$p < 0.001$. The average of referrals was of 70.5 per 100 attended-patients/year ($p < 0.001$). 2.5% referrals of the total were made to the neurological, being patient of greater age, with predominance of women and displaying the head pain/migraine as main consultation reason. Visits and episodes explain 43.2%-73.9% respectively ($p < 0.001$), the explanatory power of the classification's variability was of 46.3% ($p = 0.001$) and the referral 20.1%. EI per center were: 0.97 (CI: 0.77–1.18), 0.79 (CI: 0.57–1.01), 0.88 (CI: 0.62–1.14), 1.29 (CI: 0.94–1.65) and 0.91 (CI: 0.58–1.25), $p = 0.023$ (family practice) and 0.90 (CI: 0.47–1.33), 0.78 (CI: 0.35–1.21), 0.93 (CI: 0.43–1.44), 1.21 (CI: 0.60–1.82) and 0.97 (CI: 0.39–1.56), $p = 0.031$ (pediatrics); respectively. **CONCLUSIONS:** Adjusted morbidity by ACG explains an important part of the referrals variability. A low percentage was derived to neurology.The study results must be interpreted cautiously even after adjustment by age, gender and morbidity. Should the results be confirmed it would allow an improvement in the measurement of referrals for clinical management in the PCT.

PND30

NATIONAL GUIDELINE FOR MULTIPLE SCLEROSIS TREATMENT IN BRAZILIAN PUBLIC HEALTH: AN ANALYSIS OF TREATMENT PATTERNS AND BUDGET IMPACT

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OBJECTIVES: To determine the budget impact of treatment patterns for Multiple Sclerosis (MS) based on national guideline. **METHODS:** A one-year (October 2006 to September 2007) retrospective database search was conducted to identify medication used, costs, patient adherence and provision. The source of data was the Ministry of Health public available database, called DATASUS. The study were conduct in four steps: 1) Determine the medicines codes in the public list; 2) Establish the relationships among drugs and patients usage, based on national guidelines; 3) Analyze adherence pattern in the most relevant center in Brazil, based on medication consumption; and 4) Determine the budget impact for MS treatment. **RESULTS:** Medication for MS was responsible by 13% of high cost medication supplied by Public Sector in Brazil. During the period of analysis the costs and number of patients grew more than 100%, in average 60,000 medications per month were supplied and a total 8.294 patients were treated. Patients treated were distributed among therapeutics alternative as follow: 60.28% to interferon-1a (two brands), 19.99% to interferon-1b and 19.74 to glatiramer acetate. Five states out of 27 were responsible by 80% of patients treated. It was possible to detect the beginning of drug association. We found that 26% of patients adhere to disease treatment. Treatment costs was higher than USD 9 millions per month, the distribution of costs is similar to the patients distribution due to fewer combination therapy. **CONCLUSIONS:** National guidelines permits universal access, but the analysis of treatment patterns points to a high concentration of care and this could be an indicator of health care provision inequalities. Due to the high costs of treatments and the fast patient growth rates new cost-efficient alternatives need to be considered as a way to reduce health system inequalities.

PND31

DESCRIPTIVE STUDY OF THE PHARMACOLOGICAL TREATMENTS USED IN PATIENTS WITH DEPRESSION IN PARKINSON'S DISEASE (PD)

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Depression affects around 40–50% of people with PD [Goetz 2002]. It has been argued that depression in PD can be considered to be one of the manifestations of the degenerative nature of the disease on the CNS [Shrag et al 2000]. Any differences in the aetiology and co-morbidities in depression in PD when compared to depression in those without PD may result in differences in antidepressant treatment patterns. Furthermore, certain PD drugs are metabolised in a way that may lead to their interaction with certain antidepressants. Awareness of this may impact upon prescribing decisions both for antidepressant and PD drugs in those with depression in PD. **OBJECTIVES:** The objective of this study is to describe the use of antidepressants in the treatment of depression in PD patients. **METHODS:** The study was carried out using the General Practice Research Database (GPRD). The GPRD is a database with 9 million patients' data (3.7 million being currently active). The search identified PD patients on various rates of different antidepressants. The PD patients were diagnosed with PD from 2002 onwards. **RESULTS:** The study identified 18,481 patients with a diagnosis of PD; 44% of these also had a diagnosed depression (8,058 of 18,481). Of these PD patients with depression, 21% had prescriptions for Amitriptyline (1658 of 8058), 19% for Fluoxetine (1549 of 8058), 14% for Citalopram (1125 of 8058), 7% for Venlafaxine (566 of 8,058) and 5% for Mirtazapine (369 of 8058). **CONCLUSIONS:** This study confirms the results of previous studies that there is a high prevalence of depression in PD patients. Within a UK context, the study also identifies that a large proportion of these patients receive antidepressant treatments.

SENSORY SYSTEMS DISORDERS—Clinical Outcomes Studies

PSS1

RISK OF PSYCHIATRIC DISORDERS AND HEALTH CARE EXPENDITURES AMONG PATIENTS WITH MODERATE TO SEVERE PSORIASIS

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OBJECTIVES: To evaluate the risk of psychiatric disorders and associated health care expenditures among moderate to severe psoriasis (PsO) patients using data from a US health care claims database. **METHODS:** PsO patients and controls without PsO were identified from the PharMetrics health care claims database using the ICD-9 code of 696.x. Patients with moderate to severe PsO (N = 7971) had been diagnosed with PsO in both years 2003 and 2004, and had been treated with systemic therapies including cyclosporine, methotrexate, acitretin, biologics, or phototherapy. Controls (N = 31884) were matched with PsO cases in a 4:1 ratio by gender, age, region, and previous time-in-plan. Psychiatric disorders and anti-psychiatric therapies in year 2004 were compared between groups. **RESULTS:** PsO cases were equally distributed between males (50.6%) and females with mean age of 47.2 years. Almost half of the patients received anti-inflammatory drugs, 33.3% received biologic therapies, and 36.7% had phototherapy. Compared with controls, patients with moderate to severe PsO had a statistically significantly higher prevalence ($p < 0.01$) of anxiety (6.94% vs. 4.37%, OR = 1.63), depression (9.17% vs. 5.32%, OR = 1.80), bipolar disorder (1.10% vs. 0.51%, OR = 2.16), and delirium (0.25% vs. 0.14%, OR = 1.74). There was no difference between PsO patients and controls in the prevalence of dementia or schizophrenia ($p > 0.05$). Compared with controls, a greater proportion of PsO patients had been treated with antidepressants (6.12% vs. 0.90%, OR = 7.18), anxiolytics (5.03% vs. 0.75%, OR = 7.04), anti-psychotics (5.90% vs. 0.89%, OR = 6.97) or anti-manics (4.89% vs. 0.74%, OR = 6.93). PsO patients had higher total health care