Objectives: Prescribing patterns in bipolar disorder are complex and varied. The objective of this analysis was to identify how various patterns of treatment relate to direct costs.

Methods: The PharMetrics Integrated Outcomes Database of adjudicated medical and pharmaceutical claims for over 3 million patients from 11 U.S. health plans was utilized. 3,648 bipolar patients were identified based on the following criteria: two claims with ICD-9-CM diagnosis for bipolar disorder (296.0, 296.1, 296.4–296.8) that were not accompanied by a unipolar depression claim on the same day, age between 10 and 64, and 1 year of continuous eligibility prior to and following the initial bipolar diagnosis. Thirteen months of data were analyzed (1 month pre diagnosis, 12 months post diagnosis).

Results: Eighty-two percent of patients (2992) were treated with medication. For drug treated patients, on average, the total cost over the 13-month period is $12,416 per patient. Of this amount, 65% of the costs ($8018) are bipolar-related; with a 5:1 ratio of medical services related costs ($6,691) to medication costs ($1327). Patients initiating on poly-pharmacy incur higher total bipolar costs ($10,137) than their cohorts who initiated on mono therapy ($6,683). As expected, as the number of drugs used increases, total bipolar costs steadily rise with the average being $3,883 for one drug, $11,419 for four drugs and $19,040 for 9 drugs. Additionally, as the number of treatment regimes per patient increases, so do costs. Total bipolar costs for patients having only one treatment regime average $3,528, whereas patients experiencing 3 switches (four regimes) average $12,553. Conclusion: Many factors are related to the cost of treating bipolar patients. Further investigation needs to be conducted in order to understand which of these factors might be cost containment opportunities.
bipolar) increased overtime with monthly average of $1432 (SD 2551). In addition, total cost was also significantly associated with general comorbidities like diabetes mellitus (OR = 1.34; 95% CI 1.14–1.56), cancer (OR 1.73; 1.07–2.63), hypertension (OR 1.63; 1.41–1.88), COPD (OR 1.41; 1.35–1.96), cerebrovascular disease (OR 1.94; 1.59–2.35), and ischemic heart disease (OR 1.89; 1.53–2.34). CONCLUSION: Bipolar related cost is associated with bipolar I disorder, psychological disorders, and use of antipsychotics therapy. In addition, the total health care cost is significantly associated with general clinical comorbidities.

PMH38

EPILEPSY PATIENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER: PREVALENCE AND COST OF CARE

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OBJECTIVE: The objective is to quantify the epidemiological patterns and medical cost of patients treated for both Attention-Deficit/Hyperactivity Disorder (ADHD) and epilepsy (ADHD/epilepsy). METHODS: We analyzed a de-identified administrative claims database (approximately 600,000 lives under the age of 65, 1998 to 2001) for commercially insured populations to assess the treated prevalence rate as well as the incremental cost of epilepsy among ADHD patients 18 years old or younger. These measures were computed for the ADHD patients treated for epilepsy (n = 64) compared to a control group of epilepsy patients without ADHD (“non-ADHD”) of the same age (n = 107) in a random sample. We investigated the validity of the results using a similar, supplemental database. RESULTS: The treated prevalence rate of epilepsy is 1.5% among ADHD patients versus 0.5% among non-ADHD patients. The odds ratio of epilepsy treatment given an ADHD diagnosis is 3.2. ADHD/epilepsy patients are treated for mental disorders 3.6 times more than non-ADHD patients (41.0% vs. 11.4% of patients, respectively, p < 0.0001). The average annual costs are $4365 for ADHD/epilepsy patients and $3568 for controls; the difference is not statistically significant. These costs were primarily for non-mental health diagnoses. However, the cost of mental health treatment of ADHD/epilepsy patients was 15 times higher than that for non-ADHD patients (p = 0.01). Patterns of results were similar in the second database. However, because this study relied on insurance claims data, the findings apply to clinical practice as opposed to tightly diagnosed research samples. CONCLUSIONS: Epilepsy is more common among ADHD patients than the general population. ADHD/epilepsy patients use more health care services and cost more than epilepsy-only patients.

PMH40

COST-EFFECTIVENESS OF RITALINTM VERSUS ADDERALLTM FOR FIRST-LINE TREATMENT OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN CHILDREN

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OBJECTIVE: Although it is widely accepted that stimulants are used as the treatment of choice, many decision makers do not have appropriate information regarding an optimal first-line agent in treating this patient population. We evaluated the cost-effectiveness in choosing methylphenidate (RitalinTM) or amphetamine/ dextroamphetamine (AMP/DEX) mixed salts (AdderallTM) as a first-line agent in the treatment of ADHD. METHODS: Decision-tree analysis was performed using weighted utility and weighted cost outcomes after basing decisions on three treatment arms: Initiation with methylphenidate, initiation with AMP/DEX, or no treatment. Data inputs such as efficacy rates, side effects, compliance rates, and school administration rates were extracted from a literature review. A societal perspective was used to estimate outcomes in terms of incremental cost and incremental utilities over the time horizon of one year. RESULTS: In the base case analysis, AMP/DEX dominates both methylphenidate and using no treatment. The ICE ratio for AMP/DEX versus no treatment is $21,931/ QALY. Total costs for the AMP/DEX arm were $2999 with a QALY score of 0.889. The methylphenidate arm reports total costs of $3043 and a QALY score of 0.839, and those who received no treatment achieved total costs of $993 and a QALY score of 0.798. Sensitivity analysis shows that major drivers of this conclusion...