COMPARISON OF DOSING PROFILES BETWEEN DULOXETINE AND PREGABALIN INITIATORS AMONG ELDERLY PATIENTS WITH FIBROMYALGIA
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OBJECTIVES: To assess dosing differences between duloxetine and pregabalin initia- tors among elderly patients with fibromyalgia. METHODS: Using a large US admin- istrative claims database, we examined fibromyalgia patients aged 65 and above with Medicare supplemental insurance who initiated duloxetine or pregabalin in 2006. Initiation was defined as no duloxetine or pregabalin pill coverage in the previous 90 days and one duloxetine or pregabalin pill defined as the first initiation date. Dulox- etine cohorts were constructed based on the index agent. All individuals selected had continuous enrollment in the 12-month pre- and post-index periods and at least 31 duloxetine or pregabalin supply days in the 12 months post-index period. Duloxetine initiators with diabetic peripheral neuropathic pain (DPN) or depression, and pre- gabalin initiators with DPNP, post-herpetic neuralgia or epilysis diagnosis in the 12-month pre-index period were excluded. Average initial daily dose, annual average daily dose, average daily dose of the first 12 prescriptions of duloxetine or pregabalin, and percent of daily dose change from previous prescription were compared between cohorts. RESULTS: Patients in the duloxetine (n = 624) or pregabalin (n = 1,199) cohorts had a mean age of 74 years. The average initial daily dose was 51.34 mg for duloxetine and 145.71 mg for pregabalin, respectively. Duloxetine patients had an annual average daily dose of 50.81 mg, while 162.82 mg for pregabalin patients. The average daily dose change increased through the first 12 duloxetine prescriptions from 49.49- 53.96 mg, while the range for pregabalin was between 145.71 mg and 216.96 mg. The percentages of changes in daily dose from previous prescriptions were −4.5±2.8% for duloxetine and 0.6±12.4% for pregabalin, respectively. CONCLUSIONS: Dulox- etine initiators had clear dose escalation over the 12-month follow-up period, while pregabalin initiators had clear dose escalation over the 12-month follow-up period.

PROJECTING THE ECONOMIC OUTCOMES OF OBESITY USING A NATURAL HISTORY MODEL
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OBJECTIVES: Obesity (defined as body mass index (BMI) >30) is a major contributor to increased morbidity, mortality, and health care expenditures. We used data from the Medical Expenditure Panel Survey (MEPS) to construct a lifetime cost and outcomes model explicitly accounting for morbid obesity. Then, we estimated the potential economic value of weight reduction in terms of cost savings plus the value of improvements in life expectancy and quality of life. METHODS: We constructed a Markov model with a lifetime horizon using death and BMI health states: 18.5–24.9, 25–29.9, 30–34.9, 35–39.9, 40–44.9, 45–49.9, 50+ < MEPS Panels 6–10 (2001–2006) provided 91,000 observations to estimate transition probabilities. We estimated discounted (3% per annum) lifetime costs and quality-adjusted lives. RESULTS: The model estimates show that patients tend to stay in the same BMI category from year to year. Average annual cost increases significantly (p ≤ 0.01) for BMI > =362 per BMI unit increase), age (≥118 for each year of age) and gender (≥547 for females). For utility levels, BMI (≥0.024 per BMI unit increase), age (≥0.0304 for each year of age), and gender (≥0.0355 for females) were all significant (p < 0.0.1). CONCLU- SIONS: MEPS panels provide repeated measures of BMI allowing a projection of the natural history of obesity from a single data source. Obesity is a significant driver of costs and QALYs: we show that a reduction in BMI of obese patients could be associ- ated with lower costs and better quality-adjusted life expectancy. MEPS provides only self-reported BMI data, and this potential bias deserves further exploration.

A COST-EFFECTIVENESS ANALYSIS OF CONVENTIONAL TREATMENT VERSUS BARIATRIC SURGERY FOR OBESE PATIENTS WITH TYPE-2 DIABETES AND HYPERTENSION AS COMORBIDITIES. PRELIMINARY RESULTS UNDER THE BRAZILIAN PRIVATE PAYER PERSPECTIVE
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OBJECTIVES: To assess the cost-effectiveness of the open (OPBARS) and the lap- aroscopic bariatric surgery Roux-en-Y gastric bypass (LAPBARS) versus the conventional non-surgical treatment (CONVT) for obese patients, in 5 years of follow up, under the Brazilian private payer perspective. METHODS: An analytic decision-tree model was built to estimate costs and outcomes among OPBARS and LAPBARS versus CONVT, measuring weight loss, co morbidities, and quality-adjusted life years. RESULTS: For elderly patients, at the Brazilian payer perspective, OPBARS and LAPBARS were more cost-effective than CONVT. The impact of that on QALYs for obese patients with BMI ≥ 35. In order to evaluate the differences of surgery against CONVT treatment we assumed the same efficacy for OPBARS and LAPBARS. The Brazilian guideline for Health Technology Assessment (Assis, 2005) provides the cost-effectiveness comparison. A panel of specialists was conducted to obtain local practice from pre-operative evaluation to the last medical visit 5 years after the procedure. A micro cost technique based on public price lists (SIMPRO 2009, CBH/PMS 5.0 Ed) was applied to value the resource usage. Only direct medical costs were considered. A discount of 3% per annum was assumed for costs and outcomes. One-way sensitivity analysis was performed to check the robustness of the results. RESULTS: The more sustainable resolution of the co morbidities for OPBARS and LAPBARS resulted in an increase of 1.38 QALYs in 5 years versus CONVT (1.26 QALYs vs. 1.92 QALYs). The total costs for the 5 years were R$ 26,456 for OPBARS, R$ 32,515 for LAPBARS and R$ 19,217 for CONVT. So, the incremental cost-effectiveness ratio was R$ 7,449 per QALY for OPBARS and R$ 10,395 per QALY for LAPBARS when compared with CONVT. CONCLUSIONS: Findings suggest OPBARS and LAPBARS as safer and cost-effective choices for obesity treatment and co morbidity resolution, under the Brazilian private health care system.