health insurance status were associated with differential levels of antidepressant adherence and associated health expenditure. Hispanic ethnicity was associated with decreased antidepressant adherence compared to non-Hispanic white ($\beta = 12.53$, $P < 0.05$) and other ethnicities ($\beta = 28.27$, $P < 0.01$). Patient who were covered by public insurance had better PDC compared to uninsured patients ($\beta = 16.23$, $P < 0.05$). Patient who were covered by private insurance spent more on MDD-specific drug compared to uninsured patients ($\beta = 0.36$, $P < 0.05$). Higher antidepressant adherence was associated with higher MDD-specific drug expenditure ($\beta = 0.03$, $P < 0.01$). Use of innovative antidepressants such as SSRIs and SNRIs was associated with an increase in MDD-specific drug expenditure. **CONCLUSIONS:** Differences in antidepressant adherence and health care spending across patient factors could have important policy implications for drug formularies and health disparities. Solutions for gaps between optimal and suboptimal health care for patient mental health caused by systematic differences in sociological factors need to be well tailored. We need policy makers to be engaged in designing effective policy interventions to improve patient medication adherence, and to fund cost-effectiveness studies to improve patient outcomes and in turn, reduce associated health expenditure.

PMH50

TRENDS IN ANTIDEPRESSANT UTILIZATION, AND ASSOCIATED LABOR MARKET PARTICIPATION AND QUALITY OF LIFE OUTCOMES IN THE UNITED STATES: 2004–2007

Lin HC[1], Erickson S[2], Smith D[1], Balkrishnan R[2]

[1]University of Michigan, Ann Arbor, MI, USA; [2]University of Michigan, College of Pharmacy, Ann Arbor, MI, USA

OBJECTIVES: Innovative antidepressants have been widely adopted. However, the differences in patient factors and antidepressant use, and associated patient health and work outcomes were not jointly studied. This study was trying to understand how patient factors and antidepressant utilization were associated with patient employment durations and quality of life. **METHODS:** A retrospective cross-sectional study was conducted using the 2004–2007 Medical Expenditure Panel Survey (MEPS) database. Proportional hazard duration models were used to examine MDD patient's employment duration. Linear regression models were implemented to study the impacts of MDD patient factors and antidepressant utilization on associated patient physical and mental health status. **RESULTS:** Differences in employment duration across several patient factors were found. Cox proportional hazard model showed that, compared to uninsured patients, MDD patients covered by private insurance had a lower level of hazard of job termination (hazard ratio = 0.15, $P < 0.01$). Patients who were in better physical health conditions had a lower level of hazard of job termination (hazard ratio = 0.96, $P < 0.01$). Results from OLS regressions showed that, compared to patient without antidepressant pharmacotherapy for MDD treatment, patients who took innovative antidepressants such as SSRIs/SNRIs and other newer ones had a huge increase in MCS ($\beta = 11.35$, $P < 0.01$). In addition, better antidepressant adherence was significantly associated with an increase of MCS ($\beta = 0.10$, $P < 0.01$). **CONCLUSIONS:** This study suggested that effective policy interventions were needed for improving medication adherence, and the design of prescription drug benefit within health insurance should be tailored considering its associations with patient factors and related improvement in health status according to the findings of this study. We need policy makers to be engaged in designing effective policy interventions to improve patient medication adherence, which may in turn improve patient health status and labor market participation.

PMH51

HEALTH STATUS AND COST OF CARE IN PATIENTS WITH DEMENTIA IN GERMANY

Reese JP[1], Heßmann P[1], Seeberg GM[1], Baum E[1], Rieke J[2], Müller MJ[3], Balzer-Geldsetzer M[1], Dodel R[1]

[1]Phillips University Marburg, Marburg, Germany; [2]Office-based neurologist, Giessen, Germany; [3]Vitos Clinic for Psychiatry and Psychotherapy Marburg, Marburg, Germany

OBJECTIVES: To assess cost-of-illness and patient-relevant outcomes in patients with dementia in different settings in the German health system. **METHODS:** 600 patients with dementia were recruited at 1) a university hospital; 2) general practitioners; 3) office-based neurologists; 4) a regional psychiatric hospital; and 5) in long-term care facilities. Socio-demographic, economic and clinical parameters were assessed using a standardized questionnaire. Disease severity was measured by means of the Minimental Status Examination (MMSE) and the Alzheimer's Disease Assessment Scale. Neuropsychiatric status was assessed with the Geriatric Depression Scale, the Neuropsychiatric Inventory and the Alzheimer's Disease Cooperative-Study-Activities of Daily Living. Patient's quality of life was reported by the patient and also by the caregiver (employing the EuroQol and the QoL-AD instruments). **RESULTS:** For an interim analysis, 278 patients (180 female, 98 male) were available. Mean age was 78.2 yrs and mean disease duration was 4.5 yrs (SD 3.9). On average, care was needed for 3.0 yrs (SD 3.1). Cognitive impairment was severest in institutionalized patients (MMSE 12.2 pts SD 8.2) compared to the mean of all patients (MMSE 16.9 Pts). Mean EQ VAS values were 60.5 pts (SD 20.2). Disease-specific QoL-AD health status mean was 30.2 (SD 5.6). Health status was rated highest in long-term care facilities (EQ VAS) and at office-based neurologists (QoL-AD). In all severity stages patients rated their own health status (Qol-AD) better than their relatives. The costs of antidementia drugs were €45,000 per 3 months. Memantine accounted for 61%. a total of 41% of the patients received Memantine whereas 45% of the patients received no anti-dementia medication. **CONCLUSIONS:** Health status is considerably impaired in patients with dementia and their caregivers. Interestingly, caregivers often appraise patients' Quality of life worse than the patients themselves. Altogether, our results indicate a considerable under-supply with anti-dementia drugs.

PMH52

A SHORT 12-ITEM ZARIT BURDEN INVENTORY FOR THE ASSESSMENT OF DEMENTIA CAREGIVERS AS OBTAINED BY ITEM RESPONSE THEORY

Ballesteros J[1], Santos B[1], González-Fraile E[2], Muñoz-Hermoso P[2], Dominguez-Pachón A[3], Martín-Carrasco M[4]

[1]University of the Basque Country, UPV/EHU, CIBERSAM, Leioa, Spain; [2]Instituto de Investigaciones Psiquiátricas-IIP, Bilbao, Spain; [3]Hospital Aita Menni, Arrasate-Mondragón, Spain; [4]Clínica Psiquiátrica Padre Menni, Pamplona, Spain

OBJECTIVES: The Zarit Burden Inventory (ZBI) is a 22-item self-report scale frequently used to asess patients' caregiver burden on several dimensions. As a multidimensional instrument the interpretation of its total score is sometimes unclear. Our aim was to obtain a short-ZBI unidimensional scale based on Item Response Theory (IRT) approaches. **METHODS:** The validation sample comprised 246 caregivers of patients diagnosed with dementia and recruited for an ongoing multi-center randomized clinical trial on the efficacy of psychoeducational interventions (EDUCA-2 trial). The pre-randomization 22-item ZBI was analyzed according to the Samejima's graded response model to select the more informative items. The dimensionality of the scale was further tested with Confirmatory Factor Analysis (CFA). Finally, discriminant validity was assessed by Receiving Operator Characteristic (ROC) analysis and the Area Under the Curve (AUC) contrasting the short scale total score against the psychological distress criterion evaluated with the General Health Questionnaire 28-item at 5/6 cut-off. **RESULTS:** A 12-item short-ZBI was selected. It covered 87% of the total 22-item ZBI information and showed appropriate item curve characteristics according to the Samejima's model. The short-ZBI had an internal reliability of 0.89 (Cronbach's alpha), and was compatible with a unidimensional latent structure for the burden construct (CFI = 0.99; RMSEA = 0.05). According to the GHQ-28 cut-off 131 caregivers (53% of the total sample) could be considered at high risk for developping psychological distress. The discriminant validity of the short-ZBI scale against that criterion was good (AUC = 0.84, 95% CI = 0.79 to 0.89) and not significantly different from the parental 22-item ZBI (p = 0.85). **CONCLUSIONS:** We have found good psychometric properties for the short-ZBI scale derived from IRT. Its unidimensionality might be important to enhance its interpretation. Further psychometric studies, mainly on its sensitivity to change are now warranted.

PMH53

FACTOR STRUCTURE OF A SOCIAL SUPPORT SCALE FOR ADOLESCENTS TREATED FOR SUBSTANCE USE DISORDER

Ciesla J, Yao P

Northern Illinois University, DeKalb, IL, USA

OBJECTIVES: The literature indicates that social support is protective of relapse for adolescents treated for substance use disorder (SUD). Unfortunately, no standard measure of social support exists. The objective of this research is to use factor analysis to elucidate the underlying factor structure of a 14-item social support scale for use in outcomes assessment in this treatment population. **METHODS:** Subjects are 517 adolescents discharged from primary substance abuse treatment from 2004–2008. The data is from research conducted between 6 and 12 months post discharge via a 234-item questionnaire that included the 14-item social support scale. The scale has questions that assess the degree to which the adolescent's social contacts conform to norms of positive behavior and therefore foster non-use and recovery. The response rate was 62 percent. **RESULTS:** The factorability of the scale was assessed by Keiser-Meyer-Olkin statistic (it was 0.727, > the recommended 0.6) and by Bartlett's test of sphericity which was significant ($x^2 = 1066.89$, p = 0.00001). The scale was decomposed by principal component factor analysis and three factors emerged. Initial Eigen values explained 65.6, 23.1 and 11.3 percent of the variance, respectively. Final factor solutions were examined using varimax, oblimin and promax rotations with 3, 4, 5 & 6 solutions, respectively. a three-factor solution via promax explaining 99 percent of the variance emerged as the best solution although results were similar using the other rotations. Factor 1 yielded ten items that are attributes of a peers' potential to be positive a or negative influence and thus supportive of recovery. The three items in Factor 2 related to emotional dimensions of social support. Factor 3 contained two items indicating a recovering adolescent's ability to seek-out and establish positive social contacts. **CONCLUSIONS:** This scale is useful as a standard measure of social support which is an important aspect of treatment success.

PMH54

USE OF THE ANALYTIC HIERARCHY PROCESS TO PRIORITIZE PATIENT-RELEVANT ENDPOINTS OF ANTIDEPRESSANT TREATMENT

van Manen JG[1], Hummel JM[1], Ijzerman MJ[1], Volz F[2], Gerber A[2], Danner M[2]

[1]University Twente, Enschede, The Netherlands; [2]Institute for Quality and Efficiency in Health Care (IQWiG), Cologne, Germany

OBJECTIVES: In deciding about coverage of new medical technology, multiple clinical outcomes are used to support reimbursement claims. Neither the real world value nor the relevance of these outcome measures for patients is systematically assessed. Hence, there is growing interest in the use of patient-reported outcome measures. Multi-criteria decision analysis, like the analytic hierarchy process (AHP), is a technique to elicit patient preferences. In the present study we used AHP to prioritize patient relevant endpoints related to the use of antidepressants in major depression.

METHODS: Patient relevant endpoints of treatment (remission of depression, response to treatment, no relapse, serious adverse events, adverse events, social function, anxiety, pain, cognitive function) were prioritized using pairwise comparisons of these outcomes. In two separate groups, twelve patients and seven experts judged on a 9 point scale the relative importance of pairs of two outcome measures. The geometric mean of these judgments was used to derive weighting factors for the outcome measures (scale 0–1). **RESULTS:** Of all outcome measures, patients rated response to treatment highest (0.32), while experts rated remission of depression highest (0.48). Adverse events were all rated lowest by patients as well as by experts, and disease-specific quality of life domains such as social function (0.11 & 0.09), anxiety (0.12 & 0.05) and cognitive function (0.13 & 0.06) were rated in between. **CONCLUSIONS:** The most important outcome measures according to the patients are, in order of decreasing importance: response, cognitive function, no anxiety, social function, no relapse, no adverse events, and remission. The AHP appears to be suitable in gaining an overview of the importance of patient relevant outcome measures. An additional advantage of AHP is that the group discussions offer insight in the question *why* the endpoints are important.

PMH55

THE SUBJECTIVE WELL-BEING UNDER NEUROLEPTIC SCALE SHORT FORM (SWN-K20) AND THE SF-36 AS QUALITY OF LIFE MEASURES IN SCHIZOPHRENIC PATIENTS

Sanjuán J[1], Haro J[2], Maurino J[3], Diez T[4], Ballesteros J[5]

[1]University of Valencia, CIBERSAM, Valencia, Spain; [2]Parc Sanitari Sant Joan de Deu, CIBERSAM, Sant Boi de Llobregat, Spain; [3]AstraZeneca, Madrid, Spain; [4]AstraZeneca, Zaventem, Brussels, Belgium; [5]University of the Basque Country, UPV/EHU, CIBERSAM, Leioa, Spain

OBJECTIVES: Outcomes research in patients with schizophrenia should take into account the subjective interpretation of the mood and physical changes accompanying medication. Those changes influence the behavioural response to treatment and ultimately the patient's clinical outcome as mediated by his treatment compliance. Our aim was to assess the relationship between a specific well-being measure, the SWN-K20 that presents a general and 5 specific measurement subdomains (mental functioning, social integration, emotional regulation, physical functioning, and self-control), and the 8 domains of the SF-36 v1 as a general quality of life measure. **METHODS:** The validation sample for this study comprised 97 patients diagnosed with schizophrenia and who were rated as clinically stable at the moment of the study (1 week test-retest intraclass correlation coefficient for clinical symptoms = 0.96). The patients were recruited as part of a multicenter psychometric trial to validate the SWN-K20 in Spanish. The associations between the domains of the SWN-K20 and the SF-36 were evaluated by the Spearman's rank correlation test. **RESULTS:** All correlations among domains were positive and most were statistically significant ($p < 0.05$). As expected the bodily pain domain of the SF-36 presented the lower correlations with the SWN-K20 (rho range of 0.10 to 0.25), whereas the other 7 domains correlated significantly with the total SWN-K20 score (rho range 0.49 to 0.60, all $p < 0.001$). Overall the largest correlations were obtained between the SWN-K20 and the SF-36 domains of general health (rho = 0.53), mental health (rho = 0.60), and vitality (rho = 0.54). **CONCLUSIONS:** The positive but nevertheless moderate correlations observed between a specific well-being scale, as the SWN-K20, and a general quality of life scale, as the SF-36, supports the inclusion of specific and diagnose-tailored instruments for outcome assessments of patients with schizophrenia.

PMH56

INNOVATIONS IN COMBINING PATIENT REPORTED OUTCOMES WITH COGNITIVE TESTING DATA TO STREAMLINE AND LEVERAGE REAL-TIME DATA COLLECTION

Curry C

PHT Corporation, Boston, MA, USA

OBJECTIVES: Understand features of an electronic device that allow a marked improvement in the quality of collected data; the importance of improved data quality leading to enhanced patient safety and drug labeling; populations best suited for paired PRO and cognitive measurement technologies; important practical considerations for implementation in clinical trials including training and compliance; the potential for using real-time parallel data for adverse event safety monitoring. **METHODS:** This session discusses using ePRO and biometric technology for parallel data capture emphasizing advantages, disadvantages, execution, and ways to leverage these data. The session will review PRO and cognitive testing technologies, including comparisons of devices that combine physiological measures with a patient interface with systems that use separate PRO input and biometric devices. **RESULTS:** Assessing a treatment's ability to enhance or prohibit reduction of cognitive processing efficiency is an emerging study in the pharmaceutical industry. Case studies examine how the use of cognitive function tests in combination with ePRO can enhance the data collection so drug effects otherwise unidentified can be determined. The speaker will discuss the future of ePRO combined with biometric measurements as a standard of clinical research. **CONCLUSIONS:** Clinical trial endpoints can involve collection of physiologic and patient-reported outcome data; a combination of subjective and objective data. Electronic forms of information capture assure trial efficiencies including edit checks and shorter time to database lock. ePRO provides time-stamped, legible and complete data from subjects. Biometric devices capture the physiological measurements. Typically, cognition data have been collected from patients separately from PRO data during clinical trials, increasing respondent burden and risk of error such as transposing manually entering data. The use of ePRO and biometric devices, evolution of data transmission technology, and greater technologic sophistication of consumers, provide an opportunity for parallel electronic data capture, simultaneously capturing and transmitting physiologic and PRO parameters in clinical studies.

PMH57

REVIEW OF CO-MORBIDITY OF EATING AND BODY DYSMORPHIC DISORDERS

Faragó E, Pakai A, Dér A, Oláh A, Boncz I, Németh K

University of Pécs, Pécs, Hungary

OBJECTIVES: Our intention was to investigate the prevalence of Eating Disorder and Body Dysmorphic Disorder in patients diaghnosed with depression, anxietay and borderline personality disorder by gender, using controll groups. **METHODS:** The reserach was 2009 at the Department of Phsyciatry of Szigetvár Hospital (Hungary). Eating Disorder Inventory was used. a self-made questionnaire aimed the body mass, body height and several demographic data. Inclusion criteria: ones between 18 and 50 years age, and according to BNO F32-F34 (depression), F41 (anxiety), F6030 (borderline personality disorder) diagnoses. Control group: participants with age between 18 and 50 years like that, who do not stand under a psychiatric treatment. The statistical analysis consisted of two sample T test, χ^2-probe. **RESULTS:** The target group's number was 82, the control group 85. In the "The feeling of the insufficiency" ($P < 0.001$), "Interpersonal distrust" ($P < 0.005$), "Interoceptive consciousness" ($P < 0.001$) scales, the members of the control group from all three psychiatric patient groups reached a significantly lower score away. In the "Bulimia" scale there was a significantly lower score in the control group as well than the borderline in a group ($P < 0.005$), and here I found a significant difference between the members of two psychiatric groups: the anxious group reached a lower score, compared with the borderline group ($P < 0.001$). **CONCLUSIONS:** The three psychiatric patient groups did not attain the threshold value onto one of the eating disturbances relevant scales neither There is not a direct, causal contact between the examined psychiatric clinical pictures. The men's higher result achieved on the „Bulimia" scale relates rather onto the binge eating disorder.

PMH58

MODELING PROGRESSION IN DEMENTIA: ASSESSING THE PERFORMANCE OF FIVE CLINICAL MEASURES IN SPANISH SUBJECTS AND CAREGIVERS

Darba J[1], Kaskens L[2], Lacey L[3], McLaughlin T[4]

[1]Universitat de Barcelona, Barcelona, Spain; [2]BCN Health, Barcelona, Spain; [3]JANSSEN Alzheimer Immunotherapy, Dublin, Ireland; [4]Alzheimer Immunotherapy Research & Development, Dublin, Dublin, Ireland

OBJECTIVES: The primary objective of this analysis was to compare five different clinical measures and their impact on economic modelling. Clinical measures compared are the Mini-Mental State Examination (MMSE), the Cognitive Component Score (CCS), the Functional Component Score (FCS) the Behaviour Component Score (BCS), and the Dependence Scale (DS). **METHODS:** The MMSE, CCS, FCS, BCS and DS were compared in their ability to explain variation in clinical outcomes, economic- and other utilized resources, caregiver burden (Zarit Scale) and caregiver QoL (EQ-5D) using univariate (Pearson correlations) and multivariate (linear regression) analyses. Data on subjects and caregivers was obtained from multiple centres in Spain. **RESULTS:** In total 394 subjects, males and females aged 50 to 93 years old with mild cognitive impairment to severe dementia were included in this study. CCS, FCS, BCS and DS were moderately correlated with MMSE, with Pearson correlations ranging from −0.26 for BCS to −0.56 for CCS. These four clinical measures were also moderately correlated with medical costs, Zarit Scale and EQ-5D while MMSE was not. These measures also performed better in explaining variation in medical costs, Zarit Scale and caregivers' EQ-5D. MMSE performed better explaining variation in the number of concomitant conditions and caregiver time (hours per day). **CONCLUSIONS:** The CCS, FCS, BCS and DS are better predictors in modelling AD progression on a higher number of variables including medical costs, caregivers' burden and caregivers QoL than the MMSE.

PMH59

EVALUATION OF THE EFFECT OF ARIPIPRAZOLE ON QUALITY OF LIFE IN PATIENTS WITH SCHIZOPHRENIA IN A PROSPECTIVE, MULTICENTRE, OPEN-LABEL STUDY

Bervoets C[1], Constant E[2], Sabbe B[1], Morrens M[1], Vansteelandt K[3], De Patoul A[4], Pitsi D[5], Halkin V[6], Loze JY[7], Peuskens J[8]

[1]University Antwerp, Antwerp, Belgium; [2]UC Louvain, Bruxelles, Belgium; [3]KU LEUVEN, Kortenberg, Belgium; [4]BMS, Bruxelles, Belgium; [5]BMS, Bruxxelles, Belgium; [6]Bristol-Myers Squibb, Braine-l'Alleud, Belgium; [7]Otsuka Pharmaceutical Co., Ltd., Rueil-Malmaison, France; [8]KULeuven, Leuven, Belgium

OBJECTIVES: Aripiprazole has been claimed to have a beneficial effect on cognition with an emphasis on verbal functioning in schizophrenic patients. a prospective, multicenter, open-label study of Aripiprazole was set to evaluate the effect on quality of life, in relation to illness severity and cognitive functioning of a treatment with aripiprazole in schizophrenic patients. **METHODS:** A total of 363 schizophrenic patients from 18 to 65 years, treated with different typical and atypical antipsychotics or had no previous treatment, were switched to aripiprazole after a 2 week washout period. Quality of life was assessed by use of the Quality of Life Enjoyment and Satisfaction Questionnaire (QLESQ) at 3 separate test moments in a 12 weeks period.