brought to you by  $\overline{\mathbb{U}}$  CORE

A135 **Abstracts** 

related") included opioids, anticonvulsants, nonsteroidal anti-inflammatory drugs (NSAIDs), salicylate analgesics, antimigraine agents, muscle relaxants, corticosteroids, benzodiazepines, sedatives/hypnotics, tricyclic antidepressants, serotonin-norepinephrine reuptake inhibitors (SNRIs), and selective serotonin reuptake inhibitors (SSRIs). Mean annual costs per patient were calculated using third-party payments for Rx drug claims. RESULTS: A total of 77,124 patients met all study entry criteria. Of these FM patients, 40,951 (53.1%) had evidence of receipt of opioids in 2006. Total mean annual Rx drug costs per patient were \$2225.92. FM-related Rx drugs represented \$912.80 (41.0%) of these costs. Opioids were the most costly drug class, accounting for \$272.79 (29.9%) of FM-related Rx drug costs. The next most costly drug class was anticonvulsants at \$112.90 (12.4%), followed by SNRIs at \$105.14 (11.5%) and SSRIs at \$78.53 (8.6%). CONCLUSIONS: Given the widespread use of opioids, their lack of efficacy, and their potential for addiction, reducing opioid use may benefit patients and reduce costs. New disease management methods and more effective medications to treat FM may assist in achieving this goal.

PSY27

#### THE LONG-TERM COST OF ORTHOPAEDIC SURGERY WITH RECOMBINANT ACTIVATED FACTOR VII (RFVIIA) IN HAEMOPHILIA INHIBITOR PATIENTS

Ericsson Å, Haglund M

Novo Nordisk Scandinavia AB, Malmo, Sweden

OBJECTIVES: To measure the long-term cost consequences of using recombinant activated factor VII (rFVIIa) in total hip replacement in haemophilia patients with inhibitors in a Swedish setting. Severe haemophilic arthropathy has a negative impact on health-related quality of life due to recurrent bleeds, chronic pain and significantly reduced mobility. Successful Elective Orthopaedic Surgery (EOS) of an affected joint can lead to decreased bleed frequency into the new joint, less time spent in hospital, relief of chronic pain, and increased mobility and health-related quality of life. METHODS: A decision-analytic model was designed to assess cost implications of using rFVIIa in haemophilia patients with inhibitors who are candidates for surgery. It is based on a consensus protocol from an "Elective Orthopaedic Surgery (EOS) Expert Group" convened in London in 2006. The model calculates costs of surgery in a five-year perspective, based on data of bleed reduction of 80-89% in the joint during the years after surgery. One-way sensitivity analyses were made, varying patient weight (55-95 kg), length of stay in hospital (8-16 days), number of physiotherapy sessions (6-24), number of bleeds in the affected joint over the past 12 months (6-14), and bleed reduction assumption (70-90%). A unit cost of SEK 5822/mg for rFVIIa was used (USD 1 = SEK 7.86). RESULTS: Total hip replacement was cost-saving in the fourth year after surgery, and in a five-year perspective, savings were SEK 1, 315,749. In the sensitivity analyses, surgery was cost-saving within three to five years. The only exception was seen in patients who had 6 bleedings or less in the affected joint during the year preceding surgery. CONCLUSIONS: In a five-year perspective, total hip replacement using rFVIIa is cost-saving for haemophilia patients with inhibitors who had more than six bleedings in the affected joint during the previous year prior to

# ESTIMATE COSTS OF COMORBIDITES IN OVERWEIGHT AND OBESE MEXICAN CHILDREN AGED BETWEEN FIVE AND ELEVEN YEARS UNTIL

Anaya P, Meléndez G

Fundación Mexicana para la Salud, El Arenal Tepepan, D.F, Mexico

OBJECTIVES: To estimate the economic burden of diabetes, hypercholesterolemia and hypertension related to overweight and obesity in Mexican children aged between five and eleven years during their life-time. METHODS: A Discrete Event Model was designed to calculate prevalence and yearly incidence of diabetes, hypercholesterolemia and hypertension and its related costs during the life-time of a children cohort aged between five and eleven at the start of the simulation. The size of the cohort is one of one thousand of the total population reported by the Mexican Population Council for that age range. Data of risk of dying at each age was obtained from the same source and a 0.2% was added for each comorbidity. Costs were obtained from the Popular Insurance report of 2001. Due to the absence of data related to incidence of comorbidities in overweight and obese children, adult data was used but smoothed by an exponential curve. Probability of becoming overweight and obese was obtained from the National Health and Nutrition Survey of 2006. A 3% discount rate was used for all costs. Results are presented in US dollars with an exchange rate of 13.5 MXN pesos for 1 US dollar. RESULTS: Total expenditure in comorbidities for children that became obese at any time during simulation was \$96,632,485,372, for those who became overweight was \$90,513,280,890 and for those that remain in normal weight was \$55,650,160,294. CONCLUSIONS: From the results of the model it can be said that for the group of children currently aged between 5 and 11 years an extra \$ 41 billion will be spend in comorbidities of those that will become obese and an extra \$ 35 billion for those that will become overweight compared to those that will remain in a normal weight.

PSY29

#### VARIABILITY OF FEES IN THE FIELD OF HAEMOGRAMS IN THE **AUSTRIAN CONTRACT PHYSICIANS' AND INSTITUTES' SECTOR**

Scholler C, Weisser A, Wilbacher I, Endel G

Main Association of Austrian Social Security Institutions, Vienna, Vienna, Austria

OBJECTIVES: Contracts with physicians or institutes that perform health care services can provide price advantages due to competition. The sickness funds of the Austrian Social Security signed different contracts concerning haemograms with physicians or institutes. Claims data, respectively rendered fees suggest a possible savings potential in the fee for service system without reducing the scope of the procedures or the frequencies. We analyzed the variety of prices in the field of haemograms including contracted physicians and institutes. This shows variability among the total amount of reimbursement in the Austrian outpatient sector consisting of contracted physicians, institutes, and outpatient clinics of hospitals and ambulatories. The outpatient sector is supplied with services by contracted physicians. Approximately 30% of the Austrian outpatient sector cannot be displayed since no data is available from outpatient clinics of hospitals. METHODS: Price differences for the same or similar procedures performed by different contracted physicians or institutes are evaluated. Different financial impacts (e.g. focusing on average or lowest value) are simulated. Values were rounded to two decimal points, however, calculated by 15 decimal points. The fee equals the division of turnover and frequency. RESULTS: Services in haemograms were brought into account 103,468,542 times in the year 2006. Calculating all frequencies with the lowest paid fee (turnover/frequency) for each service would lead to a lower financial effort of 82% compared to the current turnover. Calculating all frequencies with the highest fee for service would lead to a higher effort of 117% compared to the current turnover. CONCLUSIONS: A current savings potential of 117%, contrasting the current fee with the most expensive one, indicates a well established fee negotiation. However, a savings potential of 82% is worth being considered for further evaluation and, if necessary, the adjustment of fees

PSY<sub>30</sub>

### ECONOMIC BURDEN OF FIBROMYALGIA COMPARED TO OTHER CHRONIC CONDITIONS

Blum S, Juday T, Erder MH

Forest Research Institute, Jersey City, NJ, USA

OBJECTIVES: Fibromyalgia is a chronic condition characterized by widespread pain and decreased physical function. This study compares the economic burden in patients diagnosed with Fibromyalgia (FM) with that of patients diagnosed with Chronic Fatigue Syndrome (CFS) and patients with Major Depressive Disorder and other Depressive Disorders (DEP). METHODS: Claims data were obtained from the Thomson/Medstat MarketScan Commercial Claims Database. Study subjects aged 18+ with continuous eligibility were required to have ≥1 inpatient claim or ≥2 outpatient claims during 2006 with ICD-9-CM codes for one of the disease conditions. Patient groups were not mutually exclusive (1.0% of FM patients had CFS and 10.8% had DEP). Mean annual third-party payer costs/patient were calculated based on paid claims. Incremental costs relative to FM were generated using generalized linear models (family = gamma, link = log), adjusting for age, gender, beneficiary status, employment status, insurance plan type, comorbid prevalence of FM, DEP, CFS, and other comorbidities. RESULTS: A total of 77,124 FM, 11,672 CFS and 215,380 DEP patients met all study entry criteria. Total unadjusted costs for FM patients (\$10,187) were similar to that of DEP patients (\$10,416) and greater than CFS patients (\$8,314). The highest unadjusted cost category for all patients were outpatient costs (FM \$5594; DEP \$4972; CFS \$4605), followed by inpatient costs (FM \$2367; DEP \$3136; CFS \$2067). Prescription costs (FM \$2226; DEP \$2308, CFS \$1641) were the lowest cost category. After adjusting for covariates, third-party payer costs for FM patients were not significantly different than costs for CFS patients and were 9% (\$984) lower costs for DEP patients. CONCLUSIONS: The costs to treat FM patients are high and comparable to that for CFS and DEP, other chronic diseases with similar symptoms and/or often covered by third-party payers. Early diagnosis and use of effective treatments for FM could reduce the economic burden on third-party payers.

PSY31

## REAL-WORLD USE OF DULOXETINE FOR LOW BACK PAIN

Ivanova I<sup>1</sup>, Birnbaum HG<sup>2</sup>, Schiller M<sup>2</sup>, Kantor E<sup>2</sup>, Waldman T<sup>2</sup>, Johnstone BM<sup>3</sup>, Faries D<sup>4</sup>, Risser R4, Swindle R3

Analysis Group, Inc., New York, NY, USA, <sup>2</sup>Analysis Group, Inc., Boston, MA, USA, <sup>3</sup>Eli Lilly and Company, Indianapolis, IN, USA, 4Lilly USA, LLC, Indianapolis, IN, USA

OBJECTIVES: Examine the real-world role of duloxetine vs. other treatment for low back pain (LBP). METHODS: 500 patients, ages 18-64 years, with >1 LBP diagnosis, as specified by HEDIS, and >1 duloxetine prescription within a year after LBP diagnosis were identified from a large, privately-insured claims database (>5 million lives; 2004-2006). Patients had continuous eligibility >6 months after their index duloxetine prescription (study period) and >6 months before their index prescription (baseline period) and no other duloxetine prescription during the baseline period. Duloxetinetreated patients were matched to 500 LBP patients (controls) who initiated another pharmacological or non-invasive LBP treatment in the same month from LBP diagnosis as duloxetine was initiated in duloxetine-treated patients. Controls were also matched using baseline propensity scores of duloxetine treatment, specific comorbidities, LBP diagnostic categories and baseline LBP treatments. Patients with back surgery prior to index date were excluded. McNemar tests were used to compare study period