Abstracts

NATIONAL ESTIMATES OF HEALTH SERVICE USE AND COSTS IN CHRONIC MEDICAL DISORDER PATIENTS WITH AND WITHOUT DEPRESSION IN 2004-5
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OBJECTIVES: To report from claim providers and payers the impact of depression in chronic medical disorders (CMD) in the United States (US), we studied national estimates of health service use and related costs in CMD patients with and without depression.
METHODS: For the retrospective analysis, we extracted data on >618-year-old enrollees from the pooled 2004-5 Medical Expenditure Panel Survey. Data included ICD-9-CM-coded CMD (hypertension, heart disease, arthritis/other joint-disorders, chronic obstructive pulmonary disease, hypertension, or diabetes), depression, health service use (ambulatory, in-patient, and emergency department visits and prescription medications) and related costs adjusted to 2005 US dollars. Weighted sample estimates and 95% confidence limits (CI) using the Taylor expansion method. For CMD patients with and without depression, in univariate analyses using t-tests, we compared the mean number of ambulatory, in-patient, and emergency department visits and prescription medications and related costs. RESULTS: On average, CMD patients with depression (n = 999) did significantly differ from those without depression (n = 8739) by number of ambulatory visits (7.5, 95% CI: 6.9-8.1 vs. 4.6, 95% CI: 4.4-4.8, p < 0.001) and related costs ($973, 95% CI: $867-$1,094 vs. $567, 95% CI: $534-$601 p < 0.001) and by number of prescription drugs used (16.8, 95% CI:15.2-18.5 vs. 9.2, 95% CI:8.3-9.6, p < 0.001) and related costs ($1,012, 95% CI:918-1,117 vs. $469, 95% CI: 442-497, p < 0.001). However, CMD patients with depression did not significantly differ from those without depression for average number of inpatient hospital days or emergency department visits (p > 0.05). Costs were compared with CMD patients without depression, those with depression report 1.6- and 1.7-times higher ambulatory visits and related costs, and 1.8- and 2.2-times higher number of prescription medications and related costs. Factors associated with significant increases in health service use and related costs in CMD patients with depression than those without depression need further study.

COMPARISON OF HOSPITALIZATIONS AND HEALTH CARE COSTS OF ELDERLY MAJOR DEPRESSIVE DISORDER (MDD) PATIENTS TREATED WITH ESCITALOPRAM, GENERIC SRSR, OR SNRIS
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OBJECTIVES: To examine hospitalization use and health care costs of elderly MDD patients treated with escitalopram compared to those treated with either generic SSRIs or SNRIS. METHODS: Elderly MDD patients (age 65) initiated on escitalopram, a generic SSRi, or SNRIS were identified in the Ingenix Impact Database (2003-2007). Hospitalization rates, length of stay, and health care costs were examined over the 6-month period following therapy initiation (analysis period). Logistic and negative binomial regressions were used to compare the rate and days of hospitalization, respectively. Wilcoxon tests were used to compare costs descriptively. General Linear Model regression was conducted to control for patient characteristics including demographics, comorbidities, and baseline medical resource use. RESULTS: A total of 1850 elderly patients initiated on escitalopram, 2686 on generic SSRIs, and 1053 on SNRIS. Escitalopram patients had higher comorbidities, health care utilization, and costs at baseline than generic SSRi and SNRI patients. Logistic regression showed that escitalopram patients were less likely to be hospitalized in the analysis period than generic SSRI (OR = 0.81, P = 0.0071) or SNRI patients (OR = 0.88, P = 0.1870). Negative binomial regression showed that escitalopram patients had fewer hospitalization days than generic SSRI (IRR = 0.79, P = 0.0416) and SNRI patients (IRR = 0.74, P = 0.0442), which translated into 54.0 and 76.0 more days per 100 patients for the generic SSRI and SNRI patients over 6 months, respectively. Escitalopram patients had a $3,758 cost reduction during the analysis period, significantly greater than the cost reductions for generic SSRI and SNRI patients of $951 and $562, respectively (both

PMH13

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DISCRETE EVENT SIMULATION COMPARING QUALITY OF LIFE AND COSTS BETWEEN OLANZAPINE AND QUETIAPINE XR TREATMENT FOR SCHIZOPHRENIA IN MEXICO
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OBJECTIVES: To determine Quality of Life related to adverse reactions and costs using Olanzapine or Quetiapine XR in the treatment of Schizophrenia from an institutional perspective. METHODS: A Discrete Event model using Arena software was developed to determine the quality of life (QoL) of Schizophrenia patients. Hospitalization costs and time between relapses were obtained from an observational study performed in the Mexican Social Security Institute. This information was used to calculate random distributions for the model. Maintenance treatment costs were calculated using recommended doses and institutional drugs costs. Random distributions for adverse reactions were obtained from literature. QoL was assessed each year and costs were calculated for each patient applying a 3% discount rate. The model was run with five hundred patients for each cohort during a six-year period. A single variable sensitivity analysis was performed to evaluate the effect on compliance since the extended release formulation of Quetiapine is expected to improve compliance. Results are presented in US dollars with an exchange rate of 13.5 MXN pesos for 1 US dollar. RESULTS: Annual average cost of treatment for Olanzapine cohort was $4,851 (95% CI: $4,632-$5,085) and for Quetiapine XR cohort $4,533 (95% CI: $4,334-$4,750) Average QoL for Olanzapine was 0.840 (95% CI: 0.839-0.842) and for Quetiapine was 0.859 (95% CI: 0.857-0.861). The sensitivity analysis results showed a better QoL at a lesser cost in the worst assessed scenario with 60% compli- ance in the Quetiapine XR cohort and 80% compliance in the Olanzapine cohort. CONCLUSIONS: Quetiapine extended release is an atypical antipsychotic with less adverse reactions than Olanzapine that results in a better Quality of Life for patients with schizophrenia at a lesser cost for the institution.

PMH14

THE ECONOMIC IMPACT OF GENERIC SWITCHING FOR PATIENTS WITH MAJOR DEPRESSIVE DISORDER (MDD) TREATED WITH ESCITALOPRAM OR A PATENTED SSRI
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OBJECTIVES: To compare economic outcomes of MDD patients who were treated with a patented SSRI (escitalopram, citalopram, sertraline, or paroxetine controlled-release) and were switched to a generic SSRI for non-medical reasons vs. those continuing on the patented SSRI. “Therapeutic substitution,” defined as change from a branded product to a different generic compound in the same class, is a common practice encouraged by low co-pay for the generic products. METHODS: Adult MDD patients from the Ingenix Impact Database (2003-2007) were considered “switchers” if they were treated with a patented SSRI and switched to a generic SSRI. Those who had either MDD-related urgent care hospitalization or emergency room or psychother- apy visit in the seven days prior to switching were excluded. Patients who remained on the patented SSRI (“non-switchers”) were matched 1:1 to switchers. All-cause, mental health and MDD-related urgent care costs over six months were compared between switchers and non-switchers and regression models controlled for baseline differences. A subgroup analysis was conducted for patients treated with escitalopram. RESULTS: The study included 4449 matched pairs, 3304 (74%) of whom started on escitalopram. Compared to non-switchers, switchers had higher risks of all-cause and mental health-related urgent care use (OR = 1.15 and 1.3, respectively, P < 0.01) and higher risk-reduced MDD-related medical costs ($222, P < 0.05). In escitalopram subgroup analyses, compared to non-switchers, switchers from escitalopram had even higher risks of all-cause (OR = 1.21) and mental health-related urgent care use (OR = 1.41, both P < 0.01) and higher MDD-related medical costs ($151, P < 0.05). CONCLUSIONS: Compared to patients who continued on escitalopram for patented SSRIs, patients who switched to a generic SSRI incurred more urgent care resource use and higher MDD-related health care costs. The effects of “therapeutic substitu- tion” should be carefully examined because increasing utilization of drugs with lower acquisition costs may not be a cost-saving strategy, when total health care costs are considered.