yearly frequency and average consumption. **RESULTS:** The study enrolled 210 MS patients with a median age of 47 years (standard deviation 15.5 years) and 70.7% female. Patients with mild disability (according to self-reported Expanded Disability Status Scale [EDSS]) represented 40.4% of patients, 43.7% had moderate disability and 15.9% had severe disability. The overall yearly direct costs (mean [95%CI]) associated to patients with mild to severe disability in Argentina were USD1,018 (95%CI 832-1,204), USD13,871 [4,651-34,090], and USD19,545 [5,077-65,189] (BDRL = 0.4973USD), respectively. Disease modifying therapies (DMTs) were the major component of the total yearly cost, ranging from 53.5% among mild patients to 53.9% in the severe group (58.5% in the total sample), followed by aids and home modifications (mild: 2.3%; moderate: 2.3%; severe: 15.1%; total sample: 4.3%). Patients with moderate disability had higher absolute costs related to inpatient care, emergency visits, laboratory and imaging tests, and DMTs than the other disability groups, while those with severe disabilities presented higher costs in the remaining categories (consultations, co¬medications and OTC medications, aids and home modifications, and professional caregiving). **CONCLUSIONS:** This was the first study to analyze the cost of MS in Argentina and to identify the factors driving the cost of MS patients. Our findings indicate that MS represent a significant economic burden for both the health care system and patients and their families, with different expenditures profiles depending on the EDSS level.

**PND7 ARGENTINIAN SURVEY IN COST OF ILLNESS AND UNMET NEEDS IN MULTIPLE SCLEROSIS: TREATMENT EXPERIENCE & THE COSTS OF MS PATIENTS IN ARGENTINA**

**Method:** Objective: The objective of this study was to assess the cost of MS patients in Argentina categorized by disease severity using a societal perspective. **METHODS:** This was a cross-sectional study including MS patients from 21 MS centers in 12 cities of Argentina conducted to collect information on demographics, disease characteristics, disease severity, comorbidities, relapses, resource utilization and patient reported outcomes, associated with MS. Patients were stratified by disease severity: mild (EDSS<3), moderate (EDSS 3-6) and severe (EDSS>6). **RESULTS:** The total cost of MS per patient in Argentina was USD 36,025 (95% CI 31,985-38,068) for the 2009-2012 period were collected from the BPHS Hospital Information System and compiled by state and year. The study enrolled 210 MS patients. In each monthly cycle, patients can discontinue treatment, states were based on EDSS and relapses (moderate or severe). We obtained relapse and hospitalization in the general population (per 100,000, absolute number). The aim of this study is to conduct a cost-effectiveness analysis of natalizumab (Tysabri®) versus glatiramer acetate (Copaxone®) for treatment of relapsing and remitting Multiple Sclerosis (RRMS) patients from the Brazilian Public Healthcare System (BPHS) perspective. **METHODS:** A Markov model with a 20-year time horizon comparing natalizumab to glatiramer acetate was developed. Health states were based on EDSS and relapses and moderate or severe. We obtained relapse and disability progression transition probabilities from natural history studies on RRMS patients. In each monthly cycle, patients can discontinue treatment, remain stable, progress to higher MS EDSS state, experience Progressive Multifocal Leukoencephalopathy (PML) or die. Patients with EDSS score ≥ 7.5 receive best supportive care. Resource use and costs were validated by an expert’s panel and valued on the basis of resource item, state and year. **RESULTS:** We obtained data on 5,922 individual MS relapse-related claims, homogeneously distributed among the 4 years. They represented an overall cost of BRSL 7,739,921 for the 2009-2012 period (ranging from BRSL 8,062,722 in 2010 to BRSL 1,033,649 in 2012). The 4-year national average cost per inpatient admission BRSL 629, with mean LOS of 7.51 days and ICU days of 0.2. The in-hospital mortality rate ranged from 0.65%-1.60%. The 2012 national rate of MS relapse-related-hospitalization in the general population (per 100,000, absolute number of admissions / total population) was 0.79, varying from 0.03/100,000 in Alagoas (Northeast region) to 1.78/100,000 in Santa Catarina (South region). All parameters were consistently different among Brazilian states. In hospital deaths were very rare in this sample not allowing robust conclusions. It was possible to identify significant outliers in the mean cost per admission when states were separately considered (2012 data: from BRSL9 [8-10] in Sergipe to BRSL 4,596 in Espírito Santo [8-9]). São Paulo was the state with higher absolute number of hospitalizations in all years. In 2012, the state had 526 admissions, mean cost per event of BRSL80, 4 in hospital deaths (0.76%), mean LOS=6,16, and mean ICU days of 0.36. **CONCLUSIONS:** BPHS administrative hospital database can provide insightful information about MS relapse-related admissions. Both geographical and time trends can be examined using SIH/SUS secondary data, particularly for diseases with highly specific procedure codes.

**PND9 ANALISIS DE COSTO-EFECTIVIDAD DEL TRATAMIENTO PROFILÁCTICO VERSUS A DEMANDA EN ADOLESCENTES CON HEMOFILIA A SEVERA EN COLOMBIA**

**Objectives:** The aim of this study was to determine if deferred prophylaxis with FVIII has a similar efficacy to prophylaxis at demand for controlling hemarthrosis in adolescents with moderate hemophilia A and 3rd generation genetic testing. **Methodology:** The recommended dose of prophylaxis at demand for these patients is 50 U/kg every 12 hours, while the prophylaxis at demand dose is 100 U/kg every 12 hours. Under these conditions, by using pharmacoeconomic methodology, the incremental cost-effectiveness ratio (ICER) of prophylaxis with FVIII versus prophylaxis at demand was calculated. **Results:** The cost-effectiveness ratio for prophylaxis at demand was USD 30,251/QUALY in the Brazilian public healthcare system (BPHS). The cost-effectiveness ratio for prophylaxis at demand was USD 30,251/QUALY in the Brazilian public healthcare system (BPHS). The cost-effectiveness ratio for prophylaxis at demand was USD 30,251/QUALY in the Brazilian public healthcare system (BPHS). **Conclusion:** The results of this study are in line with previously published studies. This study was able to show that prophylaxis at demand is not only efficient but also cost-saving in adolescents with severe hemophilia A. Therefore, it is recommended to use prophylaxis at demand for these patients.