

## PMH54

**COMPLEX ATTENTION-DEFICIT/HYPERACTIVITY DISORDER: PATIENT CHARACTERISTICS, HEALTH CARE UTILIZATION AND COSTS IN A RETROSPECTIVE OBSERVATIONAL CLAIMS STUDY**Hess G<sup>1</sup>, Sasane R<sup>2</sup>, Hill J<sup>1</sup>, Hodgkins P<sup>2</sup>, Shah MR<sup>1</sup><sup>1</sup>SDI Health, Plymouth Meeting, PA, USA, <sup>2</sup>Shire Pharmaceuticals, Wayne, PA, USA

**OBJECTIVES:** To elucidate the characteristics of complex Attention-Deficit/Hyperactivity Disorder (ADHD) and associated health care utilization and costs in children and adolescents. **METHODS:** Patients (aged 6–17) diagnosed with ADHD between November 2005 and October 2007 and with medical/pharmacy claims for  $\geq 1$  year after the index diagnosis were identified retrospectively from SDI's databases of patient-level medical and pharmacy claims. Because patients with ADHD and associated comorbidities were likely to require the most treatment (and therefore incur higher health care charges), we hypothesized that total cost of ADHD prescriptions and office visits could serve as a proxy for a more "complex" patient. Costs for ADHD prescriptions and ADHD office visits were aggregated, and patients were stratified into high- (top 25% of total charges), medium- (middle 50%), and low- (bottom 25%) cost groups. **RESULTS:** In total, 10,362 patients were stratified, with 2591 patients in the high-cost, 5170 in the medium-cost, and 2601 in the low-cost group. More than two thirds of the patients were aged 6–12 years, and >70% were male. The prevalence of most psychiatric and other comorbidities was higher in the high-cost group than in the medium-cost group ( $P < 0.05$  for 10 of 14 comorbidities) or in the low-cost group ( $P < 0.05$  for 9 comorbidities). High-cost patients were also more likely to be diagnosed younger, be treated by a specialist, and use augmented pharmacotherapy for their ADHD. Health care resource utilization in the high-cost group was 1.77 times greater than in the medium-cost group and 3.52 times greater than in the low-cost group ( $P < 0.001$  for both comparisons). The proportion of ADHD physician visits with procedure codes indicating higher disease burden and complexity was also significantly greater ( $P < 0.001$ ) for the high-cost group. **CONCLUSIONS:** This study identified a subset of complex pediatric and adolescent ADHD patients with unique characteristics and higher relative resource use. Supported by funding from Shire Development Inc.

**MENTAL HEALTH – Patient-Reported Outcomes Studies**

## PMH55

**DEPRESSION TREATMENT ADHERENCE AMONG DEPRESSION PATIENTS WITH COMORBIDITY**

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**OBJECTIVES:** To examine the impact of comorbidity on treatment options and treatment adherence among depression patients in employer health plans. **METHODS:** We used 165,569 records of administrative claims data between September 2002 and March 2004 for employed between 18 to 64 years old. Depression was identified using ICD-9 diagnosis codes. Treatment adherence was defined as finding more than 2 prescriptions for antidepressants (>30 days supply) or having more than 5 psychotherapy sessions. Multivariate logistic regression analyses were performed to examine impact of comorbidity on adherence to treatment among depression patients who initiated treatment. **RESULTS:** Among eligible members, 2567 (1.5%) had a primary diagnosis of depression and received treatment. Over 70% were female and the average age was 42.6 years. Approximately half (49.2%) received medication only; 29.3% received psychotherapy and medication; and 15.7% received psychotherapy without medications. The average number of prescribed antidepressants was 4.4 among those took any medications. Among those who had psychotherapy, 51.4% received more than 5 sessions. The most frequent comorbid mental disorders were anxiety (25.3%), adjustment disorder (9.1%), alcohol use (3.5%) and substance abuse (1.9%) and physical comorbid conditions were musculoskeletal and chronic pain (MSCP, 29.9%), injuries (17.5%), hypertension (13.3%), asthma (6.7%), diabetes (6.4%), arthritis (5.1%), and urinary tract infection (4.0%). Depression patients with anxiety (OR = 1.9), or adjustment disorder (OR = 1.4) were significantly more likely to receive psychotherapy ( $p < 0.05$ ), but significantly less likely to use medication only. Comorbid HIV (OR = 1.7), arthritis (OR = 0.5), anxiety (OR = 0.4) and MSCP (OR = 0.3) were significantly associated with receiving both medication and psychotherapy ( $p < 0.001$ ). Among patients who received both treatments, those with hypertension were significantly less likely to adhere to either treatment. Among those who initiated psychotherapy, comorbid anxiety (OR = 0.6) was significantly associated with treatment adherence ( $p < 0.001$ ). **CONCLUSIONS:** Among depression patients, having comorbid mental disorders was significantly associated with use of and adherence to psychotherapy treatment.

## PMH56

**A PATIENT PERSPECTIVE ON SIDE EFFECTS OF ANTIPSYCHOTIC THERAPY: THE TOOL INSTRUMENT**Lindström E<sup>1</sup>, Jönsson L<sup>2</sup>, Bernström A<sup>3</sup><sup>1</sup>Malmö University Hospital, Malmö, Sweden, <sup>2</sup>i3 Innovus, Stockholm, Sweden, <sup>3</sup>Danderyds hospital, STOCKHOLM, Sweden

**OBJECTIVES:** Pharmacotherapy is the most important component of care for patients with schizophrenia and related disorders. However, side effects adversely affect patient's health-related quality of life. A novel self-assessment instrument (Tolerability and quality of Life, ToolL) is presented to assess patient experiences of side effects.

**METHODS:** The instrument was developed to reflect the subjective perception of side effects in patients treated with antipsychotic medication. ToolL was developed by an expert panel of four experienced psychiatrists with a special interest in the treatment of schizophrenia, schizoaffective or bipolar syndrome. ToolL has eight domains reflecting important aspects for patient well-being: anxiety and depression, usual activities, fatigue or weakness, body weight, stiffness and tremor, bodily restlessness, sexual function and vertigo or nausea. ToolL was completed by 220 patients with schizophrenia, bipolar disorder or schizoaffective disorder in a cross-sectional observational study. Reliability and validity were estimated by correlations with existing scales assessing presence of side effects, symptom severity and HRQoL (UKU, PANSS, MADRS, SWN, EQ-5D, and VAS). **RESULTS:** Responses on ToolL demonstrated that frequent experiences of side-effects impact the well-being of patients. Validity was supported by significant correlations with other instruments. ToolL correlated with corresponding domains in the UKU scale. The MADRS score correlated strongest with anxiety, depression, fatigue or weakness. The global PANSS score significantly correlated with all domains except Weight gain, Stiffness and Sexual function. ToolL also correlated to the VAS score, EQ-5D, and the disease-specific scale SWN. **CONCLUSIONS:** ToolL is a new instrument for patient-reported assessment of the impact of side-effects of antipsychotic medication. The instrument can be of significant value in a clinical setting as a decision tool to guide treatment choices and serve as an important input to evaluations of antipsychotic treatment. Patient experiences of side effects are a highly relevant outcome measure that may determine the long-term success of therapy.

## PMH57

**NON-ADHERENCE TO ORAL ANTIPSYCHOTICS IN SCHIZOPHRENIA: RELAPSE AND UTILIZATION OF HEALTH CARE RESOURCES IN A 6-MONTH FOLLOW-UP PERIOD**San L<sup>1</sup>, Valladares A<sup>2</sup>, Bernardo M<sup>3</sup>, Olivares JM<sup>4</sup>, Ciudad A<sup>2</sup>, García-Polavieja P<sup>2</sup>, Yrurettagoyena B<sup>2</sup>, Dilla T<sup>2</sup>, Gilaberte I<sup>2</sup><sup>1</sup>Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain, <sup>2</sup>Lilly, S.A., Alcobendas, Madrid, Spain, <sup>3</sup>Hospital Clinic, Barcelona, Barcelona, Spain, <sup>4</sup>Hospital Meixoeiro—Complejo Hospitalario Universitario de Vigo, Vigo, Pontevedra, Spain

**OBJECTIVES:** To investigate the clinical profiles, modification of therapeutic strategies, relapse rate and resource utilization in patients with schizophrenia who are at risk of non-adherence to oral antipsychotic (AP) medication. **METHODS:** A Spanish cohort of 596 outpatients with schizophrenia whose therapy was modified because of risk of non-adherence to oral AP medication was followed during 12 months. Baseline and 6-month data on sociodemographic and clinical characteristics, as well as on resource utilization are described. **RESULTS:** Patients' mean (SD) age was 40.1 (11.1) years, and 64% were males. The median (IQR) time-since-diagnosis was 14 (15) years. Within the prior 6 months, 124 (21%) had been hospitalized at least once with mean duration of 26 days. Patients had severe symptoms (CGI-S mean score of 4.3), poor quality of life (mean EuroQol-5D health-status value of 0.6) and functional status (mean SOFAS score of 50.6). Baseline non-pharmacologic therapies were modified in 189 (32%) patients, AP medication in 503 (85%) and concomitant medication in 15%. Modifications of AP medications were mostly dose adjustments (64%). Depot formulation was started by 15%. After 6 months, 65 patients (11%) relapsed. These had worse CGI-S and SOFAS scores than patients who did not relapse (4.2 and 51.4 versus 3.7 and 58.6, respectively), whilst EuroQol-5D scores were similar (0.7 in both groups). Hospitalization was required by 35 out of 65 (53.9%) patients who relapsed (38.7 days on average), but just by 5 out of 531 (0.9%) of those who did not relapse (5.4 days on average). Visits to emergency room occurred, respectively, in 44 out of 65 (67.7%) and in 74 out of 531 patients (14%). **CONCLUSIONS:** After baseline treatment modification the proportion of patients requiring hospitalizations within 6 months was reduced. Patients who relapsed consumed more resources.

## PMH58

**TOOL: MULTI-ATTRIBUTE UTILITY FUNCTION REFLECTING PATIENT EXPERIENCE OF SIDE EFFECTS TO ANTIPSYCHOTIC THERAPY**Jönsson L<sup>1</sup>, Lang A<sup>2</sup>, Lindström E<sup>3</sup><sup>1</sup>i3 Innovus, Stockholm, Sweden, <sup>2</sup>i3 Innovus, 11164, Sweden, <sup>3</sup>Malmö University Hospital, Malmö, Sweden

**OBJECTIVES:** The main effects of pharmaceutical treatment in schizophrenia are symptom relief and relapse prevention. Antipsychotic treatment is, however, associated with adverse effects that impact patient well-being. A novel instrument, ToolL (Tolerability and quality of Life), measures health-related quality of life with antipsychotic medication across eight different dimensions: mood, function capabilities, fatigue, weight gain, stiffness and tremor, physical restlessness, sexual dysfunction and nausea. This study aimed to develop a function linking responses to ToolL to health utility values. **METHODS:** A multi-attribute utility function (MAUF) was developed based on the instrument for patients with schizophrenia, schizoaffective or bipolar syndrome on antipsychotic treatment to allow estimation of health utilities associated with antipsychotic treatments and their side effects. 220 patients with stable schizophrenia, schizoaffective disorder or bipolar disorder completed a set of ratings to facilitate the estimation of a MAUF linking each possible state in the classification system to a utility value. **RESULTS:** A total of 183 of the 220 patients provided complete and consistent ratings allowing an average utility function to be estimated. The ToolL utility ratings correlated significantly with disease specific instruments for disease severity (MADRS and PANSS) and quality of well-being (SWN). Utility ratings