dol. Inclusion criteria of treatment episodes were that subjects were aged 18 years or above, had at least one admission due to schizophrenia during the two-year period prior to the initiation of the treatment episodes, and with no diabetes mellitus during a one-year period prior to the initiation of the treatment episodes. Diabetes mellitus was identified by claims with such diagnosis or with antidiabetic agents. A logistic regression model was applied to evaluate the likelihood of newly-onset cases of diabetes of different antipsychotic treatment episodes.

RESULTS: Compared with users of haloperidol, those receiving clozapine, olanzapine, and risperidone had a higher probability of developing diabetes mellitus. Those taking quetiapine, amisulpride, and ziprasidone, however, had no significantly higher odds of developing diabetes mellitus.

CONCLUSIONS: The preliminary findings of this study support reports of atypical antipsychotics-induced diabetes mellitus. Clozapine, olanzapine, and risperidone, compared with haloperidol, are associated with an increased risk of diabetes mellitus among schizophrenic patients in Taiwan.

Mental Health—Cost Studies

Annual Costs Associated with Patterns of Antidepressant Treatment Response Among Employees

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OBJECTIVES: Describe the annual direct health care and indirect work loss costs for employees treated with antidepressants and compare them across patients with different treatment response. METHODS: We examined 1999–2003 data from a claims database of 1.2 million beneficiaries, from 7 large U.S. employers. Analysis was restricted to employees aged 18–64, with at least one diagnosis of major depressive disorder (ICD-9: 296.2x, 296.3x) and at least one prescription of selective serotonin or serotonin/norepinephrine reuptake inhibitor (SSRI/SNRI). Patients were classified as combination antidepressant therapy users, switchers, discontinuers, or monotherapy maintainers. Annual direct health care costs, including drug and medical costs (comprising inpatient, outpatient, and emergency visits), and indirect work loss costs (comprising absenteeism and disability) were calculated for the 12-month period following therapy initiation. Results were compared descriptively across treatment responses using t-tests and ANOVA analyses.

RESULTS: Of the 3971 patients, 18.4% were on combination therapy, 19.7% switchers, 45.1% discontinuers, and 16.8% monotherapy maintainers. Patients on combination therapy had similar direct and indirect costs compared to switchers (all p > 0.08). The average direct and indirect costs for patients on combination therapy and switchers ($7986 and $2806 respectively) were higher than those for discontinuers ($6013 and $1680 respectively, all p < 0.001) or maintainers ($5193 and $1467 respectively, all p < 0.001). Compared to patients on combination therapy and switchers, maintainers had similar drug costs ($1980 vs. $2068, p = 0.469). Compared to discontinuers, maintainers had higher drug costs ($1,980 vs. $1095, p < 0.001), but lower medical ($3214 vs. $4918, p = 0.002) and disability costs ($360 vs. $664, p = 0.008). CONCLUSION: Patients on combination therapy or who switched monotherapy had higher average direct health care costs and indirect work loss costs than patients who discontinued or maintained therapy. Maintainers had higher drug costs but lower medical and disability costs compared to discontinuers.

Cost-Effectiveness of Venlafaxine: A Canadian Perspective

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OBJECTIVE: To estimate the incremental cost-effectiveness of venlafaxine extended-release compared to Selective Serotonin Reuptake Inhibitors (SSRIs) in the treatment of major depressive disorder (MDD) in Canada. METHODS: A previously validated decision-tree model for the treatment of MDD was adapted to the Canadian clinical practice setting. Probabilities used to populate the decision-tree were derived from the literature and where needed, from a Delphi panel consisting of two General Practitioners and two Psychiatrists. The Ontario Ministry of Health and Long-term Care perspective was used in this study. The relevant direct medical costs (year 2005 Canadian dollar values) were derived from the Ontario Health Insurance Policy (OHIP) and the Ontario Case Costing Initiative (OCCI). The drug acquisition cost for venlafaxine (brand) and SSRIs (generic) was derived from the Ontario Drug Benefit formulary (ODB).

The treatment goal in the model was achieving remission and the primary outcome measure in the model was Symptom Free Days (SFDs). The time horizon was six months; therefore the costs and outcomes were not discounted. Various one-way sensitivity analyses were performed. RESULTS: The average six-month expected cost per patient for venlafaxine and SSRIs were CDN$4136 and CDN$4224 respectively. The average six-month expected SFDs were 33.4 and 46.7 days for venlafaxine and SSRIs respectively. The cost-effectiveness as measured by cost per SFDs was CDN$77.86 for venlafaxine and CDN$90.36 for SSRIs. The incremental cost-effectiveness analysis showed a treatment strategy using venlafaxine as first line was dominant. The sensitivity analysis demonstrated the results robustness to variations in drug acquisition cost. CONCLUSION: Despite a higher drug acquisition cost, venlafaxine extended-release may be cost-effective and even cost saving compared to SSRIs when used as first line treatment of MDD in a Canadian clinical practice setting.

Cost-Effectiveness of Atypical Antipsychotics in the Treatment of Acute Mania

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OBJECTIVES: To estimate the cost-effectiveness of atypical antipsychotics (AAPs) in the treatment of acute mania in patients with bipolar I disorder from a managed care perspective.

METHODS: The model estimated the cost-effectiveness (CE) ratios for each AAP when used as monotherapy for the acute (3-week) treatment of patients with bipolar mania. CE ratios were defined as the total annual cost per responder, and responders were defined as patients with a 50% improvement on the YMRS scale at 3 weeks. Data sources included published literature, package inserts, and primary data analysis of a managed care claims database. The median response rate for each AAP was used in the base case scenario: 45.5%, 50.0%, 58.0%, 53.3%, and 56.7% for aripiprazole, ziprasidone, risperidone, quetiapine, and olanzapine, respectively. Since there are no pub-