PSY27
REAL-WORLD EVALUATION OF HEALTH CARE RESOURCE UTILIZATION AND COSTS IN PATIENTS WITH NEUROPATHIC PAIN ASSOCIATED WITH DIABETIC PERIPHERAL NEUROPATHY (DPNP) TREATED WITH PREGABALIN OR GABAPENTIN
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OBJECTIVES: To evaluate and compare changes in healthcare resource utilization and costs associated with the initiation of pregabalin or gabapentin in pDPN patients in a real-world setting. METHODS: A retrospective cohort study utilizing the MarketScan Commercial Claims and Encounters Database (2007-2009). Patients with a new prescription for pregabalin or gabapentin in 2008 (date of the prescription defined as index date) and ≥1 healthcare encounter with an IC-9 code for diabetic peripheral neuropathy (DPN; 250.6 or 357.2) within 30 days prior to the first prescription for pregabalin or gabapentin were identified and propensity score matched. Both cohorts were continuously enrolled for the 12 month pre- and post-index periods during which health care utilization and costs were assessed. Pre-to-post-index changes were compared between pregabalin and gabapentin using a difference-in-difference (DID) approach. RESULTS: 910 pregabalin patients (48.6% female; mean age 63.1±12.1 years) were matched to 910 gabapentin patients (48.8% female; mean age 62.0±12.3 years) in a 1:1 ratio. Other demographic and clinical characteristics were also comparable between cohorts, with the exception of US region. The pre- to post-index DID in resource utilization did not differ between the two cohorts including: number of office visits per patient (P=0.66), number of ER visits (P=0.78), number of inpatient stays (P=0.92), average inpatient length of stay per hospitalization (P=0.79), number of total prescriptions filled (P=0.63). The DID of total healthcare costs per patient were non-significant with pre- to post-index increases of $3,081 in pregabalin patients and $4,683 in gabapentin patients (P=0.50).
CONCLUSIONS: Patients with pDPN initiating pregabalin or gabapentin experienced comparable changes in healthcare resource utilization and costs. These results suggest overall cost neutrality between pregabalin and gabapentin.

PSY28
FACTORS LEADING TO HIGH HEALTH CARE EXPENDITURE AMONG OBESE INDIVIDUALS IN THE UNITED STATES
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OBJECTIVES: To identify the factors associated with high healthcare expenditure among obese individuals in the United States. METHODS: Analytical sample consisted of obese adults 20 years or older with BMI≥30. Total yearly expenditures for obese adults were obtained from 2007 Medical Expenditure Panel Survey data. Observations with total yearly healthcare expenditure greater than 90th percentile were classified as high healthcare expenditure and coded yes/no to be used as the dependent variable. Independent factors selected according to the Anderson’s Behavioral Model were age, gender, race, MSA, region, education, poverty category, source of payment, usual source of care, MSA, education, general health status, mental health status and mortality risk status. ‘Surveylogistic’ regression was used to determine the predictors of high expenditures. RESULTS: Descriptive analysis show that adults with high healthcare expenditure were whites (74.23%), had mid-to-high income (60%), lived in MSA (79%), had usual care provider (95%), private insurance (93%), and a high demand for long-term safe and effective weight-loss agents. While 3 new obesity therapies underwent FDA review in 2010, little is known about their utilization of available weight-loss drugs. The objective of this analysis is to describe the real-world prescription patterns, adherence, and persistence of weight-loss pharmacotherapy in the United States. METHODS: A retrospective cohort analysis was conducted using Medco’s integrated claims database to evaluate adult patients initiating weight-loss pharmacotherapy between May 2007-October 2010. Eligibility criteria included new weight-loss drug prescription claims (no weight-loss therapy prescriptions 6 months prior to index claim date) and continuous eligibility for 6 months pre- and 14 months post-index claim date. Patients on drugs for ≥12 months, ≥3000 distinct patients per drug, all-cause medical claims for each patient (Annual Medication Possession Ratio, MPR, consistency (allowing a 45 day gap), and comorbid therapy. RESULTS: Analyses included 91,160 patients receiving five drugs: phentermine (N=67434), sibutramine (N=13438), orlistat (N=8047), phendimetrazine, and 3.1% (phentermine, high-phendimetrazine) of patients. Mean MPR was 0.41±0.20. Persistence at 3, 6, and 12 months respectively from 26%-38% (low-phendimetrazine, high-phentermine), 9%-16% (low-phendimetrazine, high-sibutramine), and 9%-13% (low-phendimetrazine, high-phentermine). CONCLUSIONS: Weight-loss pharmacotherapies in the United States were prescribed by primary care physicians to predominantly younger, female patients on comorbid therapy for common obesity-related conditions. Adherence and persistence to therapy is low, even over short-term exposure, although treatment duration may extend beyond recommendations in some cases (eg. phentermine).

PSY31
HEMOPHILIA A: PATIENT IMPACT AND ECONOMIC BURDEN OF THE DISEASE
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OBJECTIVES: Hemophilia A is a rare but serious bleeding disorder caused by a blood clotting factor VIII (FVIII) deficiency. To examine the impact of hemophilia A and replacement FVIII therapies from a humanistic and economic perspective, a targeted literature review was conducted. METHODS: Searches were conducted in MEDLINE® and the National Health Service Economic Evaluation Database, using disease-specific search terms and economic-related keywords. Results included articles published from January 2000-January 2010 (inclusive). From 653 abstracts retrieved, 34 full-text articles were selected for detailed consideration. RESULTS: Findings revealed increased mortality rates and decreased life expectancy among people with hemophilia A, compared with the general population. This is largely attributed to the transmission of blood-borne viruses (e.g. HIV and Hepatitis-C) due to use of plasma-derived FVIII (pdFVIII) concentrates. Improvements in viral attenuation processes plus donor screening practices for pdFVIII products have reduced the risks of viral transmission, but risk from non-enveloped viruses and other unknown pathogens still exists. Newly developed recombinant FVIII therapies minimize these risks; however, such therapies are not currently widely available globally. All available FVIII therapies use demanding regimens due to use of plasma-derived FVIII (pdFVIII) concentrates. In managing the pharmacy benefit, decision-makers may want to consider the financial implications of these FVIII differences. Systemic Disorders/Conditions – Patient-Reported Outcomes & Preference-Based Studies

PSY30
A REAL-WORLD EVALUATION OF ADHERENCE AND PERSISTENCE OF WEIGHT-LOSS PHARMACOTHERAPY IN THE UNITED STATES: 2007-2010
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OBJECTIVES: There is a rapidly growing obesity and overweight epidemic in the US, and a high demand for long-term safe and effective weight-loss agents. While 3 new obesity therapies underwent FDA review in 2010, little is known about their utilization of available weight-loss drugs. The objective of this analysis is to describe the real-world prescription patterns, adherence, and persistence of weight-loss pharmacotherapy in the United States. METHODS: A retrospective cohort analysis was conducted using Medco’s integrated claims database to evaluate adult patients initiating weight-loss pharmacotherapy between May 2007-October 2010. Eligibility criteria included new weight-loss drug prescription claims (no weight-loss therapy prescriptions 6 months prior to index claim date) and continuous eligibility for 6 months pre- and 14 months post-index claim date. Patients on drugs for ≥12 months, ≥3000 distinct patients per drug, all-cause medical claims for each patient (Annual Medication Possession Ratio, MPR, consistency (allowing a 45 day gap), and comorbid therapy. RESULTS: Analyses included 91,160 patients receiving five drugs: phentermine (N=67434), sibutramine (N=13438), orlistat (N=8047), phendimetrazine, and 3.1% (phentermine, high-phendimetrazine) of patients. Mean MPR was 0.41±0.20. Persistence at 3, 6, and 12 months respectively from 26%-38% (low-phendimetrazine, high-phentermine), 9%-16% (low-phendimetrazine, high-sibutramine), and 9%-13% (low-phendimetrazine, high-phentermine). CONCLUSIONS: Weight-loss pharmacotherapies in the United States were prescribed by primary care physicians to predominantly younger, female patients on comorbid therapy for common obesity-related conditions. Adherence and persistence to therapy is low, even over short-term exposure, although treatment duration may extend beyond recommendations in some cases (e.g. phentermine).
tially more expensive than on-demand treatment, is associated with greater clinical efficacy and improved long-term outcomes, which may lead to cost savings over a patient’s lifetime. **CONCLUSIONS:** Hemophilia A is associated with considerable humanistic and economic burden. Substantial unmet needs remain among hemophilia A patients with regard to the safety, convenience and global access to FVIII therapy.

**PSY32**

**HOW DO MINIMALLY IMPORTANT DIFFERENCES VALUE OUTCOMES?**

Sub JK, Doctor J

**OBJECTIVES:** To assess the functional form of the minimally important difference (MID) and the item parameter estimates (slope and item characteristic curve) of the PROMIS Fatigue Item Bank (www.nihpromis.org). **RESULTS:** Item parameter estimates of the PROMIS Fatigue item bank were estimated using multi-group IRT analysis. The results indicate that the PROMIS Fatigue item bank appears to contain a factor that is consistent with the original PROMIS conceptual model. Subscales of individuals with FM, the PROMIS Fatigue item bank appears to contain a factor that is consistent with the original PROMIS conceptual model.

**METHODS:** A total of 125 subjects participated in the study. The mean MID values were 5.53 (SD = 2.56), and 13.073 (SD = 6.491) for 29, 36, and 43 lb overweight, respectively. The normalized mean MID values were 0.323 (SD = 0.138), 0.311 (SD = 0.145), and 0.304 (SD = 0.151) for 29, 36, and 43 lb overweight, respectively. The results of WUL’s estimate were statistically significant (p = 0.2807). Moreover, one-way within-subjects resulted in no effect of the different body weights on the MID at the significance level of α=0.01.

**CONCLUSIONS:** The normalized mean MIDs from three different body weights were calculated. These estimates can be used to construct improved efficient short-forms or for application in computer adaptive testing.

**PSY35**

**VALIDATION OF THE LUPUS IMPACT TRACKER**

Jolly M1, Kosinski M1, Garrison CP2, Jhingam PM3, Miklatousa RA1, Dennis O1, Wallace DJ1, Clarke AE1, Parke A1, Dooley MA1

**OBJECTIVES:** To derive a short form questionnaire from the LupusPRO®, for use in daily practice to assess the impact of SLE. **METHODS:** A total of 1,207 respondents completed the survey. IRT item parameter estimates (slope and item characteristic curve) and item information functions were obtained for all 95-items. Mean score across all items for the FM sample was 3.68 compared to the PROMIS mean of 2.12. Maximum information function was 2.92 for 29/95 items in the PROMIS sample, compared to only 2.95 items in the PROMIS sample, indicating differences in both discriminate ability as well as the difficulty of items for a FM specific population. **CONCLUSIONS:** Disease specific item level calibrations of PROMIS items can be estimated. Using the same Grim methodology as PROMIS we were able to calculate revised item parameter estimates and information functions. These estimates can be used to construct improved efficient short-forms or for application in computer adaptive testing.

**PSY36**

**DEVELOPMENT OF THE LUPUS IMPACT TRACKER: A TOOL FOR PATIENTS AND PHYSICIANS TO ASSESS AND MONITOR THE IMPACT OF SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)**

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**OBJECTIVES:** To derive a short form questionnaire from the LupusPRO®, for use in daily practice to assess the impact of SLE. **RESULTS:** Item parameter estimates were estimated using multi-group IRT analysis. The results indicate that the PROMIS Fatigue item bank appears to contain a factor that is consistent with the original PROMIS conceptual model. Subscales of individuals with FM, the PROMIS Fatigue item bank appears to contain a factor that is consistent with the original PROMIS conceptual model.

**METHODS:** A total of 125 subjects participated in the study. The mean MID values were 5.53 (SD = 2.56), and 13.073 (SD = 6.491) for 29, 36, and 43 lb overweight, respectively. The normalized mean MID values were 0.323 (SD = 0.138), 0.311 (SD = 0.145), and 0.304 (SD = 0.151) for 29, 36, and 43 lb overweight, respectively. The results of WUL’s estimate were statistically significant (p = 0.2807). Moreover, one-way within-subjects resulted in no effect of the different body weights on the MID at the significance level of α=0.01.

**CONCLUSIONS:** The normalized mean MIDs from three different body weights were calculated. These estimates can be used to construct improved efficient short-forms or for application in computer adaptive testing.

**REFERENCES:**

1. University of Michigan, Ann Arbor, MI, USA, 2Forest Research Institute, Jersey City, NJ, USA

**OBJECTIVES:** The NIH roadmap project “Patient-Reported Outcomes Measurement Information System” (PROMIS) provides a basis for measuring symptoms --includ- ing fatigue-- associated with chronic diseases. However, information on use of PROMIS with Fibromyalgia (FM) patients is limited. This study sought to re-estimate the Item Response Theory (IRT) item parameter estimates for each of the 95-items included in the PROMIS Fatigue item bank using responses from individuals with FM. It is unknown whether the parameter estimates differ among a sample of FM patients from that of the broader population used in the initial PROMIS item calibrations.

**METHODS:** An Internet-based survey was conducted with individuals with FM. Participants had to be ≥18 years and diagnosed with FM by a physician. Respondents were randomized into one of three cohorts. IRT analyses was performed using both a polychoric correlation matrix with Mplus and a full-information approach using ORDFAC. Comparisons were made using the Akaike Information Criteria (AIC) and Bayesian Information Criterion (BIC). Models chosen based on AIC and BIC were then validated using Cronbach’s alpha. A total of 125 subjects participated in the study. The mean MID values were 5.39 (SD = 2.51), 11.19 (SD = 5.24), and 13.07 (SD = 6.491) for 29, 36, and 43 lb overweight, respectively. The normalized mean MID values were 0.323 (SD = 0.138), 0.311 (SD = 0.145), and 0.304 (SD = 0.151) for 29, 36, and 43 lb overweight, respectively. The results of WUL’s estimate were statistically significant (p = 0.2807). Moreover, one-way within-subjects resulted in no effect of the different body weights on the MID at the significance level of α=0.01.

**CONCLUSIONS:** The normalized mean MIDs from three different body weights were calculated. These estimates can be used to construct improved efficient short-forms or for application in computer adaptive testing.

**REFERENCES:**

1. University of Michigan, Ann Arbor, MI, USA, 2Forest Research Institute, Jersey City, NJ, USA