PMH26

A STUDIES-BASED PRIVATE INSURANCE BUDGET IMPACT ANALYSIS OF BUPRENORPHINE / NALOXONE FILM AND TABLET FORMULATIONS

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OBJECTIVES: Buprenorphine/naloxone (BUP/NAL) combination for the treatment of opioid dependence is available in Film (since September 2010) and tablet formulations. Earlier studies showed that treatment with film leads to better persistence and lower health care costs compared to BUP/NAL tablet. Higher costs were related to higher relapse and reinitiation rates found in the tablet treated groups. Based on these scientific analyses, a budget impact analysis was built to assess the health care expenditures related to new patients entering treatment in scenarios characterized by different market shares of the two BUP/NAL formulations. **METHODS:** A Markov model was structured tracking a cohort of patients initiating opioid dependence treatment with BUP/NAL film or BUP/NAL tablet through successive phases of treatment: initiation, maintenance, discontinuation, off treatment and reinitiation. Transition probabilities and resource utilization were estimated from a private insurance claims database. The total health care expenditure over five years was predicted for 1,000,000 lives for the following scenarios: 1) 100% market share BUP/NAL film formulation, 2) 100% market share BUP/NAL tablet formulation broken between all BUP/NAL tablet formulations currently available in the market. **RESULTS:** In the first year, costs of medication acquisition were found to be 14.4% (-US$597,244) lower in the Scenario 1. Costs of laboratory tests were 71.9% (US$371,547) higher. Nevertheless, this difference was outweighed by lower costs of outpatient care (-4.7%) (-US$88,493), inpatient psychiatric care (-51.2%) (-US$1.8 million) and inpatient non-psychiatric care (-16.7%) (-US$703,780). Scenario 1 total health care costs were were19.7% (US$2.8 million) and 16.5% (US$17.2 million) lower in the first year and cumulatively over five years, respectively. **CONCLUSIONS:** Treatment with buprenorphine/naloxone film results in less health care resource utilization and lower total cost burden for private insurers when compared to treatment with buprenorphine/naloxone tablet.

PMH27

ESTIMATION OF THE EFFECT OF BUPRENORPHINE/NALOXONE DOSING IN PRIVATELY INSURED OPIOID-DEPENDENT PATIENTS IN THE UNITED STATES

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OBJECTIVES: Buprenorphine/naloxone (BUP/NAL) combination is a treatment for opioid dependence. The dose of BUP/NAL should be adjusted to a level that suppresses craving and opioid withdrawal symptoms and holds the patient in treatment. The objective of this study was to estimate the impact of BUP/NAL dosing on treatment persistence, resource utilization and health care charges among privately insured patients. **METHODS:** A retrospective cohort analysis was conducted on a private health insurance claims database (ClinformaticsTM DataMart) from January 2005 to November 2012. Patients were classified in two groups based on average daily dose using the median as cut-off value and matched according to baseline characteristics. Discontinuation was defined as a gap of at least 31 days without prescription renewal following the theoretical end date of the previous prescription. Resource use and related charges were calculated over the 12-month period after the date of treatment initiation. **RESULTS:** The median of the average daily dose was 15.7mg/day. The matching algorithm resulted in the selection of 1,949 patients in each group, with 64% of males, and an average age of 34 years. Patients in the high dose group had a 9% lower chance of discontinuation compared to patients treated with low dose, after adjustments (p=0.0278). The probability of psychiatric hospitalization in the year following the treatment initiation was 41% lower in the high-dose patients (p<0.0001) and health care charges were 23% lower (p=0.0061). **CONCLUSIONS:** Treatment duration was longer among patients treated with doses above 15.7mg/day. Despite higher pharmaceutical charges, patients treated with higher doses had significantly lower total health care charges in the 12 months after initiation related to lower rates of hospitalizations.

PMH28

ESTIMATION OF THE EFFECT OF BUPRENORPHINE/NALOXONE DOSING IN MEDICAID OPIOID-DEPENDENT PATIENTS

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OBJECTIVES: Buprenorphine/naloxone (BUP/NAL) combination is a treatment for opioid dependence. The dose of BUP/NAL should be adjusted to a level that suppresses craving and opioid withdrawal symptoms and holds the patient in treatment. The objective of this study was to estimate the impact of BUP/NAL dosing on treatment persistence, resources utilization and health care costs among Medicaid population. **METHODS:** A retrospective cohort analysis was conducted on Medicaid insurance claims database (TruvenHealth MarketScan^R Medicaid) from January 2007 to June 2012. Patients were classified in two groups using an average daily dose of 15mg/day as cut-off value, and matched according to baseline characteristics. Discontinuation was defined as a gap of at least 31 days without prescription renewal following the theoretical end date of the previous prescription. Resource use and related costs were calculated over the 12-month period after the date of treatment initiation. **RESULTS:** The matching algorithm resulted in the selection of 1,041 patients in each group, with 27% males and an average age of 34 years. Patients in the high dose group had an 11% lower chance of discontinuation compared to patients in the low dose group, after adjustments (p=0.0377). The number of days of psychiatric hospitalization in the following year after treatment initiation was 17% lower in the high dose patients (p=0.0218) and there were no differences in total health care costs (p=0.6486). **CONCLUSIONS:** Treatment duration was better among patients treated with doses above 15mg/day. Despite higher medication costs associated with higher doses, total health care costs were similar between the two groups due to lower health care resource use.

PMH29

HEALTH CARE RESOURCE UTILIZATION AND DIRECT MEDICAL COSTS FOR SCHIZOPHRENIA PATIENTS INITIATING TYPICAL OR ATYPICAL ANTIPSYCHOTICS IN TIANJIN, CHINA

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OBJECTIVES: To compare the psychiatric-related health care resource utilization and direct medical costs of schizophrenia patients initiating typical or atypical antipsychotics in Tianjin, China. **METHODS:** Data were obtained from the Tianjin Urban Employee Basic Medical Insurance database (2008-2010). Adult schizophrenia patients with ≥1 prescription of antipsychotics after a ≥90-day washout period (during which patients didn't receive any antipsychotics) and 12-month continuous enrollment after first prescriptions were included. Psychiatric-related resource utilization and direct medical costs during 12-month follow-up period were estimated. Chi-square test (for categorical) and two-sample t-test (for continuous) were conducted to detect differences between typical and atypical initiators. Logistic regressions controlling for demographics, mental health comorbidities, concomitant medications, prior resource utilization and prior medical costs were applied to compare resource utilization, and ordinary least square (OLS) linear regression to estimate cost differences. One-to-one propensity score matching was conducted as a sensitivity analysis. **RESULTS:** A total of 1131 patients initiated with either typical (N=483) or atypical antipsychotics (N=648). Over the 12-month follow-up, compared with the typical initiators, the atypical initiators had a significantly lower rate of hospitalization (45.8% vs. 56.7%, p<0.001), consistent with logistic regression result (OR=0.58, p<0.001). Mean (SD) annual antipsychotic costs for the atypical initiators were higher than the typical initiators [$288 (431) vs. $63 (216), P<0.001]. However, mean annual inpatient non-medication costs were significantly lower [atypical vs. typical $1213 (2061) vs. $1699 (2346), P<0.001]. The total annual costs were not significantly different between atypical and typical initiators [$1661 (2224) vs. $1892 (2465), p=0.100], consistent with the results from OLS (atypical-typical=-$229, p=0.091) and propensity score matching [$1711 (2240) vs. 1868 (2450), p=0.341]. **CONCLUSIONS:** Although antipsychotic costs were higher for patients initiated on atypical antipsychotics, atypical initiators had similar total annual direct medical costs compared to typical initiators, mainly due to a lower rate of atypical initiators being hospitalized.

PMH30

THE HUMANISTIC AND ECONOMIC BURDEN OF BULIMIA NERVOSA AND BINGE EATING DISORDER: A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: To perform a systematic review of humanistic and economic burden of bulimia nervosa (BN) and binge eating disorder (BED). **METHODS:** A systematic literature search of English-language articles was conducted in June 2013 using Medline, Embase, PsycINFO, PsycARTICLES, Academic Search Complete, CINAHL Plus, Business Source Premier and Cochran Library. Cost data were inflated and converted to 2012 US$ purchasing power parities. **RESULTS:** Forty-seven studies were included; 31 evaluated BN, 23 BED. Health-related quality of life (HRQoL) was reported in 29 (17 for BED), health care utilizations and/or health care costs in 21 studies (5 for BED). Diagnoses were made using DSM-IV in 27 studies. Patient characteristics differed between BN and BED: for BN and BED respectively mean age of patients varied between 17 to 32 years and 33 to 45 years, percentage of female 95% to 100% and 73% to 100%, mean body mass index 20 to 24 kg/m^2 and 25 to 54 kg/m^2. BN and BED greatly affected patients' HRQoL. Compared to BN, BED showed lower HRQoL, although not statistically significant, in various domains of HRQoL (physical functioning, physical and emotional role). BN and BED appear to be associated with higher use of health services (hospitalization, outpatient- and emergency department visits) compared to individuals without eating disorder or other Axis I psychiatric disorder. Average annual direct health care costs in BN and BED ranged from $1,160 to $9,997 and $2,923 to $4,033, respectively (in Finland, Canada, Germany and the United States). In BN, mean binge eating related food costs were $1,771 per year which was 32.7% of total food costs. **CONCLUSIONS:** SBN and BED markedly impair HRQoL. Both BN and BED are predictors of increased health care utilization, direct and indirect hβealth care costs. The limited literature warrants further research to better understand the humanistic and economic burden of BED.

PMH31

COST-EFFECTIVENESS OF GUANFACINE EXTENDED-RELEASE VERSUS ATOMOXETINE FOR THE TREATMENT OF CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN CANADA

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OBJECTIVES: Attention-deficit/hyperactivity disorder (ADHD) is a common childhood psychiatric disorder, with worldwide prevalence varying from 2.2 to 17.8%. Although stimulants are the recommended first-line treatment for ADHD, approximately 30% of children with ADHD do not have adequate response to the stimulants and may require alternative treatments to control their symptoms. Atomoxetine (ATX) and guanfacine extended-release (GXR) are once-daily, non-stimulants intended for the treatment of ADHD. The objective was to assess the cost-effectiveness of GXR compared to ATX in the treatment of children and adolescents with ADHD, from a Canadian perspective. **METHODS:** A Markov model that included the following health states: treatment response, no response, and treatment discontinuation was developed. Transition probability from non-