impacts medical costs. METHODS: A retrospective cohort study design was used. Pharmacy and medical claims data for MS patients (N = 5,323) were extracted for 2008 from a pharmacy benefit management (PBM) company. The two study populations included: 1) patients who received therapy from a specialty pharmacy, and 2) those who did receive therapy from retail pharmacies. Adherence was measured by Medication Possession Ratio (MPR), with patients considered adherent for MPR ≥ 80%. Nonparametric statistical tests and multivariate log-linear regression analyses were used to determine differences between the two populations. RESULTS: The results suggest that MS patients receiving therapy from a specialty pharmacy have significantly lower total medical costs than patients who receive therapy from a retail pharmacy (+0.18; 95% CI −0.33, −0.02). Overall, specialty pharmacy MS patients tended to have lower total medical costs, IP costs and office visits as compared to retail therapy. CONCLUSIONS: Considered together, these findings support the use of specialty pharmacies for relapsing-remitting MS patients. Specialty pharmacies often have additional patient care services that help the patient manage their therapy more effectively. This study demonstrates that MS patients taking a DMD who are medically managed in a specialty pharmacy setting can achieve lower medical costs. This has significant implications for insurers and patients.

APPROACH TO MATCHING ALzheimer’S DISEASE PATIENTS AND THEIR SPOUSES TO ASSESS CAREGIVER BURDEN IN AN ADMINISTRATIVE CLAIMS DATABASE

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OBJECTIVES: To present a methodology for matching Alzheimer’s disease (AD) patients and their spouses to non-AD couples using an administrative claims database to assess caregiver burden. METHODS: Data were extracted from MarketScan databases from January 1, 2002–December 31, 2008. Patients with an AD ICD-9 code and with a spouse were matched 1:1 to a control couple. The AD index date was the date of first AD diagnosis. Couples with no AD diagnoses were eligible as controls and were matched 1:1 to AD couples based on patient and spouse birth years ± 3 years, index date ± 1 year (defined as eligibility midpoint), gender, and CPRS risk adjusted score prior to index date. All subjects had continuous eligibility 12+ months pre- and post-index date. RESULTS: Of 12,476 AD patients with spouses who met all inclusion criteria, 12,370 matched to a control couple. AD couples who did not match often had a greater age difference than available control couples. More AD patients and spouses utilized AD medications, antidepressants, anxiolytics, and antipsychotics pre-index date than their controls (p < 0.05). AD patients had a higher pre-index prevalence of non-AD dementia, anxiety, and psychosis than control patients (p < 0.001). AD spouses had increased antidepressant use post index (p < 0.001); control spouses showed no change. AD patients had a greater increase in total costs post index date than control patients (p < 0.001); no difference in total cost was observed between AD and control spouses, whose increases were similar to control patients. CONCLUSIONS: Matching on a risk adjuster score resulted in similar rates of chronic conditions between case and control couples but may have limited the ability to detect whether AD impacts spouse health care resource use. However, significant differences in prevalence of dementia and other mental health conditions were noted for AD patients, and an increase in antidepressant use suggests such a trend.

HEALTH CARE COSTS STRATIFIED BY EPILEPSY SEVERITY IN A US COMMERCIALLY INSURED POPULATION

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OBJECTIVES: To measure health care costs related to epilepsy severity using real-life claims data (PharMetrics®, IMS, USA) in a representative sample from a U.S. commercially-insured population. METHODS: The observation period ranged from January 2006–December 2007. Patients with at least two diagnoses of epilepsy before the observation period and at least two claims for anti-epileptic drugs (AEDs) during the observation period were included. As PharMetrics® does not report data on disease severity, the number of epilepsy-related emergency room visits over two years (0, 1, 2, 3) was used as a proxy. Covariates included age, gender, region, epilepsy-type, number of co-morbidities, concomitant AEDs, and treatment duration. Annualized costs were split into AED costs and non-AED costs. Non-AED costs included non-AED medications and ‘other’ costs including emergency room visits, hospitalizations, and physician visits. RESULTS: A total of 9163 patients were included, with 14% in the most severe category (≥ 3 ER visits). Total annualized costs ranged from US$6,000 to $13,000 depending on disease severity. AED costs were not linked to severity; however ‘other’ costs increased disproportionately with disease severity. In the unadjusted analysis, mean annualized AED, non-AED medication and ‘other’ costs were $2,513, $1,276 and $2,522, respectively, for those with no ER visits and $3,279, $3,457 and $2,932, respectively, for those with ≥ 3 ER visits. The rise in ‘other’ costs was mainly attributable to hospitalization costs. In the adjusted analysis, the difference between AED and ‘other’ costs increased significantly with epilepsy severity, number of co-morbidities, and age, whereas it decreased with improved AED compliance. CONCLUSIONS: Non-AED treatment increased disproportionately with epilepsy severity, driven mainly by hospitalization. AED medication costs were not related to disease severity. This analysis suggests cost savings may be achieved through targeted strategies and improvement of patient compliance in cases of severe epilepsy.