Using the mini-mental state examination (MMSE) we classified patients as mild (27–20), moderate (19–10) or severe (<10). We calculated the association between previous and current MMSE stage and the association between previous MMSE stage and institutionalization using multinomial logistic models with random effects to account for individual and center level correlation, controlling for demographic characterstics and time since last observation. The coefficients from the regressions were used to calculate predicted probabilities using the population means for each of the covariates.

RESULTS: Our analysis was limited to 3,418 patients with dementia (52.3% probable AD) and two or more observations with complete data for our covariates of interest. Average baseline age was 76.72 years old. Average MMSE was 17.05. The majority were female, 50.4%. The regression coefficient for the previous MMSE stage was significant in all cases and suggests that being in a higher MMSE stage at the previous visit is associated with being in a higher MMSE stage or dead. Previous MMSE stage was found to be strongly associated with institutionalization. White, non-Hispanic, unmarried patients were more likely to be institutionalized, all else equal. Patients with non-AD dementia were more likely to be institutionalized than patients with AD. CONCLUSIONS: Patients with AD in the NACC-UHS database transition more quickly to more severe stages of MMSE than non-AD dementia patients. Non-AD dementia patients are more likely to transition to institutionalization and die than patients with AD.

MENTAL HEALTH – Cost Studies

ESCITALOPRAM (GENERIC DRUG) IN MAJOR DEPRESSIVE DISORDER (MDD) – BUDGET IMPACT ANALYSIS

OBJECTIVES: The purpose of this analysis was to estimate the impact of escitalopram (generic drug) reimbursement on the budget of the National Health Fund (NHF) in Poland. METHODS: The budget impact analysis was prepared for 3 years time horizon (2009–2013) from the public payer’s as well as patient’s perspective. Two scenarios were compared: present—without reimbursement of generic version of escitalopram and proposed—placing of escitalopram on the list of reimbursed drugs in Poland. It was assumed that escitalopram will take over a part of market of selective serotonin reuptake inhibitors (SSRIs) and selective serotonin-noradrenergic reuptake inhibitors (SNRIs). The analysis was performed in two variants: basic analysis, assuming new reimbursement limit for escitalopram which equals the retail price of generic escitalopram and alternative variant presuming equal reimbursement limits for escitalopram and venlafaxine. Additionally, the minimum and maximum case scenarios and one-way sensitivity analyses were performed. RESULTS: Assuming the reimbursement of generic escitalopram in basic variant, the annual expenses from the budget of the NHF for major depressive disorder treatment would rise from 344,723 PLN in first year to 5,770,153 PLN in fifth year in comparison to present scenario. In alternative variant, the estimated expenses would rise from 344,833 PLN in first year to 2,716,183 PLN in fifth year. From patient’s perspective the expenses for MDD treatment groups would decrease in basic variant from 245,874 PLN to 4,829,704 PLN and in alternative variant from 45,980 PLN to 1,775,734 PLN in fifth year. From patient’s perspective the expenses for MDD treatment would decrease in basic variant from 245,874 PLN to 4,829,704 PLN and in alternative variant from 45,980 PLN to 1,775,734 PLN in fifth year. From patient’s perspective the expenses for MDD treatment would decrease in basic variant from 245,874 PLN to 4,829,704 PLN and in alternative variant from 45,980 PLN to 1,775,734 PLN in fifth year.

ASSOCIATING THE RISK OF HOSPITALIZATION AND ASSOCIATED HEALTH CARE COSTS IN PATIENTS WITH BIPOLAR DISORDER TREATED WITH ATYPICAL ANTIPECYTICS

OBJECTIVES: To compare the risk of hospitalization and associated inpatient psychiatric treatment costs among patients with bipolar disorder treated with atypical antipsychotics and selective serotonin reuptake inhibitors (SSRIs) and selective serotonin-noradrenergic reuptake inhibitors (SNRIs). The analysis was performed in two variants: basic analysis, assuming new reimbursement limit for escitalopram which equals the retail price of generic escitalopram and alternative variant presuming equal reimbursement limits for escitalopram and venlafaxine. Additionally, the minimum and maximum case scenarios and one-way sensitivity analyses were performed. RESULTS: Assuming the reimbursement of generic escitalopram in basic variant, the annual expenses from the budget of the NHF for major depressive disorder treatment would rise from 344,723 PLN in first year to 5,770,153 PLN in fifth year in comparison to present scenario. In alternative variant, the estimated expenses would rise from 344,833 PLN in first year to 2,716,183 PLN in fifth year. From patient’s perspective the expenses for MDD treatment would decrease in basic variant from 245,874 PLN to 4,829,704 PLN and in alternative variant from 45,980 PLN to 1,775,734 PLN in first and fifth year, respectively, in comparison to present scenario. CONCLUSIONS: Budget impact analysis showed that the reimbursement of generic escitalopram would increase expenses from the NHF’s perspective and savings from patient’s perspective.

COSTS ASSOCIATED WITH ANTIPSYCHOTIC MEDICATIONS AT CLINICALLY RECOMMENDED DOSES BASED ON MEDICAID CLAIMS DATA FROM EIGHT STATES

OBJECTIVES: There is accumulating evidence of sub-therapeutic dosing of second-generation antipsychotics (SGAs), leading to suboptimal control of disease and higher overall treatment costs. Additional evidence is needed to better understand the clinical and economic outcomes of patients who receive clinically effective doses of SGAs. The objectives of this study were to distinguish patients receiving clinically recommended doses of SGAs and compare their medical care costs. METHODS: Patients with schizophrenia (N = 12,133) on an oral SGA (aripiprazole, olanzapine, quetiapine, risperidone or ziprasidone) were identified from Medicaid claims databases (2001–2008) from 8 states. Patients were followed for 18 months (6 month pre-index period during which patients did not receive an SGA, followed by a 12-month post-index utilization period to determine total costs). For patients on recommended dosing, costs were compared using a generalized linear model with a gamma distribution and log-link function, adjusting for baseline covariates (age, gender, race, pre-index costs, Charlson co-morbidity score, and specific psychiatric co-morbidities) with ziprasidone as the reference group. RESULTS: Of the 12,133 patients meeting study criteria, 7,213 (59%) were taking clinically recommended doses by day 61 of their follow-up period. Patients on quetiapine had the lowest percentage at 37% (N = 1,057/2,869). Other results were aripiprazole 66% (N = 996/1515), olanzapine 65% (N = 1,831/2,828), risperidone 73% (N = 2,807/3821), and ziprasidone, 47% (N = 522/1,100). When comparing groups of patients with recommended dosing, mental health-related costs (p = 0.006) and all-cause costs (p = 0.0005) were statistically higher for the quetiapine group compared to the ziprasidone group. CONCLUSIONS: Less than two-thirds of the Medicaid patients with schizophrenia who were started on an SGA were taking clinically recommended doses 2 months after their initial start. For patients using clinically recommended doses, those taking quetiapine had higher mental health-related costs and higher all-cause costs compared to patients taking ziprasidone.