of selecting treatment options that may help reduce the risk of relapse.

**PMH53**

**DIRECT HEALTH CARE COSTS OF SCHIZOPHRENIA IN THE UNITED STATES: 2002**

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**OBJECTIVES:** This study quantifies direct health care costs of schizophrenia patients in the US in 2002, as compared to a demographically matched control sample. **METHODS:** Annual excess health care costs of patients with schizophrenia were estimated using insurance and patient out-of-pocket payment for patients with at least one schizophrenia diagnosis. Patients were identified from two databases: a de-identified employer claims database of ~3.0 million beneficiaries (1999–2003) for privately insured patients, and Medi-Cal paid claims (2000–2003) for Medicaid patients (n = 14,074). Medicare costs were imputed using Medicare/Medi-Cal dual eligible patients (n = 6887). Non-schizophrenia controls were randomly matched to schizophrenia patients in a 3:1 ratio, by demographic characteristics (i.e., age, gender, region of residence). Excess costs were estimated by comparing the costs of schizophrenia patients to those of controls. Costs were adjusted to 2002 dollars using the Medical Care CPI. California Medicare and Medicaid beneficiary costs were extrapolated to the US. Using published per enrollee costs. Schizophrenia prevalence was based on analysis of the National Comorbidity Survey Replication (NCS-R) and other epidemiological literature. **RESULTS:** The total excess health care costs of the schizophrenia population were estimated at about $16.3 billion, with $7.2 billion from outpatient costs, $4.6 billion from drug costs, $2.6 billion from hospital inpatient costs, and $1.9 billion from long term care costs. **CONCLUSIONS:** A comparison of these results with previous schizophrenia studies suggests a shift from inpatient to outpatient and drug costs in the past decade. Since 1991, the proportion of total direct health care costs attributable to inpatient services decreased by approximately 40%. The proportion of costs attributable to drugs and outpatient costs increased by approximately 28% and 37% respectively. This shift suggests that new effective pharmaceuticals may lead to potential cost savings through avoiding expensive hospitalizations.

**PMH54**

**DIFFERENTIAL RISKS AND ASSOCIATED COSTS OF HOSPITALIZATION DURING ANTIPSYCHOTIC TREATMENT IN MEDICAID PATIENTS WITH SCHIZOPHRENIA**

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**OBJECTIVES:** This retrospective claims-based study compared atypical antipsychotics to typical antipsychotics and to each other with respect to risk of hospitalization and inpatient costs among Ohio Medicaid patients with schizophrenia. **METHODS:** Relative risks of hospitalization for mental illness between enrollees with diagnosed schizophrenia treated with any of the atypical antipsychotics (risperidone, olanzapine, quetiapine, ziprasidone) or any of the leading traditional antipsychotics (haloperidol, perphenazine, thioridazine, thiothixene) were assessed. Cox proportional hazard regression controlled for age, gender, diagnosis, prior hospitalization and ER use, substance dependence/abuse, antipsychotic dose, use of other psychotropics, and other health needs. Differences in length of stay and inpatient costs (charges) were also assessed. **RESULTS:** Patients treated with quetiapine had a 33% lower risk of hospitalization for mental illness compared with patients treated with typical antipsychotics (HR 0.672; P = 0.0413), equating to $389 lower expected annual inpatient charges per patient for quetiapine. Other pair-wise comparisons of antipsychotic-related hospitalization were not statistically significant. Risperidone was associated with significantly longer hospital stays than the typicals (1.78, P = 0.0301), resulting in $303 higher expected annual inpatient charges per patient. Risperidone also had significantly longer lengths of stay than olanzapine, 1.88 days (P = 0.006), resulting in higher inpatient charges ($320 annual per patient). Other differences in length of stay were not significant at P < 0.05. **CONCLUSIONS:** Quetiapine was associated with a lower risk of hospitalization for mental illness compared with typical antipsychotics, resulting in substantially lower inpatient charges. While risperidone may also have a lower risk of hospitalization than the typicals (22% lower, ns P = 0.0932), length of stay was significantly longer, contributing to higher inpatient charges. Risperidone also had significantly longer lengths of stay than olanzapine with associated higher inpatient costs, and may also have longer stays than ziprasidone (3.61 days, ns P = 0.0619).

**PMH55**

**CLASSIFYING ANTIPSYCHOTIC ADHERENCE USING LATENT CLASSES ANALYSIS: CHARACTERISTICS OF NON-ADHERENT CASEMIX IN THE CALIFORNIA MEDICAID (MEDICAL) PROGRAM**

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**OBJECTIVES:** Patient adherence to medications can be improved by proper identification of patients at risk for non-adherence. This study aims to classify patients to latent non-adherence casemix classes varying in degree of adherence, and to examine the socio-demographic and clinical correlates of class memberships. **METHODS:** We used patients (n = 36,195) with a schizophrenia diagnosis from the 100%-sample Medi-Cal fee-for-service paid claims data (1999–2003). The date of the first antipsychotic medication (index date) was used to define a 6-month pre-index and a 12-month post-index periods. Latent class analysis was applied to four categorical adherence indicators: a dichotomous variable derived from medication possession ratio (MPR; cut-off = 0.8); number of treatment attempts (1, 2, 3, 4, > 4), duration of uninterrupted therapy (<30, 30–60, 60–120, 120–240, 240–365, >365 days); and time to first switching of medication (no switching, <30, 30–90, 90–180, 180–365 days). Determinants and consequences of non-adherence were examined by profiling each latent class in terms of covariates and utilization outcomes. **RESULTS:** Models with up to five classes were explored, leading to a final selection of three classes: adherent (prevalence 14.9%, partially adherent (28.1%) and non-adherent (57.0%) based on the smallest classification error (2.14%). Non-adherent class was associated with minority ethnicity, more suicide attempts, more hospitalizations and inpatient rehabilitations than other classes. Partially adherent class displayed higher outpatient care use, higher depot antipsychotic drugs, and higher rate of polypharmacy. Adherent class displayed the exact opposite characteristics as non-adherent class. Total costs in the 12-month follow-up period were $9,370