MA3

**COMPARATIVE OUTCOMES OF FIBROMYALGIA PATIENTS WHO INITIATED DULOXETINE OR PREGABALIN: MEDICATION ADHERENCE AND DIRECT MEDICAL COSTS**

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**OBJECTIVES:** To compare medication adherence and direct medical costs between duloxetine and pregabalin among fibromyalgia patients. **METHODS:** A retrospective cohort study design was used along with a large US national commercial claims database (2006–2009). Fibromyalgia patients who initiated duloxetine or pregabalin in 2008 at age between 18 and 64, and with continuous health insurance 1 year before and 1 year after initiation were assigned to a duloxetine or pregabalin cohort or a pregabalin initiator cohort based on their initiated agent. Medication adherence of duloxetine or pregabalin, measured by total supply days, medication possession ratio (MPR) and proportion of patients with MPR=0.8, and direct medical costs, measured by annual costs per patient, were assessed and compared between the cohorts in the year following the initiation. Bootstrapping and propensity score stratification methods were used to adjust for distribution bias, as well as across-cohort differences in demographics, clinical and economic characteristics, and medication history prior to the initiation. **RESULTS:** Both the duloxetine cohort and the pregabalin cohort had higher total annual supply days (273.5 vs. 176.6, p<0.05), higher MPR (0.7 vs. 0.5, p<0.05) and more patients with MPR=0.8 (45.1% vs. 29.4%, p<0.05), lower daily average consumption of insulin (28.6 U/day vs. 35.8 U/day, p<0.05), and more patients with MPR ≥ 0.8 (45.1% vs. 34.8%, p<0.05). **CONCLUSIONS:** Both the duloxetine and pregabalin cohorts showed that for elderly T2DM patients initiating insulin treatment, using a pen rather than vial/syringe was associated with better treatment persistence and compliance, without increasing healthcare costs during the first year after initiation. The total costs incurred under the assumption of equivalent efficacy ranged from $68,360 for ARA alone to $70,360 for BMD screening alone. The total QALYs realized ranged from 10.87 for doing nothing to 10.90 for ARA and BMD screening combined. The incremental life expectancy, quality-adjusted life years (QALYs), and healthcare costs were: $28,470 for ARA alone, $30,470 for BMD screening alone, and $40,940 for ARA and BMD screening combined. **RESULTS:** The total costs incurred under the assumption of equivalent efficacy ranged from $86,049 for ARA alone to $88,360 for BMD screening alone. The total QALYs realized ranged from 10.87 for doing nothing to 10.90 for ARA alone. Compared to the current standard, the incremental cost-effectiveness ratio (ICER) of ARA was $154,367/QALY, but ARA in concert with BMD screening reduced the ICER to $88,360/QALY.

MO2

**THE COST-EFFECTIVENESS OF PRIMARY STROKE CENTERS FOR ACUTE STROKE CARE**

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**OBJECTIVES:** Primary stroke centers (PSC) have been shown to improve survival in patients with acute ischemic stroke (AIS). The objective of this study was to evaluate the cost-effectiveness of treating AIS patients in a PSC compared with a non-PSC setting. **METHODS:** A decision analytic model was developed to project the lifetime outcomes and costs for AIS patients. Clinical data were derived from a recent observational study comparing existing PSC- and non-PSC-admitted patients, the NINDS and ECASS III clinical trials, longitudinal cohort studies, and health state preference studies. Annual cost data were based on Medicare reimbursement and other published sources, and did not include start-up costs. The model used a health care payer perspective, and the primary outcomes were incremental life expectancy, quality-adjusted life years (QALYs), and health care costs. Sensitivity and scenario analyses were performed to evaluate uncertainty in the results. **RESULTS:** Admission to an existing PSC resulted in a gain of 0.22 years of life (95% credible range [CR], 0.12 - 0.33) and 0.15 QALYs (95% CR, 0.08 - 0.23) per patient, at a cost of $3600 (95% CR, $2400 - $5000) per patient, compared with admission to a non-PSC hospital. The incremental cost per QALY gained was $24,000, and the results in all probabilistic simulations were below the $100,000/QALY threshold. The cost-effectiveness improved as the number of stroke patients admitted per year and use of recombinant tissue plasminogen activator increased. **CONCLUSIONS:** Modeling analyses support the hypotheses that PSCs provide meaningful long-term benefits to AIS patients and are cost-effective.

MO3

**COST-EFFECTIVENESS ANALYSIS OF DIFFERENT STRATEGIES FOR FRACTURE PREVENTION IN UNITED STATES MALE VETERANS**

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**OBJECTIVES:** Absolute risk assessment (ARA) is promoted for guiding osteoporosis treatment decisions. Competing guidelines lack clarity on how to incorporate ARA into practice. We compared 6 strategies to identify one that minimized cost and optimized quality-adjusted life years (QALYs) in United States (US) veterans. **METHODS:** We developed a Markov model comparing 6 strategies in elderly male veterans including (1) ARA alone, (2) ARA in concert with BMD screening, (3) BMD screening alone, (4) waiting for fracture, (5) doing nothing, and (6) an approximation of current care, which included a combination of strategies 2-5. Health states included community, nursing-home, and death. Three models with different assumptions concerning treatment efficacy among high-risk versus osteopenic patients were simulated. **RESULTS:** ARA alone was the least costly and ARA and BMD screening together were the most costly. **CONCLUSIONS:** ARA may represent an important tool for minimizing cost and optimizing fracture prevention outcomes in US veterans.