

ratio (OR): 9.42; 95% confidence interval (CI): 8.55-10.39), female sex (OR: 1.11; 95%CI: 1.01-1.22), age 55-64 (OR: 1.26; 95%CI: 1.09-1.46) relative to age 25-34, and Hispanic (OR: 1.37; 95%CI: 1.05-1.81) relative to white. An incremental \$10K in BY inpatient admission cost was also associated with greater likelihood of success (OR: 1.11; 95%CI: 1.08-1.15). Accounting for baseline differences between treatment cohorts using IPW, PP use was associated with a 26% increase in the likelihood of continuity achievement compared to other AP use (OR: 1.26; 95%CI: 1.14-1.39). **CONCLUSIONS:** Baseline factors associated with better performance on the HEDIS Continuity of AP Medications measure were prior year adherence, use of PP therapy, higher inpatient costs, older age, female gender, and Hispanic ethnicity.

PMH59

IMPACT OF ATYPICAL ANTIPSYCHOTICS USE ON LONG ACTING STIMULANTS PERSISTENCE AMONG CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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OBJECTIVES: Pediatric Attention Deficit/Hyperactivity Disorder (ADHD) patients are usually prescribed combination of psychotropic agents. This study looked at the impact of atypical antipsychotic (AAP) use on long acting stimulant (LAS) persistence in children and adolescents with ADHD. **METHODS:** This study used 4 years (January 2004 to December 2007) of IMS LifeLink™ claims data involving 6-16 years old youths with ADHD and at least 1 LAS prescription between July 2004 to December 2006 and continuous eligibility 6 months before and 1 years after the index LAS prescription. Persistence was measured by summing the total number of days a patient remained on the index LAS from the index prescription date with allowable gap of no more than 30 days. Multivariate Cox proportional hazards regression was used to examine the impact of concomitant atypical antipsychotic use on persistence of stimulants. **RESULTS:** The study cohort consisted of 39,981 subjects. Of these, 1,560 (3.90%) received LAS and AAP polypharmacy and the rest 38,421 (96.10%) received LAS monotherapy. Bivariate analyses revealed that concomitant users had longer persistence (by 71 days) than the stimulant alone users. Cox proportional hazards regression revealed that concomitant atypical antipsychotic use improved LAS persistence by 15% (HR=0.85, CI=0.76-0.94) in comparison to the non-users among LAS recipients. Other factors such as age, region, season, coexisting mental health conditions, use of co-medications, and general mental health status influenced the LAS treatment persistence among children and adolescents with ADHD. **CONCLUSIONS:** Use of atypical antipsychotics improved LAS treatment persistence in children and adolescents with ADHD. Various patient, clinical and treatment factors were associated with the LAS treatment persistence in ADHD youths. Understanding of these factors can help to improve persistence to LAS treatment.

PMH60

ANTIDEPRESSANT ADHERENCE IN OLDER ADULTS AND DIFFERENT QUALITY OF LIFE OUTCOME MEASURES

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OBJECTIVES: The aim of this study was to determine the impact of antidepressant adherence on health-related quality of life and life satisfaction in a representative community sample of older adults. **METHODS:** The data were obtained from the ESA (Étude sur la Santé mentale des Aînés) Services study that included a large sample of older adults (n=1809) aged 65 years and over who consulted and were recruited in a primary care practices. HRQOL was measured using the EuroQOL-5D which assessed utility values, from the general population perspective and the EQ-Visual Analog Scale (EQ-VAS) was used to measure self-reported health status from the patient perspective. The CASP was used to measure life satisfaction. Common mental disorders were based on DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition) criteria. Antidepressant use was obtained from administrative databases. A 4 level dummy variable was constructed to consider the presence of depression/anxiety (MD) and antidepressant use (MD X AD). Adherence to antidepressant was measured using the medication possession ratio (MPR ≥ 80%). Multivariate linear regression models were used to study HRQOL and life satisfaction as a function of depression/anxiety X antidepressant use (MD X AD) controlling for antidepressant use, the presence of chronic and physical disorders and other socio-demographic factors. **RESULTS:** HRQOL measured by the EuroQOL was significantly associated with age, cognitive impairment and the presence of depression. Self-reported health status measured by the EQ-VAS was associated with age, number of chronic illnesses, cognitive impairment. The CASP was associated with age, and PTSD. Antidepressant use was associated with a lower HRQOL and a lower life satisfaction. **CONCLUSIONS:** The study showed that the determinants associated with HRQOL and life satisfaction from the patient and general population perspective differs. Future studies should focus on determining other factors that influence HRQOL and life satisfaction in older adults.

PMH61

UTILITY DECREMENTS ASSOCIATED WITH TREATMENT-RELATED ADVERSE EVENTS IN SCHIZOPHRENIA

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OBJECTIVES: Several studies have estimated health state utilities for patients with schizophrenia according to disease stage. However, the quality of life of these patients is also largely dependent on treatment-related adverse events, and there is paucity of data on utilities associated with those adverse events. The objective of this study was to estimate utility decrements associated with treatment-related adverse events in patients with schizophrenia, using data from an observational study. **METHODS:** We used data from EuroSC, a multicenter 2-year cohort study conducted in France, England and Germany. The EQ-5D questionnaire was com-

pleted every 6 months, as well as the Subjective Side Effect Rating Scale, assessing patient distress over extrapyramidal symptoms, weight gain, sedation and sexual dysfunction over the past seven days. A random-effects regression analysis was used to estimate the impact of these adverse events on utilities with adjustment on disease severity and other potential confounding factors. **RESULTS:** Our sample consisted in 1208 patients with schizophrenia. At baseline, the mean EQ-5D utility was 0.73 (0.28), 57.7% of patients reported extrapyramidal symptoms, 46.2% weight gain, 46.5% sedation and 27.8% sexual dysfunction. The regression model showed that extrapyramidal symptoms, weight gain, sedation and sexual dysfunction were associated with reductions in utility of 0.054 (0.008), 0.018 (0.008), 0.021 (0.008) and 0.032 (0.011) points, respectively. **CONCLUSIONS:** This study shows that side effects are associated with significant decrements in EQ-5D utility, especially extrapyramidal symptoms. Additionally, adverse events may have an indirect negative impact on quality of life, since they may be associated with reduced treatment adherence, and therefore reduced treatment effectiveness.

PMH62

THE ASSOCIATION BETWEEN RESIDUAL SYMPTOMS OF DEPRESSION WITH MENTAL AND PHYSICAL QUALITY OF LIFE IN PATIENTS WHO HAVE BEEN TREATED WITH ANTIDEPRESSANT MEDICATIONS

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OBJECTIVES: Examine the association between residual symptoms of depression (depressive symptoms still present after 3 months of antidepressant treatment) and patient reported mental and physical quality of life. **METHODS:** A subset of patients from the 2012 National Health and Wellness survey (n = 71,157), an annual general health survey of US adults, was used in this analysis. Inclusion criteria were a diagnosis of depression and treatment with an antidepressant medication for at least 3 months (n = 5,354). Residual symptoms were measured via the 9-item Personal Health Questionnaire (PHQ-9) depression scale and quality of life was measured via the SF-36v2 mental and physical component summary scores (MCS and PCS). Inter-relationships among symptoms were assessed using Pearson correlations, and Ordinary Least Squares (OLS) regression was used for MCS and PCS analyses. **RESULTS:** The most common residual symptoms were fatigue (49.6%; "Feeling tired or having little energy") and sleep problems (42.8%; "Trouble falling or staying asleep, or sleeping too much"). All residual symptoms were more strongly correlated with MCS scores (r = -.37 to -.60) compared with PCS scores (r = -.06 to -.26) (p<.01). In the OLS regression models, anhedonia ("Little interest or pleasure in doing things") and sadness ("Feeling down, depressed, or hopeless") held the strongest associations with lower MCS scores (p<.001), whereas fatigue held the strongest association with lower PCS scores (p<.001) after controlling for other residual symptoms. **CONCLUSIONS:** Residual symptoms of depression persist despite adequate duration of antidepressant treatment and are associated with poorer quality of life. Anhedonia and sadness were most strongly associated with lower mental quality of life while fatigue was most strongly associated with lower physical quality of life.

PMH63

MEDIATION ANALYSIS OF EFFECT OF LURASIDONE ON PATIENT FUNCTIONING IN BIPOLAR DEPRESSION: DIRECT EFFECTS AND INDIRECT EFFECTS MEDIATED THROUGH IMPROVEMENT IN DEPRESSION SYMPTOMS

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OBJECTIVES: The efficacy of lurasidone in reducing depression symptoms and improving functioning among patients with bipolar depression has been previously demonstrated. This analysis examines the direct and indirect effect (mediated through improvement in depression symptoms) of lurasidone in improving patient functioning. **METHODS:** Data from a 6-week, double-blind, placebo-controlled trial assessing the effect of treatment [lurasidone (20-60 mg or 80-120 mg) versus placebo] in bipolar depression was used. Patient functioning was measured using a validated patient reported outcomes scale, Sheehan Disability Scale (SDS), that assessed functioning in work/school, family, and social life (higher scores indicate greater disability). Depression symptoms were measured using the 10-item Montgomery-Asberg Depression Rating Scale (MADRS; higher scores indicate greater severity). Path analyses evaluated total effect (β_1), as well as the indirect effect ($\beta_2 \cdot \beta_3$) and direct effect (β_4) of treatment on SDS change, using standardized beta path coefficients and baseline scores as covariates. The direct effect of treatment on SDS change and indirect effects accounting for mediation through MADRS change was examined for statistical significance and magnitude. **RESULTS:** Path analyses (n = 258) revealed a moderate total effect for treatment predicting improvement in SDS score ($\beta_1 = -0.40$, p=0.001). Treatment predicted improvement in MADRS ($\beta_2 = -0.33$, p=0.009), which subsequently predicted improvement in SDS ($\beta_3 = 0.70$, p<0.001; indirect effect = -0.23). The direct effect was small yet significant ($\beta_4 = -0.17$, p=0.04), indicating partial mediation. Indirect and direct effects accounted for 57% and 43% of the total effect, respectively. The full mediation model with indirect and direct effects explained 61.7% of the variation in the change in SDS scores. **CONCLUSIONS:** These analyses show that improvement in patient functioning among patients on lurasidone was largely mediated through reduction in depression symptoms. Lurasidone also had a small but statistically significant direct effect in improving patient functioning that was independent of improvements in depression within a 6-week study duration.

PMH64

VALIDITY AND RELIABILITY OF THE MEDICAL OUTCOMES STUDY SHORT-FORM HEALTH SURVEY VERSION 2 (SF-12V2) AMONG ADULTS WITH AUTISM

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OBJECTIVES: This study aimed to determine the validity (construct, known-groups), reliability (internal consistency), and floor and ceiling effects of the 12

item Medical Outcomes Study Short-Form Health Survey version 2 (SF-12v2) among adults with autism. **METHODS:** Study data was collected using an online survey (Qualtrics software system) of 291 adults with autism registered with the Interactive Autism Network (IAN). Using confirmatory factor analysis, construct validity of the SF-12v2 was examined by comparing model fits across four different iterations of the SF-12v2 two-factor structure. Known-groups validity was assessed by comparing SF-12v2 physical component summary (PCS) and mental component summary (MCS) score by autism severity. Internal consistency reliability was determined using Cronbach's alpha. Floor and ceiling effects were assessed based on the percentage of participants scoring the lowest and highest possible score, respectively. **RESULTS:** Results from CFA indicated an adequate fit with the data for the two-factor SF-12v2 model with minor modifications. As per known-groups validity, the SF-12v2 MCS domain adequately distinguished adults with autism by severity, with higher MCS score observed among adults with low autism severity as compared to those with high autism severity. However, contrary results were observed for the PCS domain. High internal consistency reliability was observed for the PCS domain (Cronbach's alpha 0.87), MCS domain (Cronbach's alpha 0.73), and overall instrument (Cronbach's alpha 0.84). There were no floor and ceiling effects. **CONCLUSIONS:** The SF-12v2 had good construct validity, and the factor structure fit well with the data. The known-groups validity of the SF-12v2 warrants further investigation in this population. Reliability of the instrument was good, and there were no floor and ceiling effects. Overall, SF-12v2 had adequate psychometric properties among adults with autism.

PMH67 CONTENT VALIDITY OF THE SR-MAD RX OPIOIDS INSTRUMENT FOR USE IN PATIENTS WITH ACUTE OR CHRONIC PAIN

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OBJECTIVES: To assess the content validity and patient interpretation of the Self-Reported Misuse, Abuse and Diversion (SR-MAD) of Prescription (Rx) Opioids instrument. **METHODS:** A cross-sectional, qualitative study was conducted in patients with chronic or acute pain. Patients were recruited from 3 clinical sites based on three patient groups (opioid naïve, known opioid abusers, and chronic opioid non-abusers) to participate in a one-on-one cognitive interview. Patients completed the SR-MAD instrument via web-administration and then participated in an in-depth discussion following a semi-structured interview guide to assess the patient's understanding of the questionnaire. Descriptive statistics and content analysis were performed. **RESULTS:** Thirty-seven patients were interviewed: 11 opioid naïve; 13 known abusers; and 13 non-abusers. Mean age was 55 ± 13.5 years (range 26 to 84); 33 patients (89%) experienced chronic pain, three (8%) experienced acute pain, and one (3%) experienced both chronic and acute pain. Overall, most patients (n=31, 84%) demonstrated a comprehensive understanding of the questionnaire's content and reported the SR-MAD was easy to complete via web-administration. The majority of patients (n=28, 76%) reported they were truthful when completing the questionnaire and most (n=22, 59%) said they were comfortable completing the questionnaire using a secure internet site. Although some patients (n=15, 41% [opioid naïve n=5, known abusers n=7, and non-abusers n=3]) reported there were questions about opioid misuse that were not applicable to them, they all understood what was being asked and thought the questions would be relevant if they were abusing pain medication. Eight patients (known abusers n=4, non-abusers n=1, opioid naïve n=3) reported they were not comfortable answering the SR-MAD honestly in a clinic/doctor's office. **CONCLUSIONS:** The SR-MAD was developed based on patient input and addresses opioid abuse, misuse, and diversion. Additional interviews with aberrant opioid abusers are underway to further examine the content validity of the SR-MAD.

PMH68 QUALITY OF LIFE AMONG ADULTS WITH AUTISM SPECTRUM DISORDERS

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OBJECTIVES: The purpose of this study was to determine the predictors of quality of life (QOL) among adults with autism. A modified version of Wilson and Cleary's QOL conceptual model was used to study the relationship between autism severity, coping, functional independence, social support and QOL in adults with autism. **METHODS:** A cross-sectional, descriptive quantitative design was utilized for this study. An internet-based survey using Qualtrics online software system was administered to adults with autism enrolled with the Interactive Autism Network (IAN). Among these adults, those who were: 1) aged 18 years and above; and 2) capable of self-reporting with little or no proxy help were identified and approached for participation. Structural equation modeling (SEM) was used to identify the inter-relationship among study variables and to identify the factors influencing QOL among adults with autism. **RESULTS:** The survey sample included 262 adults with autism. Results from the SEM analysis revealed the modified Wilson and Cleary's QOL model tested in the study to have an adequate fit (chi-square=49.75, df=17; RMSEA=0.88; CFI=0.95). Significant correlations among coping, functional independence, social support and QOL domains (p<0.05) were observed. Study results depicted autism severity, maladaptive coping, appraisal social support and functional independence as significant predictors of physical and environment QOL. Autism severity had a significant (p<0.05) negative impact on physical, psychological and environment QOL. Higher degree of social support and adaptive coping were found to have a positive influence on QOL. **CONCLUSIONS:** Modifiable variables including social support and coping were found to influence QOL among adults with autism. Physicians and other health care professionals involved in the management of autism among these adults should consider these factors when designing treatment intervention strategies.

PMH69 IMPACT OF BINGE EATING DISORDER ON WORK PRODUCTIVITY AND SOCIAL FUNCTIONING IN A REPRESENTATIVE SAMPLE OF UNITED STATES ADULTS

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OBJECTIVES: Binge Eating Disorder (BED) recently moved, with slight modification, from the DSM-IV appendix to a fully recognized disorder in DSM-5. There is limited information on the impact of BED on productivity and social functioning. One cross-national epidemiological study reported BED was associated with an increased number of days of role impairment. We report here the associations of DSM-5 defined BED, with work productivity and functional impairment in the work/school, social and family life domains. **METHODS:** An internet survey of a representative sample of US adults, conducted in fall, 2013, included questions related to demographics, general health, psychiatric comorbidities, assessment for DSM-5 criteria for BED, the Work Productivity and Activity Impairment questionnaire (WPAI) and the Sheehan Disability Scale (SDS). SDS and WPAI were compared (BED vs no BED groups) via ANOVA. **RESULTS:** Among 22,397 respondents, 344 (1.5%) participants (242 women and 102 men) met full DSM-5 criteria for BED, 1,616 (7.2%) reported overeating with loss of control but not meeting DSM-V criteria for BED. The remainder of the respondents, 20,437 (91.3%), may have reported overeating but no other BED symptoms. Relative to those with no BED, those with BED had higher mean[SD] impairment on SDS work/school (3.86[3.62]) vs 1.01[2.21], p<0.001, social life (5.29[3.49] vs 1.22[2.33], p<0.001) and home/family life (4.89[3.44] vs 1.18[2.26], p<0.001). As measured by WPAI, those with BED, compared to those in the no BED group, had higher mean[SD] scores for absenteeism (9.59[19.97] vs 2.90[12.95]), presenteeism (30.00[31.64] vs 10.86[20.07]), work productivity loss (33.19[33.85] vs 12.60[23.22]), and activity impairment (43.52[34.36] vs 19.94[27.22]) respectively (p<0.001 for all). **CONCLUSIONS:** This is the first large population study to examine the association of BED, using DSM-5 criteria, with work productivity and daily functioning. Results suggest that those with BED experience considerable impairment in functioning and work productivity relative to those without BED.

PMH70 DO DEPRESSED PATIENTS ON ADJUNCTIVE ATYPICAL ANTIPSYCHOTICS DEMONSTRATE A BETTER QUALITY OF LIFE COMPARED TO THOSE ON ANTIDEPRESSANTS ONLY? (A COMPARATIVE CROSS-SECTIONAL STUDY OF A NATIONALLY REPRESENTATIVE SAMPLE OF THE UNITED STATES POPULATION)

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OBJECTIVES: The adjunctive use of some atypical antipsychotics (AAPs) has shown to provide some benefits in improving the depressive symptoms in patients with treatment-resistant depression. However, little is known about the impact of these agents on patients' health-related quality of life (HRQoL). **METHODS:** Patients with self-reported depression (ICD-9: 296, 300, and 311), and have used the given AAPs and/or antidepressants for at least a year, were identified in the Medical Expenditure Panel Survey (MEPS) of 2008-2011. The patients were classified into users of adjunctive AAPs (i.e., antidepressants plus AAPs) and users of antidepressants only. The AAPs were identified based on documented evidence, and included risperidone, aripiprazole, quetiapine, olanzapine, and ziprasidone. Multivariate linear regression analyses were conducted to determine whether the utilization of AAPs was associated with the Physical Component Summary-12 (PCS12) or with Mental Component Summary-12 (MCS-12) of HRQoL measure. Socio-demographics, Charlson Comorbidity Index, psychotherapy (i.e., cognitive behavioral therapy), Patient Health Questionnaire-2 (PHQ-2) scores, and the number of prescription medications associated with depression were controlled. **RESULTS:** A total of 3,638 participants reported to have depression and to have used the given AAPs and/or antidepressants for at least a year during the period of 2008-2011 (306 on AAPs vs. 3,332 on antidepressants only). The study subjects were ≥18 years, predominantly White (91.9%) and female (71%). The adjunctive AAPs utilization was not associated with higher scores in the PCS-12 ($\beta = 1.455$, 95% CI = -0.1366-3.0459, p = 0.0729). Rather, it was negatively associated with the MCS-12 scores ($\beta = -1.549$, 95% CI = -3.0171-0.0822, p = 0.0386). **CONCLUSIONS:** The adjunctive utilization of AAPs was not associated with higher scores of HRQoL. Future studies should examine whether poor mental scores of HRQoL have occurred from lower medication adherence to AAPs or from lower baseline HRQoL scores among users of adjunctive AAPs.

PMH71 ANTICHOLINERGIC DRUG USE AND HEALTH RELATED QUALITY OF LIFE (HRQOL) IN THE ELDERLY WITH DEMENTIA

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OBJECTIVES: People with dementia are sensitive to cognitive side effects of anticholinergic drugs and this may adversely affect their Health Related Quality of Life (HRQoL). The study examined the association between the use of drugs with anticholinergic properties and HRQoL among community-dwelling elderly dementia patients. **METHODS:** This was a retrospective longitudinal cohort study involving elderly (age ≥ 65 years) patients with a diagnosis of dementia, using data from Medical Expenditure Panel Survey (MEPS) panels 9 to 13. Each panel consisted of five rounds which spanned over the period of two years. Patients who used anticholinergic drugs in round 1 or 2 were excluded. Anticholinergic drug exposure was measured in rounds 3 and 4 using Anticholinergic Drug Scale (ADS), an ordinal scale that rates anticholinergic drugs into levels 0 - 3 in increasing order of anticholinergic potency. The outcomes of interest were Physical Component Score (PCS) and Mental Component Score (MCS) based on Short-Form 12 (SF-12) health survey, measured in round 4. Two separate multiple linear regressions analyses were performed to determine the association of anticholinergic drugs with PCS and MCS while adjusting for sociodemographic variables and baseline HRQoL measures. **RESULTS:** The study included 112 patients, of which, 15.18% used anticholinergic drugs. Majority of the study participants were between ages of 65-79 (53%), females (57%), and with poor or low family income (65%). After controlling for sociodemographic and baseline characteristics, anticholinergic drug use was significantly associated with 5.75 units reduction in PCS (p-value: 0.01) whereas no association was found between anticholinergic use and MCS. Baseline HRQoL measures were found significant in both models. **CONCLUSIONS:** Anticholinergic medications were associated with