PMH65

IMPACT OF ATYPICAL AGENTS ON OUTCOMES OF CARE IN SCHIZOPHRENIC PATIENTS

Joyce AT[1], Harrison D[2], Ollendorf DA[1]
[1]PharMetrics, Watertown, MA, USA; [2]Pfizer Inc, New York, NY, USA

OBJECTIVE: To compare persistence, compliance, and psychiatric treatment costs in patients initiating atypical therapies. **METHODS:** Medical and pharmacy claims data were used to compare persistence (days of therapy between first and last prescription, allowing therapy gaps <90 days); compliance (days of medication supplied with total days on therapy); and treatment costs in schizophrenic adults with claims for atypicals from March, 2001 to August, 2003 and enrollment for ≥six-months before and ≥12 months after therapy initiation. One-year psychiatric treatment costs were examined before and after therapy initiation. Differences in cost fluctuations were tested by univariate techniques. **RESULTS:** Persistence was approximately 30 days longer for patients receiving ziprasidone (n = 217; 228 days) than risperidone (n = 831; 193 days) or olanzapine (n = 762; 201 days). Compliance was significantly (P < 0.01) higher among patients receiving ziprasidone (87%) compared with other treatments (78%–80%). Ziprasidone patients had significantly larger decreases (–$6866) in mean annual psychiatric-related costs following therapy initiation than those on risperidone (–$3353; P = 0.0116) or olanzapine (–$4764; P = 0.0021). The primary driver of cost savings was reduced hospitalization after treatment initiation. **CONCLUSION:** Patients initiated on ziprasidone had longer persistence, better compliance, and greater decreases in psychiatric-related costs than those initiated on other atypicals.

MUSCULAR—SKELETAL DISORDERS INCLUDING CARPAL TUNNEL SYNDROME

PMS1

INCREMENTAL DIRECT COST OF BACK PAIN IN THE UNITED STATES IN 2001

Balu S, Thomas III J
Purdue University, West Lafayette, IN, USA

OBJECTIVES: Back pain is an expensive medical condition and direct medical costs associated with back pain are significant. Estimating resource utilization costs for diseases like back pain based on disease coding have the potential for under-estimation. The objective of this study was to determine direct costs due to back pain in the US population using an incremental cost approach. **METHODS:** Analysis of the 2001 Medical Expenditure Panel Survey (MEPS) was conducted. Patients who had back pain related physician visits or treatments during 2001 were identified using International Classification of Diseases (ICD-9) codes. Patients without a back pain diagnosis and without a claim for back pain were treated as controls. Least squares regression was used to estimate the incremental cost of back pain adjusting for age, gender, race, occupation, and co-morbidities using the Charlson co-morbidity index. Sample data was projected to the US population and 95 percent confidence limits for estimates were calculated using the Taylor expansion method. **RESULTS:** Prevalence of back pain in the US was 8.3% (26,167,199) of the total population. Total annual direct costs for back pain patients were $32,135,937,092 after adjusting for co-morbidities. Mean annual direct cost for a back pain patient was $4241.3 (95% CL $3890.8–$4591.8). Office-based medical provider visits (29.4%), in-patient visits (27.1%), and prescribed medicines (21.3%) were major cost centers for back pain patients. **CONCLUSIONS:** With direct medical costs estimated at more than $32.0 billion in 2001, back pain costs represent a significant amount of health care expenditures. The estimate obtained was more than twice the magnitude of earlier estimates based only on expenditures coded for back pain. Potential for disease cost under estimation may be reduced by using the incremental cost approach.

PMS2

EVALUATION OF AN AUTOMATED SYSTEM FOR PRIOR AUTHORIZATION—A COX-2 INHIBITOR EXAMPLE

Carroll NV[1], Smith JC[2], Berringer RA[3], Oestreich GL[4]
[1]Virginia Commonwealth University School of Pharm, Richmond, VA, USA; [2]Affiliated Computer Services, Richmond, VA, USA; [3]University of Pittsburgh, Pittsburgh, PA, USA; [4]Missouri Division of Medical Services, Jefferson City, MO, USA

OBJECTIVES: To evaluate the effectiveness of an automated prior authorization system (SmartPA) in 1) reducing utilization/expenditures of Cox-2 inhibitors; 2) increasing utilization/expenditures of Cox-2 substitutes (traditional nonsteroidal anti-inflammatory drugs (NSAIDs), other products for pain or musculoskeletal conditions, and GI protective agents) to no more than the decrease seen for Cox-2's; and 3) decreasing Cox-2 utilization/expenditures more in patients at low risk for GI complications than in patients at high risk. **METHODS:** The study used a before and after with control group design. Changes in utilization/expenditures of Cox-2 inhibitors and Cox-2 substitute products were compared after implementation of SmartPA in Missouri's Medicaid plan. The Medicaid plan of an eastern state that had no PA system for Cox-2's was used as the control. Subjects were patients with a claim for a Cox-2 inhibitor in the 12-month baseline period that were continuously enrolled for the 24-month study period. Analyses consisted of comparisons of means and linear regression. Regressions controlled for differences in age, gender, risk for GI complications, and severity of illness. **RESULTS:** Regression results indicated that increases in expenditures on Cox-2 inhibitors and GI-protective products were $178 per patient per year (PPPY) higher and $191 PPPY higher, respectively, in the control state. Increases in expenditures on traditional NSAIDs and other pain and musculoskeletal products were $34 PPPY higher in the treatment state. Patients at low risk for GI complications in the treatment state experienced greater reductions in expenditures than did those in the high-risk group. Results were similar for utilization for all of the above analyses. **CONCLUSION:** SmartPA was successful in reducing expenditures/utilization on Cox-2 inhibitors for Missouri Medicaid compared to the control, while keeping the increase in expenditures/utilization for Cox-2 substitutes substantially lower than this decrease. These effects were concentrated among patients at low risk for GI complications.

OBESITY

POB1

COMPARISON OF WEIGHT REDUCTION AND SATISFACTION OF ORLISTAT AND SIBUTRAMINE

Mekaroonreung S, Auamnoy T, Thaweechotepatara P
Chulalongkorn University, Bangkok, Thailand

OBJECTIVE: The objective of this study was to compare and evaluate the efficacy and satisfaction of orlistat and sibutramine treatment in obese female patients at adisorn fort hospital in 2004. **METHODS:** A cross-sectional experimental study by randomized block design was performed. The population was women age 18 to 45 those whom wanted to reduce their weight (bmi > 25) with orlistat or sibutramine under physician control at adisorn fort hospital, Thailand. Sample was calculated by cohen's table, setting alpha = 0.05, beta = 0.2, power 0.80 effect size = 2, sample size (n) = 40. We administered orlistat (360 mg/d)