PSY15

A COMPARATIVE OUTCOMES ANALYSIS OF DIFFERENT BARIATRIC SURGERIES

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OBJECTIVES: To evaluate the clinical and economic outcomes based on bariatric surgery type. **METHODS**: 2005 and 2006 National Inpatient Sample (NIS) datasets were utilized as the data source. The bariatric population was defined by ICD-9 codes (44.38, 44.39, 44.68). A diagnosis of morbid obesity was required for inclusion; records with a diagnosis of a stomach or intestinal cancer were excluded from the analysis. **RESULTS**: Each NIS dataset contains approximately 8,000,000 hospital discharge records; the bariatric surgery sub-population contains 33,938 records. The sample population primarily consisted of females (82%) with a mean age of 43 years. Most of the procedures were performed at urban hospitals (53%), and the most common payer was private insurance (75%). Clinical and economic outcomes were compared by surgery type; the surgery types were: open gastric bypass (OGBP), laparoscopic gastric bypass (LGBP) and laparoscopic banding procedure (LB). The most common procedure was the laparoscopic gastric bypass procedure (n = 26,465). Length of stay (in days) differed significantly between procedures (OGBP = 3.8, LGBP = 2.5, LB = 1.6, $p < 0.0001$). Total charges differed significantly between procedures (OGBP = $ 40,770, LGBP = $ 37,306, LB = $ 26,859, $p < 0.0001$). The complication rate was low (<2% for all procedures); mortality was also low (<0.5% for all procedures). A multivariate model was used to assess the relationship between procedure type and predictor variables (age, gender, hospital location, year, and race); race, gender and hospital location were statistically significant. **CONCLUSIONS**: The laparoscopic banding procedure was associated with the least cost and shortest length of stay. Mortality and complication rates were low for all surgery types. Females were more likely to receive the laparoscopic gastric bypass; males were more likely to receive laparoscopic banding.

PSY16

THE DIRECT AND INDIRECT COSTS OF THE ANKYLOSING SPONDYLITIS IN THE CZECH REPUBLIC—COMPARISON BETWEEN 2005 AND 2008 STUDIES

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OBJECTIVES: To compare the burden of the ankylosing spondylitis (AS) based on data from patient survey BEDA collected in 2005 (A) and in 2008 (B) in the Czech Republic. **METHODS**: Data of 1.008 patients (A) and 509 patients (B) with AS were analysed. Data on demographics, history of disease, health care consumption and productivity loss were analysed. For calculating of the indirect costs (work loss, absenteeism) the human capita approach was applied. The study was performed from the payer perspective (health insurance companies in the Czech Republic) and societal perspective (including indirect costs). The price year was 2008. Direct medical costs were based on the price list published by the Czech Health Insurance Companies. The treatment pattern was based on the guidelines of the Czech Rheumatology Society. **RESULTS**: The average time from diagnosis was 23 years (A) and 26.4 years (B); 61% (A) and 63% (B) were male. Around 30% (A, B) were fully disabled. Mean annual direct cost per patient is estimated at €1812 (45.0%) (A) and €2588 (48.2%) (B) and the indirect costs €2218 (55.0%) (A) and €2782 (51.8%) (B). Major contributors to the total direct costs were spa (45.3% (A) and 31.2% (B) of direct costs) and biological treatment (34.2% (A) and 52.8% (B) of direct costs). Total medication use contributed to 39.4% (A) and 56.3% (B) of the direct costs. **CONCLUSIONS**: The annual costs per patient with AS in the Czech Republic were €4030 and €5371 (B). Share of direct and indirect cost was almost equal (A, B). The distribution of costs consumption was similar in both groups except spa and biologic drugs treatment. Further cost-effectiveness evaluation of the AS treatment in the Czech Republic is recommended.

PSY17

COSTS OF FIBROMYALGIA: RESULTS FROM A CROSS-SECTIONAL STUDY IN GERMANY

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OBJECTIVES: Fibromyalgia (FM) is characterized by persistent, widespread pain and associated with substantial health care costs. This study examined medical resource use (MRU) and costs associated with FM by severity level, in Germany. **METHODS**: This cross-sectional, observational study recruited 211 FM subjects during routine office visits to community-based physicians in Germany. Subjects completed questions about their pain, health-related quality-of-life, productivity, and out-of-pocket expenses related to FM; site staff recorded MRU based on medical records. FM severity was defined using subjects' FIQ total scores: 0–<39 (mild), 39–<59 (moderate), and 59–100 (severe). Annual costs from a societal perspective were calculated in 2008 Euros and included direct (e.g., physician office visits, medications, out-of-pocket, home health care services), and indirect (e.g., lost productivity due to absenteeism and disability) costs. **RESULTS**: The mean age (SD) of subjects was 53.7 (12.9) years, and 79% were female. Most patients reported moderate (38%) or severe (43%) FM. Subjects had a mean (SD) of 4.9 (3.2) physician office visits over the past 3 months, with the highest proportion of patients visiting Orthopedists (49%), Rheumatologists (31%), General Practitioners (15%), and Neurologists (13%). Most subjects (94%) were receiving at least one prescription medication for FM. The highest proportions of subjects were prescribed anti-inflammatories (67%), other analgesics (34%), and anti-depressants (33%). Subjects employed full- or part-time missed a mean (SD) of 2.1 (3.8) days from work due to FM over the past 4 weeks, corresponding to 25.2 and 32.4 work days missed annually. Total costs were €7256 (direct = €1765; indirect = €5491), and significantly increased as FM severity worsened ($p = 0.0002$). **CONCLUSIONS**: FM imposes a substantial economic burden on society in both direct and indirect costs, which increases as FM severity worsens. Indirect costs due to lost productivity accounted for the largest proportion of total FM costs.

PSY18

THE BURDEN OF OBESITY IN ONTARIO

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OBJECTIVES: To present an overview of the burden of obesity in Ontario by using the richness of a Canadian population health survey linked to Ontario administrative databases. **METHODS**: The records of all Ontarians aged 12 and over who participated in the Canadian Community Health Survey (CCHS), cycle 1.1 (2000/2001) and provided consent to data linkage with administrative databases were linked to the Ontario Health Insurance Program (OHIP) claims database and the Discharge Abstract Database (DAD) In-Patient and Day Procedure database. Prevalence of obesity in this adult population was documented using the body mass index (BMI). Socio-demographics (e.g. age, gender, education), medical characteristics (e.g. comorbidities), health related quality of life (Health Utility Index 3), self-reported health and one-year physician and hospitalization costs were described per BMI category (e.g. underweight, normal weight, overweight and obese for adult and normal weight, overweight and obese for children). A two-part model was used to identify determinants of costs. **RESULTS**: Twenty-three percent of children aged 12–17 were overweight or obese and more than 50% percent of adult participants were either overweight or obese in 2000/2001. Among respondents older than 18 years of age, differences between BMI categories were observed in terms of age, gender, marital status, place of birth, education, smoking status, physically activity, comorbidities and health-related quality of life. Costs increased significantly with age, being male, being a smoker, being obese (reference: normal weight), being underweight (reference: normal weight) or being inactive. Among children, obese children had also the highest costs. **CONCLUSIONS**: These results suggest that the burden of obesity in Ontario is considerable.

PSY19

DIRECT AND INDIRECT COSTS FOR PATIENTS WITH OPIOID INDUCED CONSTIPATION (OIC) AFTER TREATMENT WITH STRONG OPIOIDS IN SWEDEN

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OBJECTIVES: Treatment with strong opioids is connected with frequent and problematic side effects where one of the most common is Opioid Induced Constipation (OIC). The discomfort of OIC can limit an effective pain therapy. Further, little is known about the cost implications of OIC. The objective of this study was to estimate the direct and indirect costs for patients with OIC after treatment with strong opioids. **METHODS:** The study is based on patient data from a Swedish non-interventional, follow-up study, UPPSIKT (UPPföljning Starka opioider I Klinisk Terapi). The cost analysis is based on 197 patients treatmed with strong opioids during a six-month period. Direct and indirect costs are calculated per patient month and the cost for constipation is estimated as the difference between patient months with and without constipation. **RESULTS:** Around 60–70% of the patients reported to experience some degree of problem with constipation each month. The total number of patient months with no, mild, moderate and severe constipation were 419, 302, 288 and 135 months respectively. The total costs per patient month with severe problems with constipation were significantly higher than for patients with mild, moderate or no constipation. Patients with severe constipation had the highest total costs, 14,639 SEK per patient month, while patients with mild, moderate and no problems have 11,481 SEK, 10,443 SEK and 9,924 respectively. Patients with severe constipation reported on average a lower quality of life compared to the other patients in the study. **CONCLUSIONS:** The results from our cost analysis indicate that constipation associated with opioid use has the potential to increase the costs to society. The study also concludes that patients with severe constipation experience a lower quality of life than patients with fewer problems.

PSY20

COSTS AND COST DRIVERS OF IMMUNE TOLERANCE INDUCTION (ITI) IN PATIENTS WITH HEMOPHILIA AND INHIBITORS

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OBJECTIVES: Patients with hemophilia and high-titre inhibitors often attempt to achieve long-term tolerance to factor VIII (FVIII) via ITI. This analysis presents a conceptual economic model of ITI from a US health care perspective. **METHODS:** A simulation model was developed to estimate the total costs of FVIII incurred by defined cohorts of patients with hemophilia with various profiles undergoing different ITI