cal properties superior to conventional estimates of incremental cost-effectiveness and that do not depend upon an arbitrary analysis horizon. From an economic perspective, marginal estimates are preferred to incremental, or average, estimates.

PND28
COMPARISON OF FOUR PREFERENCE-BASED SF-36/SF-12 ALGORITHMS TO EVALUATE THE COST-EFFECTIVENESS OF TREATMENT FOR PRIMARY INSOMNIA WITH ESZOPICLONE
Snedecor SL, Botteman MF, Schaefer K, Barry N, Rubens R

OBJECTIVES: To compare incremental cost effectiveness ratios (ICERs) obtained with different algorithms to relate quality of life (QoL) instruments to preference-based utilities.

METHODS: We determined the ICER of treating primary insomnia with eszopiclone compared to placebo treatment based on a model developed using data from a 6-month, double-blind, placebo controlled, clinical trial to assess the quality-adjusted life years (QALYs) and costs associated with eszopiclone treatment. The average 6-month net cost per patient treated with eszopiclone versus placebo is $69 (2006 USD). QoL data were collected in the trial using the SF-36. Utilities were derived using 4 algorithms chosen for methodological merit (Brazier 2002), applicability to a US population (Franks 2003 & 2004, Lawrence 2004), and ability to generate an age- and gender-independent utility (all). All utilize either the SF-12 or the SF-6D subsets of the SF-36, but differ by: choice of utility mapped from the QoL instrument (standard gamble or EQ-5D); items or subscales of the instrument retained; weighting assigned to the items or subscales; source of the sample used to value the instrument (UK or US); and theoretical range of the predicted utility (e.g., Brazier ranges from 0.35 to 1.0 where Lawrence ranges from 0.15 to 1.01). Other algorithms were not analyzed because they were not generic measures, not preference-based, or excluded the vitality domain (a clinically relevant domain for patients with insomnia).

RESULTS: The four algorithms resulted in average net gains in 6-month QALYs with eszopiclone over placebo of 0.006687, 0.012447, 0.013714, and 0.013800, for the Brazier, Lawrence, Franks (2004), and Franks (2003) algorithms, respectively. These data represent mean costs per QALY of $10,261, $5,513, $5,003, and $4,972, respectively. CONCLUSION: These algorithms, based on either SF-12 item responses or summary scales, generated cost effective yet different point estimates for net gain in utilities and the resulting ICERs.

PND29
RETROSPECTIVE MEASUREMENT OF UNCODED DISEASE OUTCOMES IN A CLAIMS DATABASE
Krukas MR, Berenson K, Hendlish S, Doyle J

OBJECTIVES: To develop an analytic method to measure uncoded disease outcomes in a retrospective claims database.

METHODS: An analysis of multiple sclerosis (MS) patients in a large, vertically integrated health care system database was conducted with the primary outcome of interest being a relapse event. MS only has one International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code, which does not specify whether the claim was a result of a relapse or other event. A review of the literature found no surrogate markers or composite scores that could be identifiable in claims data. Though Magnetic Resonance Imaging (MRI) is useful in the treatment of MS, typical claims only report whether or not a scan was performed and no results or reason for the scan are available. Utilizing information from published literature and a physician panel, a treatment pattern was identified that could be used in a claims database and would indicate a relapse in MS patients—two consecutive days of an IV steroid (either methylprednisolone or dexamethasone). The date of relapse was recorded as the first date of IV steroid treatment. RESULTS: Using a retrospective claims database, a multiple sclerosis (MS) population utilizing one of four major MS drugs (341 patients) was identified. Within the study period (1994–2005), 67 relapses occurred, defined as two consecutive dates of IV steroid therapy, which is a common clinical treatment for symptoms related to MS relapse. This method did not identify all relapses in the study population; it would be necessary to identify more clinical combinations to achieve comparable relapse rates as those found in the published literature. CONCLUSION: Uncoded events can be identified using clinical treatment measures, which are prominent in claims databases.

PND30
ANALYSIS OF TRIPiTAN REFILLING BEHAVIOR AMONG FEMALE MIGRAINEURS
Puenpatom RA, Victor TVW

OBJECTIVES: To evaluate the factors of triptan refilling behavior of newly diagnosed female migraineurs.

METHODS: This retrospective analysis utilized data from the i3/Innovus Lab/Rx database for the period between June 2002 and May 2006. Included in this study were females between 12 and 49 years of age with a clinical diagnosis of Migraine (ICD-9-CM 346.xx), who filled a prescription for a triptan within two weeks of their first observed migraine diagnosis date (index date). Patients were required to have 18 months of continuous eligibility. Logistic regression models were used to evaluate the factors affecting triptan refilling behavior. RESULTS: A total of 14,343 females were included in the analysis. Within the 12-month post-index period only 6.5% of the sample filled two or more triptan prescriptions. Approximately one-third (38.2%) of these patients filled their first triptan prescription on their index migraine diagnosis date, while nearly half (46.8%) filled their first triptan prescription within 14 days before their index date. The logistic regression results showed that for each $10 increase in patient copay, the odds of a subsequent triptan prescription refill decreased by 8%. Similarly, for each $10 increase in patient deductible, the odds of refilling decreased by 4%. Moreover, HMO patients were 18% less likely to refill their prescriptions compared to EPO patients. Higher pill counts are associated with lower probabilities of refilling behavior. Pearson chi-square tests supported the goodness-of-fit of the test results. CONCLUSION: These data suggest that most female migraineurs do not fill more than one triptan prescription over a one-year time horizon. Out-of-pocket patient expenses appeared to be the important factors affecting refill behavior. One implication of these findings is that many women may be suffering because of inappropriate management of their migraine-related pain. Further research into the reasons and motivations for these outcomes are warranted.