**OBJECTIVES:** The Ontario Drug Policy Research Network has received provincial government funding to conduct research relating to formulary modernization within the Ontario Public Drug Programs. This innovative, integrated program for drug class reviews incorporates a novel methodological technique called reimbursement-based economics which focuses on reimbursement strategies. The first class review related to triptans for migrants. In Ontario, triptans are currently available through the Exceptional Access Program (EAP). Specific research questions related to the current evidence for the cost-effectiveness of triptans and the economic impact of alternative changes to their funding status were developed. A systematic review of cost-effectiveness studies of triptans focusing on strength and quality of evidence.

2. Applied, policy-oriented reimbursement-based economic model developed to forecast budget expenditure for each alternative reimbursement strategy (generic price, generic substitution, quantity limits and/or co-payment). RESULTS: 21 economic studies were identified through many had a number of common limitations reducing their usefulness in aiding decision making. The weight of evidence suggests that triptans are more cost effective than ergots, in patients experiencing acute migraine. Maintaining triptans within the EAP with generic equivalents costing 25% of branded products reduces expenditure by 18%-85%. Greater access to triptans to an extent limit the use of a wider population where neither effectiveness nor cost effectiveness is available. Maintaining triptan coverage through EAP with generic equivalents costing 25% of branded products combined with generic substitution will reduce total expenditures on active ingredient variability.

**CONCLUSIONS:** Evidence suggests that, for migraine, triptans are cost effective compared to ergots. Allowing greater access to triptans would significantly increase expenditure and may lead to a wider utilization where neither effectiveness nor cost effectiveness has been established. Maintaining triptan coverage through EAP with generic equivalents costing 25% of branded products combined with generic substitution will reduce total expenditures on active ingredient variability.

**Overall, clinicians’ preferences for drugs delivered via intranasal pumps were driven by patient-related health factors.**

**PDN57**

**BARRIERS TO PRESCRIBING MEDICATIONS TO PATIENTS WITH MULTIPLE SCLEROSIS: A COMPARISON OF HEALTHCARE PROVIDER PERCEPTIONS IN EUROPEAN UNION (EU) AND THE UNITED STATES**

**Narayanan S, Khan H, Gabriele S, White J**

**OBJECTIVES:** To assess healthcare provider (HCP) perception of barriers to prescribing medications to patients with Multiple Sclerosis (MS) in the EU and the US. METHODS: A multi-country HCP survey was conducted in SEU (UK/Germany/France/Spain/Italy) and the US as part of a retrospective chart-review study of MS patients. HCPs (mostly physicians) were screened for experience (>3yr) and patient volume (>15MS patients/month) and recruited from a large HCP panel to be geographically representative in each country. Practice characteristics, HCP perceptions and practice patterns were assessed. HCP perceptions of the following barriers to prescribing interferons (all types), glatiramer acetate, natalizumab and fingolimod were assessed: patients prefer other medications (barrier-1); availability/ accessibility (barrier-2); guidelines/license restrictions (barrier-3) and drug-related issues (barrier-4). Summary statistics are reported. RESULTS: In 4Q2012, 360 HCPs (n=987 per country) were recruited. The most frequently cited barrier to prescribing MS medications in the US was patients’ preference for injectable MS therapies (58%). Barriers to prescribing MS medications in the EU were patients preference for injectable MS therapies (45%) and drug-related issues (29%). Conclusions: Differences in HCP perceptions of barriers to prescribing MS medications across the EU and the US were identified. Further research is needed to assess the impact of these barriers on prescribing decisions.

**PDN58**

**PAYER MANAGEMENT OF ORAL MULTIPLE SCLEROSIS THERAPIES IN THE UNITED STATES**

**Kim E, Lounides M, Beckerman R, Gould A, Wong K**

**Objective:** The purpose of this study was to understand how United States payers manage novel oral, high cost MS medications in consideration of the availability of lower cost, intravenous treatments. In particular, we compared and contrasted the formulary management of the newest oral MS therapies with that of historical, intravenous MS therapies. RESULTS: Payer Ma.

**Barriers To Prescribing:** Barriers To Prescribing MS Medications was used to evaluate the impact of the four barriers identified as most important to HCPs. A4A329

**PDN59**

**CLEF T LIP SURGERY: RESULTS FROM THE KIDS’ INPATIENT DATABASE**

**Thomas IA,1, Kelton PC,1, Sel安稳ia T**

**Objectives:** The purpose of this study was to investigate the prevalence and characteristics of cleft lip surgery in children. The second most prevalent birth defect in the United States. Previous epidemiological studies of cleft lip surgery have been plagued by multiple design and methodological issues, including failure to account for confounders, grouping of cleft lip only (CL) with cleft lip and palate (CLP) diagnoses, and the lower definition of cleft lip surgery. The objective of this study was to provide national estimates of primary and secondary cleft lip surgery using cohort definitions based on national treatment guidelines. METHODS: The nationally representative Kids’ Inpatient Database (KID) was used for this study. Years analyzed included 2003, 2006, and 2009. Subjects were identified by International Classification of Diseases Ninth Revision (ICD-9) diagnosis of cleft lip only or cleft lip and palate. Primary surgery was defined as a surgery before two years of age with the ICD-9 procedure code for cleft lip repair. Secondary surgery was defined as a sur-
gery at age two or older with the ICD-9 procedural code for cleft lip repair. Additional characteristics examined across cohorts include length of stay and Consumer Price Index (CPI) adjusted charges. RESULTS: A total of 38,835 discharges for cleft lip repair were reported. In CL patients secondary surgery represented 16.3% (N=134), 14.2% (N=105), and 15.1% (N=129) of surgeries for 2003, 2006, and 2009, respectively. In CLP patients secondary surgery represented 23.5% (N=500), 20.2% (N=555) for 2003, 2006, and 2009, respectively. From 2003-2009, mean length of stay and CPI-adjusted costs decreased in all cohorts except secondary surgery in CL patients. CONCLUSION: The proportion of secondary cleft lip surgery did not differ significantly across years. Once adjusted, costs have decreased for the majority of patients, a finding in contrast to previously published studies.

PND60
THE EFFECT OF MEDICARE PART D ON MEDICATION PRESCRIBING PATTERNS AND DRUG UTILIZATION: THE CASE OF NON-BENZODIAZEPINE SEDATIVE HYNOTICS

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OBJECTIVES: This study investigated the effect of Medicare Part D on prescribing patterns and drug utilization of non-benzodiazepine sedative hypnotics. METHODS: Time-series analyses were conducted using data from National Ambulatory Medical Care Survey (NAMCS). Subjects were derived from US outpatient visits between 2002 and 2009 where the primary payment source was Medicare and at least one non-benzodiazepine sedative hypnotic drug was prescribed. Data trends were graphically plotted and further analyzed using segmented regression to estimate the effects of the Medicare Part D implementation on non-benzodiazepine sedative hypnotic prescription and utilization. RESULTS: Multivariate logistic regression was used to conduct the maximum likelihood of prescribing pattern associated with patient and physician socioeconomic characteristics. All analyses utilized SAS PROC GENMOD to adjust for the complex sample design employed by NAMCS database. RESULTS: An estimated 31.52 million of Medicare beneficiaries received at least one non-benzodiazepine prescription between 2002 and 2009 during one or more visits. After Medicare Part D implementation, there was overall 24% increase (24%) in Medicare outpatient visits between 2006 and 2009. In the same time period, prescribing of non-benzodiazepine sedatives increased significantly by 46.3%. The results from segmented regression indicate that the implementation of Medicare Part D drug benefits has significantly increased the sedative utilization in Medicare population (p=0.0001). Multivariate logistic regression revealed that patient gender, geography, chronic condition, and physician specialty all play an important role in determining the utilization pattern of non-benzodiazepine sedatives. CONCLUSIONS: Our study indicated that the use of non-benzodiazepine hypnotics increased dramatically after Medicare Part D. Increased utilization may also be related to the switching effect from benzodiazepine formulary exclusion and/or self-report off-label use for insomnia pharmacotherapy. These findings show the importance of using data analysis to identify substantial consequences from policy implementation and the need to provide additional guidance to insurers on how to effectively monitor prescribing patterns.

PND61
ANALYSIS OF THE BURDEN OF 30-DAY READMISSIONS AMONG PATIENTS WITH EPILEPSY: A RETROSPECTIVE STUDY IN A COMMERCIALLY-INSURED UNITED STATES POPULATION

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OBJECTIVES: To evaluate the burden of 30-day readmissions in adjudically-treated patients with epilepsy. METHODS: The MarketScan® retrospective database (January 2006 - December 2009) was used to identify patients with a diagnosis of epilepsy (ICD-9 345.xx), age ≥18, ≥1 hospitalization (index), and received at least one non-benzodiazepine prescription between 2006 and 2009 during one or more outpatient visits. After Medicare Part D implementation, there was overall a 24% increase (24%) in Medicare outpatient visits between 2006 and 2009. In the same time period, prescribing of non-benzodiazepine sedatives increased significantly by 46.3%. The results from segmented regression indicate that the implementation of Medicare Part D drug benefits has significantly increased the sedative utilization in Medicare population (p=0.0001). Multivariate logistic regression revealed that patient gender, geography, chronic condition, and physician specialty all play an important role in determining the utilization pattern of non-benzodiazepine sedatives. CONCLUSIONS: Our study indicated that the use of non-benzodiazepine hypnotics increased dramatically after Medicare Part D. Increased utilization may also be related to the switching effect from benzodiazepine formulary exclusion and/or self-report off-label use for insomnia pharmacotherapy. These findings show the importance of using data analysis to identify substantial consequences from policy implementation and the need to provide additional guidance to insurers on how to effectively monitor prescribing patterns.

PND62
NATIONAL ESTIMATES OF PRIMARY AND SECONDARY CLEFT PALATE SURGERY: RESULTS FROM THE KIDS’ INPATIENT DATABASE

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OBJECTIVES: Children with cleft palate (CP) or cleft lip and palate (CLP) may require surgery at age two or older with the ICD-9 procedural code for cleft lip repair. Additional characteristics examined across cohorts include length of stay and Consumer Price Index (CPI) adjusted charges. RESULTS: A total of 38,835 discharges for cleft lip repair were reported. In CL patients secondary surgery represented 16.3% (N=134), 14.2% (N=105), and 15.1% (N=129) of surgeries for 2003, 2006, and 2009, respectively. In CLP patients secondary surgery represented 23.5% (N=500), 20.2% (N=555) for 2003, 2006, and 2009, respectively. From 2003-2009, mean length of stay and CPI-adjusted costs decreased in all cohorts except secondary surgery in CL patients. CONCLUSION: The proportion of secondary cleft lip surgery did not differ significantly across years. Once adjusted, costs have decreased for the majority of patients, a finding in contrast to previously published studies.

PND63
PRIORITY DISEASE-MODIFYING DRUG USE AMONG PATIENTS WITH MULTIPLE SCLEROSIS

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OBJECTIVES: The MarketScan®retrospective database (January 2006 - December 2009) was used to identify patients with a diagnosis of multiple sclerosis (MS) using current and previously treated multiple sclerosis (MS) patients. METHODS: A random sample of MS patients (age ≥18 years) from the National Health and Wellness Survey was performed after approval. RESULTS: The objective of this analysis was to compare anastomotic leak rates following ileocolic anastomoses demonstrates a significantly lower rate of anastomotic leak compared to hand-sewn suture techniques. Our study indicated that the use of non-benzodiazepine hypnotics increased dramatically after Medicare Part D. Increased utilization may also be related to the switching effect from benzodiazepine formulary exclusion and/or self-report off-label use for insomnia pharmacotherapy. These findings show the importance of using data analysis to identify substantial consequences from policy implementation and the need to provide additional guidance to insurers on how to effectively monitor prescribing patterns.

PND64
DISEASE-SPECIFIC STUDIES

CANCER – Clinical Outcomes Studies

PCN1
META-ANALYSIS OF ANASTOMOTIC LEAK RATES FOLLOWING HAND-SEWN SUTURE VERSUS STAPLED ANASTOMOMES DURING RIGHT COLON SURGERY

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OBJECTIVES: The MarketScan®retrospective database (January 2006 - December 2009) was used to identify patients with a diagnosis of multiple sclerosis (MS) using current and previously treated multiple sclerosis (MS) patients. METHODS: A random sample of MS patients (age ≥18 years) from the National Health and Wellness Survey was performed after approval. RESULTS: There were 969 patients who completed the survey. Average age was 48.8 years (SD 11.3), 82.9% were female and 737 (76.1%) were currently receiving DMD treatment (self-injectable 57.6%, infusion 84.1%, oral DMDs 77.0%, other DMDs 22.9%) and 134 (13.9%) were currently untreated. Among patients currently treated with a self-injectable DMD, most patients were either on their first treatment (57.7%) or had prior use of 1 DMD (57.4%). For those currently treated with an infusion DMD, 42.9% had prior use of 2 DMDs, 36.5% had prior use of 1 DMD and 17.9% had prior use of 2 or more DMDs. For patients currently treated with an oral DMD, 27.3% had prior use of 1 DMD, 32.5% had prior use of 2 DMDs, 32.5% had prior use of ≥3 DMDs, and 7.8% were initially treated with an oral DMD. For those not currently on a DMD, 34.9% were untreated, while 33.2%, 18.5%, and 13.4% had prior use of 1, 2, or 3 DMDs, respectively. CONCLUSIONS: In this sample of MS patients, 84.9% had never been treated with a DMD. Most patients initiated therapy with a self-injectable DMD, while patients currently treated with infusion and oral DMDs had prior use of 1 or more DMDs.