respectively. Thus, delayed-release dimethyl fumarate was dominant (had lower costs and higher QALYs gained) compared to glatiramer acetate and fingolimod. Sensitivity analyses showed that delayed-release dimethyl fumarate was less costly and more effective than glatiramer acetate and fingolimod for most of the input parameter values and assumptions tested. **CONCLUSIONS:** Delayed-release dimethyl fumarate, a new oral drug indicated for RRMS, is a cost-effective treatment when compared to glatiramer acetate and fingolimod. Sensitivity analyses support the robustness of the model results.

PND26
COST EFFECTIVENESS STUDY OF TETRABENAZINE THERAPY OF CHOREA ASSOCIATED WITH HUNTINGTON'S DISEASE
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OBJECTIVES: Evaluate the cost effectiveness of Tetrabenazine for the treatment of chorea in Mexican patients with Huntington disease versus current therapy, from a governmental perspective. **METHODS:** Cost-effectiveness and a cost utility analysis were done. Effectiveness measurements were: percentage of successful patients treated and QALYs. Disease-specific utility values assigned to each disease state, have been estimated by Mevhibe 2009 using instrument Huntington's disease health-related quality of life questionnaire, and expert opinion. Costs considered are direct medical care, drug, adverse events. Analysis used a governmental perspective (Mexican Institute of Social Services costs). The model contains four arms, one for each alternative to compare: tetrabenazine, olanzapine, haloperidol and risperidone. A Markov model was performed considering 80 weeks horizon with 1 week cycles simulating Mexican population with the proposed treatment alternatives. Finally a univariated probabilistic sensitivity analysis was done to validate consistency in the model. **RESULTS:** Tetrabenazine generated the lowest cost per patient ($3,728USD), followed by risperidone ($ 4,632USD), haloperidol ($4,790USD), the alternative that generates the largest cost is olanzapine ($4,954) (conversion rate: USD=13.1 MxPesos. Average 2013). In terms of effectiveness, we find that tetrabenazine arm has the highest proportion of successful treatments regarding their comparators (56.0%, 95% CI: 46.0 - 65.0%), as well as a greater number of QALYs gained (QALY 1.166, 95% CI: 1130-1203) **CONCLUSIONS:** The use of tetrabenazine itself can be considered a cost-effective from the perspective of dominant institutions of public health intervention in Mexico, since it is a less expensive and more effective strategy regarding its comparators.

PND27
ITALIAN COST MINIMISATION ANALYSIS: BUCCOLAM (MIDAZOLAM OROMUCOSAL SOLUTION) VERSUS RECTAL DIAZEPAM FOR PROLONGED ACUTE EPILEPTIC SEIZURES
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OBJECTIVES: Buccolam (licensed midazolam oromucosal solution) is indicated in prolonged, acute, convulsive seizures (PACS) in pediatric patients. Clinical data confirm that midazolam oromucosal solution is at least as effective as existing treatments. Current-care in Italy for community PACS is rectal diazepam, which carers are often reluctant to use due to social acceptability issues. The aim of this study was to establish whether use of Buccolam could affect the cost of treatment. **METHODS:** A decision-tree model was developed to perform cost-minimisation analysis comparing Buccolam and rectal diazepam for the treatment of PACS in children initially occurring in the community setting. The model captures the treatment pathway for children experiencing a PACS including whether treatment is administered in the community, whether an ambulance is required and whether the patient is hospitalised. Costs were taken from Farmadati Italia and official DRGs. Efficacy estimates were taken from published literature whereas, due to a lack of available evidence, effectiveness was estimated by a 4-round Delphi-panel process consisting of leading Italian clinicians. **RESULTS:** Over one year, compared to rectal diazepam, Buccolam showed a reduction in per patient costs of €1,765 from an INHS perspective. The largest saving came from an estimated reduction in inpatient costs: €1,677 per patient per year. Estimates of budget impact over five years varied from a saving of €76 million to over €152 million when low and high-case population estimates were used. **CONCLUSIONS:** Treatment with Buccolam is estimated to be cost saving, through a reduction in the need for ambulance call-outs and hospital stays. Treatment with Buccolam is expected to increase the number of PACS resolved in the community through increased carer willingness to treat seizures and fewer failed deliveries: Buccolam has a more acceptable method of administration that avoids compromising patients' dignity and an easier administration route compared to diazepam.

PND28
COST-EFFECTIVENESS OF STIRIPENTOL IN THE TREATMENT OF SEVERE MYOCLONIC EPILEPSY IN INFANCY IN CANADA
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OBJECTIVES: Severe myoclonic epilepsy in infancy (SMEI, Dravet Syndrome) is a severe type of pharmacoresistant epilepsy, characterized by repeated and prolonged generalized seizures. Patients with SMEI show important delays in psychomotor and cognitive development that often progress in eventual mental retardation. Stiripentol (STP) has been approved in Canada for use in conjunction with valproate (VPA) + clobazam (CLB) as adjunctive therapy in patients with SMEI whose seizures are not adequately controlled with VPA+CLB alone. The objective of this study was to assess, from a Canadian perspective, the economic impact of STP+VPA+CLB compared with VPA+CLB in the treatment of SMEI. **METHODS:** The cost-effectiveness of STP+VPA+CLB compared to VPA+CLB in the treatment of SMEI was assessed over a 5-year horizon using a Markov model. The model comprises four health states:

not adequately controlled (NAC), not seizure free (NSF), seizure free (SF) and death. The length of each Markov cycle is 1 year for the whole study period. Patients could stay in the NAC state, move to the NSF or SF state, or die, according to the respective efficacy of each treatment. Utility values associated with each health state were used to estimate the number of QALYs associated with each treatment. Analyses were conducted from both a Canadian Ministry of Health (MoH) and a societal perspective. **RESULTS:** Compared with VPA+CLB, STP+VPA+CLB was associated with incremental cost-effectiveness ratios of CAD$50,122/QALY from a MoH perspective and was dominant from a societal perspective. Results of the probabilistic sensitivity analysis indicated that the ICUR remained below CAD$100,000 in 98.4% and in 100% of the simulations from a MoH and a societal perspective respectively. **CONCLUSIONS:** This economic evaluation demonstrates that STP+VPA+CLB is a cost-effective strategy as adjunctive therapy in patients with SMEI whose seizures are not adequately controlled with VPA+CLB alone.

PND29
HOSPITAL-BASED UTILIZATION IN PATIENTS WITH ATYPICAL HEMOLYTIC UREMIC SYNDROME
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OBJECTIVES: Atypical hemolytic uremic syndrome (aHUS) is a rare genetic disease affecting kidney function that predominantly affects children. The objective of this study was to evaluate hospital-based utilization in patients with aHUS. **METHODS:** A retrospective cross-sectional study was conducted on 6571 aHUS discharges in the MedAssets health system data for inpatient (IP) and outpatient (OP) visits for the January 2009 to December 2013 timeframe. Age and gender, hospital characteristics, clinical comorbidities and measures of utilization including number of visits and length of stay (LOS) were described. Multivariable regression was used to identify significant drivers of hospital-based utilization. **RESULTS:** The sample included 2089 patients with more than 76.0% of the hospital visits occurring in the outpatient setting. The mean age of the sample was 23 years with 59.3% under the age of 18 and 61.0% female. More than 60% of the visits occurred in teaching facilities and facilities with 300 beds or more. Among inpatient admissions, the average LOS was 16.02 days with the most common procedures being packed cell transfusions (41.7%) therapeutic plasmapheresis (29.8%) and serum transfusion (17.4%). Same-hospital readmissions occurred in 14.5% of the inpatient sample. Comorbidities for this population included renal disease (56.2%), congestive heart failure (11.1%), chronic pulmonary disease (10.0%) and diabetes without chronic complications (8.0%). Cardiovascular disease (2.8 days, p<.001), rheumatic disease (2.5 days, p<.05), and malignancy (4.2 days, p<.0001) were significantly associated with longer inpatient LOS. **CONCLUSIONS:** Patients with aHUS consume a significant amount of health care resources. Further research is required to understand the effect of interventions/treatments on mitigating the progress of this disease.

PND30
HEALTH STATUS, HEALTH CARE RESOURCE USE, AND TREATMENT SATISFACTION IN PATIENTS WITH PARTIAL ONSET SEIZURES (POS) IN THE UNITED STATES
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OBJECTIVES: As of December 2013, there were over 20 drugs available in the US for the treatment of POS. The aim of this study is to understand the remaining burden of disease and the need for newer treatments. **METHODS:** Data from the 2012 and 2013 U.S. National Health and Wellness Survey (NHWS) was analyzed. The NHWS is self-administered, internet-based survey of a nationwide sample of adults (18+ years) stratified to represent the demographic composition of the U.S. population. Patients self-reported a diagnosis of epilepsy with POS and were grouped as uncontrolled (>= 1 seizure per month) and controlled (<1 seizure per month). Patients provided information on health status (mental (MCS), physical component summary (PCS), and SF-6D (health utility) scores from the SF-36v2), resource utilization in the past six months and treatment satisfaction with current epilepsy prescription medication (1 [extremely dissatisfied] to 7 [extremely satisfied]). Regression modeling controlled for covariates. **RESULTS:** Among 207 diagnosed epilepsy with POS patients, 38.6% were uncontrolled and 61.4% were controlled. Uncontrolled vs. controlled patients were similar in age, gender and ethnicity, but were more likely to be in a committed relationship, less educated, and employed (p<0.05). Uncontrolled vs. controlled patients had lower health utilities (0.66 vs. 0.70, p=0.015), MCS scores (43.05 vs. 47.10, p=0.008), and non-significant PCS scores (47.95 vs. 49.12, p=0.371). Uncontrolled vs. controlled patients reported more emergency room visits (207.7%, p=0.002), hospitalizations (447.9%, p<0.001), and traditional provider visits were non-significantly greater (22.8%, p=0.197). Amongst treated patients, treatment satisfaction was lower for uncontrolled vs. controlled (5.27 vs. 5.86, p=0.01). **CONCLUSIONS:** Despite the availability of existing anti-epileptic drugs (AED) in 2013, the results suggest a significantly higher economic and humanistic burden in patients with uncontrolled seizures. POS patients are very much in need of additional treatment options for which newer AEDs may provide a solution.

PND31
QUANTIFYING DIFFERENCES IN HEALTH CARE CONSUMPTION FOR THE MANAGEMENT OF MULTIPLE SCLEROSIS WITHIN PRIVATE AND PUBLICLY FUNDED HEALTH CARE PROGRAMS
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BACKGROUND: MS is known to be a costly and intensive condition to treat which allows for an opportunity to better understand how non-clinical factors can impact costs and other economic measures. **OBJECTIVES:** To observe and report variances