

sitivity and construct validity are warranted, and could be conducted as part of ongoing clinical trials.

NEUROLOGICAL/GENETIC DISORDERS (Migraine, Alzheimer's, Parkinson's, MS, Epilepsy, Brain Injury, Hunter Syndrome, Insomnia)

NEUROLOGICAL/GENETIC DISORDERS (Migraine, Alzheimer's, Parkinson's, MS, Epilepsy, Brain Injury, Hunter Syndrome, Insomnia)—Health Policy Studies

PNL20

UTILIZATION OF IMMUNOMODULATORY DRUG THERAPIES IN MULTIPLE SCLEROSIS (MS) IN NOVA SCOTIA, CANADA 1998–2003

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OBJECTIVE: Immunomodulatory drugs have provided hope to patients with MS. The Nova Scotia provincial health ministry funds these drugs for patients who are seen by the Dalhousie Multiple Sclerosis Research Unit (DMSRU), meet predefined criteria and attend an education clinic. This study examined the utilization of these drugs under the provincial program. **METHODS:** Data from the DMSRU and pharmacy dispensing records was accessed from July 1, 1998 to September 16, 2003. 2035 patients attended the clinic of whom 1819 were diagnosed with MS. Patient and drug therapy characteristics were determined and compared in those patients receiving immunomodulatory drug therapy and those who were not. **RESULTS:** A total of 433 patients (326 F) received immunomodulatory drug therapy. Fifty-nine percent of patients were between 35 and 49 years of age and 56% were classified as relapsing remitting MS. Funded patients increased from 98 in 1998 to 365 in 2002. In 2001 the median drug cost/patient was CDN \$15,508. The median number of prescriptions/year was 12.0 (mean 10.7 ± 3.3). 84% of patients received a prescription in 2 fiscal years, while 17% received a prescription in all 5. In 2001, 60% of patients had a maximum EDSS score of 5 or less. Patients receiving immunomodulatory drugs were less likely to have EDSS scores over 6 compared to those not receiving these drugs. The total expenditure for MS drugs was \$4.96 million in 2001/2 with Rebif® accounting for \$1.6 million (CDN). **CONCLUSION:** Expenditures grew rapidly for the program (from \$0.83 million in 1998 to \$4.96 million in 2001). Most patients were compliant receiving 12 prescriptions/year. Further work is ongoing to compare patient outcomes and health care costs in those patients receiving therapy to those who are not.

PNL21

INSOMNIA IN A NATIONAL AMBULATORY CARE SETTING 2001

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OBJECTIVES: The purpose of this study is to estimate the number of physician visits for a primary complaint of insomnia and characterize patients with a primary complaint of insomnia, diagnosis of insomnia and patients utilizing sleep medications. **METHODS:** Data was obtained from the 2001 version of the National Ambulatory Medical Care Survey. Descriptive analyses were utilized to examine individuals with a primary complaint of insomnia and/or diagnosed with insomnia. Patient level weights were utilized to derive national population estimates from a representative sample. **RESULTS:** In 2001, there were 1.6

million patient visits for a primary complaint of insomnia. More females than males (87% vs. 17%), and more Caucasians than other races (64% vs. 36%) reported insomnia as their primary complaint. While only 22% of patients complaining of insomnia were diagnosed with a sleep disorder, a significant number (79%) were prescribed a medication, including Ambien or Sonata (26%) and Benadryl (10%). During the same year, 4.8 million patients were diagnosed with a sleep disorder. Patients were diagnosed by generalist (67%), Psychiatrist (3%) and other specialist (43%). Yet, only 9% of patients diagnosed with a sleep disorder had a primary complaint of insomnia upon visiting their physician. Medications were utilized by 76% of these patients including Ambien or Sonata (15%) and Benadryl (3%). Only 15% of patients using Ambien or Sonata and only 4% of patients taking Benadryl were diagnosed with a sleep disorder. **CONCLUSIONS:** This work describes the characteristics of patients with a primary complaint of insomnia and their resultant diagnosis and pharmaceutical treatment. Additionally, we look at patients diagnosed with insomnia and describe the most common patient reported reason for their visit and their pharmaceutical treatment.

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NEUROLOGICAL/GENETIC DISORDERS (Migraine, Alzheimer's, Parkinson's, MS, Epilepsy, Brain Injury, Hunter Syndrome, Insomnia)—Methods

PNL22

THE SENSITIVITY OF COST-EFFECTIVENESS ESTIMATES IN MULTIPLE SCLEROSIS TO INTERNATIONAL DIFFERENCES IN NATURAL HISTORY: SWEDEN VERSUS NOVA SCOTIA, CANADA

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OBJECTIVE: To investigate the sensitivity of cost-effectiveness (CE) estimates of drug treatment that delays disability progression in Multiple Sclerosis (MS) to international differences in the underlying natural history of the disease. **METHODS:** Simulation model Multiple Sclerosis PharmacoEvaluation Tool (MS-PEET) was developed to estimate the CE of drug treatment that delays disability progression in Multiple Sclerosis. MS-PEET was initially populated with Swedish data on the natural history of disability progression, measured by the cumulative probability of patients reaching three disease-specific severity endpoints (EDSS 3, 6, 10). Treatment effectiveness is modeled as a reduction in the probability of EDSS progression. This analysis compares CE estimates based on Nova Scotia natural history data with estimates based on Swedish data, holding all other variables constant. Nova Scotia natural history data is from the Dalhousie Multiple Sclerosis Research Unit (DMSRU). The DMSRU has up to 25 years of clinical follow-up for 2368 patients. **RESULTS:** Preliminary analysis of untreated patients in DMSRU data shows a less severe natural history course in Nova Scotia relative to Sweden. The reported cumulative probability of progressing to severe disability (EDSS ≥ 6) within 10 years of MS-onset is almost 60 percent less in Nova Scotia than in Sweden. CE estimates based on Nova Scotia natural history data are roughly 150 percent higher than estimates based on Swedish data. **CONCLUSION:** A less severe MS natural history course limits potential gains in terms of disability years avoided with treatment. Consequently estimates of cost-effectiveness are likely to be sensitive to differences in the underlying natural history. MS-