this study demonstrate, for the first time, the high resource utilization and financial burden experienced by sIBM patients in the USA. Further data collection of this type is needed to better understand the true economic burden of sIBM not only in US but globally.

NEUROLOGICAL DISORDERS – Patient Reported Outcomes & Patient Preference Studies

PNP41 DESCRIPTION OF PROPHYLACTIC DRUG UTILIZATION PATTERNS IN MIGRAINE PATIENTS

Santu S,1,2,3 Rolley M,1,2,3 Dessi PE,1,2,3 Enloe CJ,1,2,3 Kirson NY,1 Binbaum HG,1,2 Corey-Lisle PK,1,2,3 Sapa S1

1Analysis Group, Inc., Boston, MA, USA, 2Amgen Inc., Thousand Oaks, CA, USA, 3EMD Serono, Inc.,MA, USA

OBJECTIVES: Describe medication utilization patterns of migraine prophylactics in commercially insured patients. METHODS: Adult migraineurs (ICD-9 code 346 XX) newly initiating migraine prophylactics (no claims for 12 months before first (index) prophylactic prescription) between January 2007 and March 2013 were identified from the OptumInsight employer claims database and followed for 6 months. Prophylactics included antiepileptics (topiramate, divalproex, valproic acid), beta-blockers (propranolol, timolol), antidepressants (amitriptyline and onabotulinumtoxin A). Continuous enrollment was required for 12 months pre-index and 6 months post-index. To increase the specificity of migraine prophylactics, patients with prior diagnoses for conditions for which their prescribed prophylactics were also indicated (e.g., beta-blockers for migraine, epilepsy, hyperlipidemia, degenerative neurologic disorders, and depression for amitriptyline) were excluded. Outcomes of interest were medication adherence (medication possession ratio [MPR], discontinuation (>30-day gap between prescriptions), and switching patterns). A transition of initial prophylactic was described using Kaplan-Meier curves. RESULTS: 19,881 patients initiated prophylactic treatment with 12,136 (61%) patients enrolled in MPR and median follow-up of 6.4 months. Discontinuation rates were high ranging from 74% (topiramate and onabotulinumtoxin A) to 90% (valproic acid, divalproex timolol, amitriptyline) and ranged from 6% (topiramate) to 20% (valproic acid). Between 46% (topiramate) and 68% (timolol) patients discontinued treatment after the first prescription, and median days to discontinuation of initial treatment ranged from 30 (valproic acid, divalproex timolol, amitriptyline) to 84 (onabotulinumtoxin A). CONCLUSIONS: Adherence to migraine prophylactic medications was poor with about 50% of patients discontinuing after their first prescription and over 75% discontinuing within 6 months. The large proportion of patients discontinuing after first prescription is needed for reasons for discontinuation and better tolerated therapies.

PNP42 A REVIEW OF METHODOLOGIES USED TO ASSESS ADHERENCE TO DISEASE MODIFYING THERAPIES AMONG PATIENTS WITH MULTIPLE SCLEROSIS

Thaich A,1 Chinnah C, Makhnovskiy T, Brown N2

1The University of Texas at Austin, Austin, TX, USA

OBJECTIVES: To review the methods currently used to measure adherence to oral and injectable disease modifying therapies (DMTs) in multiple sclerosis (MS) patients. METHODS: A comprehensive systematic literature search was conducted in PubMed, CINAHL, PsyCINFO, and Cochrane Library to identify articles assessing adherence to DMTs. The publication time frame was from January 2004 to November 2014. Studies were included if they focused on at least one U.S. FDA-approved oral or injectable DMT and assessed DMT adherence as either a primary or secondary outcome. RESULTS: A total of 36 studies met inclusion criteria. The majority (63.9%) of studies were conducted in the U.S. All studies assessed adherence to at least one injectable DMT while two studies also included an oral DMT. Twenty-two studies used a cross-sectional, randomized controlled, or prospective observational study design. Among these studies, Multiple Sclerosis Treatment Adherence Questionnaire (MS-TAQ), Medication Event Monitoring System (MEMS), adherence diary, self-reported survey items (designed specifically for respective study), Morrisky 4-item medication adherence scale (MMAS-4), and self-reported missed dose ratios were used to assess adherence. Fourteen studies employed a retrospective design, using medication possession ratios (MPRs) and proportion of days covered (PDC) to assess adherence. Although some of the measures (e.g., MEMS, MMAS-4, MPF, PDC) are well established, several of the self-reported items lack any evidence of reliability and validity. CONCLUSIONS: A plethora of methods have been used to assess DMT adherence, and each has its own unique advantage and disadvantage. The wide array of measurement methods and adherence definitions makes it difficult to compare adherence rates across studies.

PNP43 ADHERENCE AND PERSISTENCE TO ANTI-EPILEPTIC DRUGS AMONG U.S. VETERANS DIAGNOSED WITH EPILEPSY

Yi J,1,2 Baer O1,3,4, Xia L1

1Indiana University School of Medicine, Indianapolis, IN, USA, 2RTI Health Solutions, Research and Development, Research Triangle Park, NC, USA, 3Indiana University School of Medicine, Indianapolis, IN, USA

OBJECTIVES: To evaluate patient adherence and persistence to anti-epileptic drug (AED) use among veterans with epilepsy. METHODS: Adherent patients were identified with diagnosis claims (ICD-9-CM: 345) or one epilepsy diagnosis claim and one claim for another condition (ICD-9-CM: 780.39) were selected from the U.S. Veterans Health Administration database (01/01/2008-03/01/2013). Patients were required to have ≥1 AED prescription post-epilepsy diagnosis, and the first AED prescription claim date was designated as the index date. Continuous health plan enrollment status was determined using claims data. 12-month pre-index and post-index periods were compared. Patients were assigned to four monotherapy AED cohorts based on drug class: sodium channel blockers (SCs), gamma-aminobutyric acid agonists (GABAa), synaptic vesicle protein 2A binding (SV2) and multiple mechanisms (MMs). Adherence was assessed using the proportion of days covered (PDC) for each 12-month time period. RESULTS: Adherence was higher in patients with identifiable genetic information than for non-actionable findings. Our findings also suggest that respondents were willing to pay more for actionable genetic information than for non-actionable findings.