce psychotropic use with minimal consequences, minorities experienced substantially elevated admission risks associated with lower cost-related adherence. Benefit changes for veterans with chronic conditions should be implemented cautiously and carefully evaluated. Reconciling budgetary concerns with quality care provision requires sensitive attention to unique patient groups to ensure equity while minimizing economic and health disparities.

**PMH67**

**CLINICAL CHARACTERISTICS AMONG ANTIDEPRESSANT INITIATORS**

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**OBJECTIVE:** To compare clinical characteristics of patients initiating treatment on duloxetine vs. those initiating on venlafaxine XR, escitalopram, and fluoxetine over a two year period.

**METHODS:** Retrospective claims analysis of Pharmetrics managed care health plan patients initiating on select antidepressants between September 1, 2004 and August 31, 2006. A total of 798,259 patients were assigned to cohorts based on their most recent antidepressant prescription. Cochran-Mantel-Haenszel test was used to test the proportional differences among the four cohorts.

**RESULTS:** Overall, 72.1% of study patients were female with a mean age of 44.3 years. Demographic differences between cohorts were modest. Based on comparison of medical claims within +/-30 days of initiation on venlafaxine XR, escitalopram, and fluoxetine, respectively, duloxetine initiators were more likely to have visited a mental health specialist (24.2% vs. 18.2%, 18.6%, and 16.5%) and been diagnosed with depression (29.2% vs. 24.1%, 25.4%, 24.9%). Among the depressed, duloxetine patients were more frequently diagnosed with major depressive disorder (MDD) (52.8% vs. 44.3%, 40.5%, and 36.4%) and, among those diagnosed with MDD, were more frequently diagnosed with recurrent MDD (78.2% vs. 73.8%, 66.2%, and 64.1%). Duloxetine initiators were more frequently diagnosed with a pain condition (44.8% vs. 27.7%, 27.3%, and 24.9%), particularly for back (15.5% vs. 7.5%, 7.0%, and 6.3%) or musculoskeletal pain (28.2% vs. 15.5%, 14.4%, and 13.1%), and were more likely to have been treated previously with a narcotic analgesic (24.2% vs. 11.1%, 9.8%, and 9.2%) (p < 0.05 for all reported differences). CONCLUSION: Duloxetine patients are more likely to present with more severe depression diagnoses and pain than patients on other antidepressants. Case mix adjustments should be made when comparing outcomes and costs associated with treatment with different antidepressants. These findings are broadly consistent with earlier analyses of data from the first four months following introduction of duloxetine in the U.S.

**WITHDRAWN**

**PMH69**

**AN INVESTIGATION OF EVIDENCE-BASED USE OF ATYPICAL ANTI精神病otics IN ARKANSAS MEDICAID PEDIATRIC**

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**OBJECTIVE:** There has been a rapid increase in the use of atypical antipsychotics in pediatric populations over the past few years. Most of these drugs are unapproved in pediatric populations. Study objectives were: 1) To identify the trend of new users of atypical antipsychotics in the Arkansas Medicaid population under the age of 18 for years 2001 through 2005; 2) to classify the use of each atypical antipsychotic as evidence-based or not depending on the diagnoses for which it was prescribed; and 3) to determine which psychiatric patients are more likely to receive an evidence-based atypical antipsychotic prescription.

**METHODS:** Study was a retrospective database analysis of Arkansas Medicaid for the period from January 2000 to December 2006. Participants were the subjects under 18 years of age, with their first atypical antipsychotic prescription claim between 2001 and 2005, with no prior antipsychotic use and having a continuous two-year Medicaid enrollment. Main outcome measure was the proportion of study cohort with at least one evidence-based atypical antipsychotic prescription claim, which was defined as any use of atypical antipsychotic supported by a clinical study in the literature.

**RESULTS:** The final study cohort was 11,700. The trend of new pediatric users of atypical antipsychotic therapy increased from 1482 to 3110 new atypical users from 2001 to 2005. After identifying 86 clinical studies from the literature and defining the evidence-based use for each atypical antipsychotic, it was found that 41.32% of the new pediatric users did not have analysis of Pharmetrics managed care health plan patients initiating on duloxetine between September 1, 2004 and August 31, 2006. A total of 102,567 duloxetine initiators were identified for inclusion in this study. Monthly data series for demographic and clinical characteristics were created on the basis of Cymbalta initiation date. Claims within +/-30 days of initiation were used to identify clinical characteristics.

**RESULTS:** Demographic patterns of patients initiating on duloxetine remained stable over the two year period (average monthly percent female 73.0%; average monthly age 47.4 years), as did proportions of patients with any anxiety (20.7%) or a GAD diagnosis (5.6%). The average monthly % of patients treated by mental health specialists trended downward over the first 16 months of the study period (from 32.3% to 23.7%), while the % with a depression diagnosis trended downward (51.0% to 45.4%) for the first 12 months, before stabilizing thereafter. The % of patients with a pain diagnosis increased over the first three months (62.4% to 66.6%) and remained stable thereafter. Of those with a depression diagnosis, the % with an MDD diagnosis trended downward (55.8% to 45.8%) for 15 months before stabilizing, while the % of those with MDD diagnosed with Recurrent MDD remained stable over the entire study period (77.8%).

**CONCLUSION:** Demographic characteristics of patients initiating on duloxetine in the two years following initial availability in the United States have remained relatively stable. Clinical characteristics have shown some variation, particularly over the first 12 to 16 months following initial availability. These trends in utilization have implications for the selection of appropriate methodologies for developing cohorts for comparing utilization and costs between new and established antidepressant medications.

**PMH70**

**CHANGES OVER TIME IN PATIENT CHARACTERISTICS FOLLOWING THE INTRODUCTION OF DULOXETINE: A 24 MONTHS STUDY**

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**OBJECTIVE:** To assess month-by-month changes in clinical characteristics of patients initiating on duloxetine, a new antidepressant, during the first two years following its initial availability in the United States.

**METHODS:** Retrospective claims analysis of Pharmetrics managed care health plan patients initiating on duloxetine between September 1, 2004 and August 31, 2006. A total of 102,567 duloxetine initiators were identified for inclusion in this study. Monthly data series for demographic and clinical characteristics were created on the basis of Cymbalta initiation date. Claims within +/-30 days of initiation were used to identify clinical characteristics.

**RESULTS:** Demographic patterns of patients initiating on duloxetine remained stable over the two year period (average monthly percent female 73.0%; average monthly age 47.4 years), as did proportions of patients with any anxiety (20.7%) or a GAD diagnosis (5.6%). The average monthly % of patients treated by mental health specialists trended downward over the first 16 months of the study period (from 32.3% to 23.7%), while the % with a depression diagnosis trended downward (51.0% to 45.4%) for the first 12 months, before stabilizing thereafter. The % of patients with a pain diagnosis increased over the first three months (62.4% to 66.6%) and remained stable thereafter. Of those with a depression diagnosis, the % with an MDD diagnosis trended downward (55.8% to 45.8%) for 15 months before stabilizing, while the % of those with MDD diagnosed with Recurrent MDD remained stable over the entire study period (77.8%).

**CONCLUSION:** Demographic characteristics of patients initiating on duloxetine in the two years following initial availability in the United States have remained relatively stable. Clinical characteristics have shown some variation, particularly over the first 12 to 16 months following initial availability. These trends in utilization have implications for the selection of appropriate methodologies for developing cohorts for comparing utilization and costs between new and established antidepressant medications.

**WITHDRAWN**

**PMH68**