a broader understanding of the influence of epidemics on health care systems. It is possible to investigate feedback of health service structure changes and reimbursement decisions on prevalence and effects of infectious diseases.

Comparing all-cause medication discontinuation rate in matched cohorts of patients with schizophrenia at risk of nonadherence who were initiated on depot or oral antipsychotics and followed over 12 months. METHODS: At study entry, patients with schizophrenia from Australia, Mexico, Romania, and Taiwan were switched, due to clinician-perceived medication non-adherence risk, from their current oral antipsychotic to either a depot or different oral antipsychotic in this 12-month, prospective observational study. Patients were compared on all-cause medication discontinuation rates, defined as a switch from the initiated medication or its augmentation with another antipsychotic. Patients initiated on depot were matched with those initiated on any oral antipsychotic, using full optimal and nearest neighbour (greedy) matching algorithms. The Rank-based Mahalanobis metric was chosen as the distance based on propensity score plus other relevant covariates, with country and antipsychotic class used for exact matching. RESULTS: Based on the full optimal 1:1 matching, only 40 of the 43 original depot initiators were matched to a corresponding oral initiating depot or oral antipsychotic showed that the oral-initiated patients were statistically significantly more likely to discontinue their medication. Findings highlight the importance of systematic matching of patient cohorts when comparing treatment outcomes in observational studies.

### MENTAL HEALTH – Clinical Outcomes Studies

#### PMH1

**THE EFFICACY OF DONEPEZIL AND MEMANTINE FOR TREATING BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD) IN PATIENTS WITH ALZHEIMER’S DISEASE: SYSTEMATIC REVIEW AND META-ANALYSIS**

**OBJECTIVES:** Behavioral and psychological symptoms of dementia (BPSD) in Alzheimer's disease (AD) greatly increase caregiver burden and often trigger nursing home placement. A systematic review of double-blind randomized controlled trials (RCTs) was conducted to compare the ability of donepezil and memantine to manage BPSD in AD. METHODS: MEDLINE, EMBASE, Cochrane Library, and hand searches identified 4739 citations, of which 16 studies had Neuropsychiatric Inventory (NPI) data suitable for meta-analysis (6 memantine and ten donepezil trials). All trials were double-blind, placebo-controlled, and patients with dementia were randomized to receive either placebo or a study medication. The mean duration of follow-up was 6 months, and the follow-up sample size was 1214 patients. RESULTS: The importance weight of one additional euro in cost of $25 or greater was negative, highly significant, and equal for both treatment arms. Compared to a treatment with 70% probability of achieving no detectable virus after 5 years and no side-effect risk, the increase in value to patients of a hypothetical treatment that has 95% effectiveness, 5% 5-year fracture risk, and 1% 5-year risk of kidney disease is an additional $34 ($17–45) per month. CONCLUSIONS: We obtained DCE responses in a split-sample test of cost sensitivity that were consistent with theoretical requirements. Results suggest that it is possible to obtain valid WTP estimates in a properly motivated European DCE.

#### PMH2

**DETERMINANTS OF PSYCHIATRIC HOSPITAL ADMISSION IN SCHIZOPHRENIA**

**OBJECTIVES:** Hospital admission is a common and costly event in schizophrenia. An analysis of phase I/1A CATIE clinical trial data assessed various patient socio-demographic and clinical characteristics in relation to risk of psychiatric hospital admission. METHODS: We followed 1460 study participants from baseline until first schizophrenia-related hospital admission, study medication discontinuation, or 18 months. Stepwise Cox regression models assessed the adjusted hazard ratio (AHR) of hospital admission by baseline patient socio-demographic and clinical characteristics. RESULTS: In 1,869 person-years of follow-up, 203 patients were hospitalized. The adjusted hazards of hospital admission were not significantly related to patient socio-demographic characteristics. Increased risk of admission was linked to early age (<17 years) of first antipsychotic treatment (AHR: 2.09; 95% CI: 1.45–3.03), psychiatric hospital admission in past year (AHR: 2.92; 95% CI: 1.28–1.93), and DSM-IV alcohol (AHR: 1.05; 95% CI: 1.15–2.08) and drug (AHR: 1.50; 95% CI: 1.13–2.00) use disorders in the past 5 years. Severe (5–7) as compared with mild (1–3) baseline global clinical severity (AHR: 1.51; 95% CI: 1.03–2.23) (CGI-I; high >20) as compared with low (7–13) positive symptoms (AHR: 1.53; 95% CI: 1.08–2.16) (FANSS-positive subscale), and low (0–2) as compared with high (≥3) social function (AHR: 1.47; 95% CI: 1.04–2.08) (Heinrichs-Carpenter QLI) were related to significantly increased risk of hospital admission. As compared with olanzapine treatment assignment, quetiapine (AHR: 2.12; 95% CI: 1.37–3.27), perphenazine (AHR: 1.64; 95% CI: 1.02–2.65), and ziprasidone (AHR: 2.67; 95% CI: 1.64–4.39), though not risperidone (AHR: 1.40; 95% CI: 0.89–2.21), were also associated with increased hospital admission risk. Self-rated physical health (SF-12 PCS) and drug attitudes (DAI) were not significantly related to risk. CONCLUSIONS: In the treatment of schizophrenia, efforts to lower hospital admission risk should focus on patients with early onset disorders, recent inpatient admissions, severe positive symptoms, high global clinical severity, poor social function, and comorbid substance use disorders and should select an appropriate antipsychotic medication.

#### PMH3

**A PHASE IV STUDY OF THE EFFECTIVENESS OF QUETIAPINE EXTENDED RELEASE 600 MG ONCE A DAY TO CONTROL THE SYMPTOMS OF MANIC PHASE OF BIPOLAR DISORDER: THE EMMY TRIAL**

**OBJECTIVES:** To assess the efficacy of a 600 mg once daily dose of Quetiapine Extended Release administered once a day at evening as monotherapy or in combination with lithium or valproate for 21 days. METHODS: A multi-center phase IV study was designed to assess the efficacy of quetiapine extended release 600 mg per day either as monotherapy or combined therapy with lithium and valproic acid in the treatment...