PMH71

HEALTH CARE RESOURCE UTILIZATION (HRU) AND DIRECT MEDICAL EXPENDITURES (DME) FOR ADULT WOMEN WITH ANXIETY DISORDERS (AD) IN THE UNITED STATES IN 2006 USING MEDICAL EXPENDITURES PANEL SURVEY (MEPS)

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OBJECTIVES: Estimate HRU and DME for adult women with AD. **METHODS:** A retrospective cross-sectional case-control design using 2006 MEPS. Females > 17 years who reported AD were selected. A control group was created using propensity score matching. The data was fitted to poisson (P), negative binomial (NB), zero-inflated poisson (ZIP), and zero-inflated negative binomial (ZINB) models. A plot of residuals was examined and the plot closest to zero was selected as the best fitting model. To calculate the HRU attributable to AD, the unadjusted mean number of visits for those without AD was multiplied by the regression coefficient for AD from the multivariate regression minus the unadjusted mean number of visits for those without AD. To estimate DME, a generalized linear model (GLM) was estimated with a Park's test to select the appropriate variance function after which the incremental expenditure was calculated by the method of recycled predictions. All analyses incorporated the MEPS sampling and variance adjustment weights to ensure nationally representative sample. All the component expenditures were summed and multiplied by the number of females who reported AD in 2006 to get the national estimate of direct medical expenditures. **RESULTS:** The annual number of inpatient, emergency room, outpatient, and office based visits attributable to AD was 0.03, 0.07, 0.34, AND 4.3 respectively. There were 0.05 home health days and 8.47 prescriptions including refills obtained by adult women with AD. The estimated national annual direct COI associated with AD among adult women was $26.52 billion. This was calculated by multiplying the per-person total incremental medical expenditure associated with AD among female adults ($2,143.16) with the prevalence of AD (12,374,189). **CONCLUSIONS:** Inpatient expenditures accounted for the largest proportion of DME followed by office based and prescription expenditures. Adult women with AD have a significant societal burden.

PMH72

ANTIDEPRESSANT PERSISTENCE AND ASSOCIATED HEALTH CARE EXPENDITURES IN CHILDREN WITH DEPRESSION

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OBJECTIVES: The objectives of the study were to examine persistence and factors associated with persistence to antidepressant medications in depressed children and adolescents and to evaluate health care expenditures across persistent patients and non-persistent patients. **METHODS:** Medical Expenditure Panel Survey (MEPS) data from the years 2002-2007 were used for the analysis. The study sample consisted of depressed children and adolescents taking an antidepressant. Multiple logistic regression analysis was conducted to examine factors associated with persistence, after controlling for various independent variables like the predisposing, enabling and need factors chosen on the basis of Anderson Behavioral Model, and controls for year and timeframe. Linear regression models, containing log of prescription drug expenditures and ambulatory expenditures as the dependent variables, were used to evaluate the expenditures. Unweighted statistical analysis was performed due to small sample cell size. **RESULTS:** Analytical sample consisted of 281 children and adolescents using antidepressants. Approximately 53% of the children and adolescents initiated on the antidepressant therapy were not persistent. Social limitation was found to be a significant predictor increasing persistence. Switching was prevalent in 16% of the children and adolescents. Analysis of expenditures revealed that being persistent led to a 2.5 times increase in the prescription drug expenditures, with no impact on ambulatory care expenditures. **CONCLUSIONS:** Over half of the patients on antidepressant therapy were not persistent. Although persistence of antidepressant therapy did not translate into reduction in ambulatory expenditures, it may play a role in clinical and humanistic outcomes.

PMH73

RETROSPECTIVE ANALYSIS OF THE IMPACT OF PERSISTENCE ON HEALTH CARE CHARGES AMONG OPIOID-DEPENDENT PATIENTS TREATED WITH BUPRENORPHINE/NALOXONE USING AN INSURANCE DATABASE IN THE UNITED STATES

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OBJECTIVES: Buprenorphine/naloxone (Suboxone®, Reckitt-Benckiser) is recommended for treating opiate addiction. Clinical guidelines do not specify the minimum duration of treatment required to achieve long-term remission. This study evaluated the impact of persistence on resource utilisation and healthcare charges. **METHODS:** This retrospective study used a US insurance claims database. It included patients with a BUP/NAL claim, not previously treated with buprenorphine, with at least one repeat claim after 30 days. Discontinuation was defined as absence of BUP/NAL claim for 90 days. Healthcare charges over 12 months were compared between persistent and non-persistent patients, adjusting on baseline characteristics (demographics, comorbidities, treatment, and resource utilisation before index date). Charges before and after discontinuation were compared using generalized linear models with repeated observations. **RESULTS:** Of 6868 patients with an incident claim of BUP/NAL, 42.4% appeared to be short-term users and were excluded. Among the remaining 3955 patients, 1287 were followed for at least one year. The Kaplan-Meier estimate of the probability of continuing treatment over 12 months was 61.2%. No significant predictors of discontinuation were identified except age and initial dose. The 12-month persistent cohort had lower mean total charges compared to non-persistent patients ($22,033 vs. $30,518; p=0.0012 adjusting on baseline characteristics). Among non-persistent patients, total charges reached a maximum during the first trimester following discontinuation (+63% compared to period from 6 to 4 months before discontinuation, p<0.0001), and were non-significantly higher in the second trimester after discontinuation compared to before discontinuation. Main drivers of excess charges were hospitalization and outpatient visits. **CONCLUSIONS:** Among long-term users of BUP/NAL, a substantial proportion discontinued treatment within 12 months. This analysis showed that non-persistence was associated with higher charges and evidence was consistent with a causal relationship between discontinuation and increased charges. However, identifying causes of discontinuation and means to improve persistence using claims data is challenging.

PMH74

UTILIZATION, PRICE AND SPENDING TRENDS FOR SEROTONIN–NOREPINEPHRINE REUPTAKE INHIBITORS IN THE UNITED STATES MEDICAID PROGRAM: 1991-2009

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OBJECTIVES: Serotonin–norepinephrine reuptake inhibitors (SNRIs), comprising arelatively new class of antidepressant drugs, have multiple approved indicationssuch as major depressive disorder and fibromyalgia. The objectives of this studywere to (1) describe the trends in drug utilization, spending, and price for the U.S.Medicaid program and (2) analyze the change in SNRI market share in the marketfor all antidepressants, including as well selective serotonin reuptake inhibitors andtricyclic antidepressants. **METHODS:** A retrospective, descriptive analysis was performed using the national Medicaid pharmacy claims database, which has information on outpatient prescription claims. Quarterly prescription counts and reimbursement amounts were calculated for each of the SNRIs (branded or generic) reimbursed by Medicaid from 1994 quarter 1 through 2009 quarter 4. Average per-prescriptions pending (implicit price) was found by dividing reimbursement by the number of prescriptions. **RESULTS:** Until 2009, venlafaxine was the most prescribed SNRI at which time it was topped in utilization by duloxetine. In 2009, Medicaid spent $159 million and $169 million for venlafaxine and duloxetine, respectively, for 1.00 and 1.07 million prescriptions. The price of venlafaxine has increased over time (the price in 2009 was almost 3 times the price in 1998). Utilization of the new extended-release formulation of venlafaxine (Effexor XR®) has risen exponentially, and this new formulation was 8 times more prescribed than its predecessor in 2009. After 2008, two new SNRIs (Pristiq® and Savella®) were marketed, but their market shares were still very small at the end of 2009. In total, Medicaid spent $342 million for 2.20 million prescriptions for SNRIs in 2009. The SNRIs as a class represented 20% of total Medicaid reimbursement for antidepressants at the end of 2009. **CONCLUSIONS:** Increased utilization may be due to multiple approved indications. Very little price competition is observed between brands or between brand andgeneric venlafaxine.

PMH75

PSYCHIATRIC MORBIDITY AND BURNOUT AMONG HOSPITAL PHYSICIANS AND NURSES: ASSOCIATION WITH PERCEIVED JOB-RELATED FACTORS

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OBJECTIVES: To evaluate psychiatric morbidity and burnout among physicians and nurses of a general hospital in central Italy, examining the association with perceived job-related factors. **METHODS:** Anonymous questionnaires were distributed to all 323 hospital physicians and 609 nurses of a non-profit health organisation in Rome, Italy. Standardised instruments were used to evaluate psychiatric morbidity (General Health Questionnaire), burnout (Maslach Burnout Inventory) and perceived job-related factors. Stepwise logistic regression was used to examine the association between job-related factors, psychiatric morbidity and burnout, controlling for demographic factors. **RESULTS:** Questionnaires were returned by 155 physicians and 216 nurses (overall response rate 40%). Estimated prevalence of psychiatric morbidity was 25% among physicians and 36.9% among nurses. Burnout on the emotional exhaustion scale affected 38.7% of physicians and 46.4% of nurses. Personnel with emotional exhaustion was at higher risk of psychiatric morbidity (p<0.001). The likelihood of psychiatric morbidity among physicians was increased by perceived insufficient recognition of personal commitments by the unit's head (OR=4.21; 95%CI 1.2-15.1; p=0.027), insufficient managerial ability of the unit's head (OR=3.45; 95%CI 1.2-10.1; p=0.023), unsatisfactory communication (OR=5.30;95%CI 1.6-17.6; p=0.006). Among nurses, psychiatric morbidity was associated with insufficient ability of the unit's head to solve conflicts, insufficient decisional power in relation to responsibilities, insufficient economic rewards and career possibilities, working in surgery. Similar job-related factors were associated also with emotional exhaustion. **CONCLUSIONS:** Psychiatric morbidity and burnout were relatively high, particularly among nurses. Specific job-related factors were associated with psychiatric morbidity and burnout. Improving these aspects is important for the well-being of hospital staff and the quality of patient care.

PMH76

PHARMACIST AND PHARMACY STAFF KNOWLEDGE AND ATTITUDES TOWARDS SUICIDE AND SUICIDE PREVENTION AFTER A NATIONAL VA TRAINING PROGRAM

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OBJECTIVES: To evaluate US Department of Veterans Affairs (VA) training in suicide prevention on pharmacists' and pharmacy staff's knowledge of and attitudes