continuity of care occurs when patients do not follow-up after being discharged from the hospital. In bipolar disorder problems with continuity of care and medication adherence may lead to expensive relapses. The objectives of this research were: 1) examine the frequency of poor continuity of care for individuals with bipolar disorder; 2) identify the predictors of poor continuity of care; and 3) evaluate the potential increased psychiatric hospitalization costs. METHODS: Premier linked their PerspectiveTM Comparative Database (PCD), the largest, most detailed, US hospital database, with the administrative claims from a large managed care organization. We identified 319 individuals who had a primary discharge diagnosis of bipolar disorder in the PCD and who maintained continuous eligibility for the 60 days prior and the 180 days following the hospitalization. Good continuity of care was operationally defined as the presence of a psychiatric visit in the 60 days following discharge. Propensity scores were used to correct for background differences between patients with good continuity of care and patients with poor continuity of care. RESULTS: A total of 34.5% of individuals had poor continuity of care. Prior to discharge, individuals who would later have poor continuity of care could be identified. Some variables that independently predicted later poor continuity of care included no psychotherapy visits, no psychiatric visits, substance use diagnoses, and psychiatric hospitalizations. After correcting for background differences, patients with poor continuity of care had reduced mood stabilizer use (94 vs. 116 days, p = 0.008) and twice the psychiatric hospitalization charges ($10,027 vs. $4,892, p = 0.03). CONCLUSIONS: One in three individuals with bipolar disorder did not have a psychiatric follow-up visit after discharge from the hospital. This poor continuity of care appears to lead to decreased medication adherence and increased psychiatric hospitalizations. An effective, targeted intervention could potentially prevent relapses and reduce health care costs.
Diagnostic criteria were heterogeneous and included definitions based on International Classification for Headache Disorders (ICHD) guidelines, Silberstein-Lipton criteria, and various investigator-defined frequency-based classifications. Thus, definitions varied from relatively strict criteria (215 days/month of migraine) to more liberal criteria (history of migraine and 215 days/month of headache). Prevalence of 0%-5.1%, with estimates typically in the range of 1.4%-2.2%. Seven studies used criteria of history of migraine and 215 days/month of headache (or equivalent), with prevalence of 0.9%-5.1%. Three studies used criteria of 215 days/month of migraine (or equivalent), with prevalence of 0%-0.7%. Two studies stated that the criterion was transformed migraine or chronic migraine (without specific criteria), with prevalence of 1.6% and 4.1%. Prevalence varied by WHO region and gender. CONCLUSIONS: CM prevalence estimates are influenced by specific definitions employed. Using the same criteria, prevalence was well under 1%, with a less restrictive definition, prevalence was higher, 1%-5%. With these variations, it is difficult to compare results across regions and explore temporal trends. Future studies on CM would benefit from an ICHD consensus diagnosis that is clinically appropriate and operational in large-scale epidemiological studies.

PREVALENCE OF ALZHEIMER’S DISEASE AND RELATED DEMENTIA AND THE CO-EXISTING CONDITIONS IN MANAGED CARE ORGANIZATIONS

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OBJECTIVES: Prevalence data of Alzheimer’s disease and related dementia (ADRD) in managed care organizations (MCO) is old and very few data on the prevalence of the co-existing conditions in MCOs. This study aims at integrating the rates and trends of the prevalence of ADRD and the co-existing conditions in MCO over an eleven-year period.

METHODS: Data are drawn from the Ingenix Impact National Managed Care Database (Impact Database). The study time period is 1997-2007. Annual prevalence of ADRD and two common co-existing conditions (type II diabetes and congestive heart failure) are calculated among those aged 250 and those aged 265. Prevalence of the co-existing conditions among ADRD patients are compared to the prevalence among the general population in the same age group. Data extraction and prevalence calculations are performed in SAS 9.1. RESULTS: From 1997 to 2001, prevalence of ADRD increased dramatically among those aged 50 and aged 65. Prevalence of ADRD starts to level off during 2005-2007 in both age groups. For the two co-morbid conditions that are investigated, 1) prevalence of diabetes is 2.3 times higher in ADRD patients than in the general population, prevalence of congestive heart failure is 2.3 times higher; and 2) during 1997-2007, prevalence of both co-morbid conditions among ADRD patients are constantly increasing, whereas the prevalence in the general population are variant. CONCLUSIONS: In this study, prevalence estimates of ADRD are consistent with the literature. The finding that the prevalence of ADRD starts to level off since 2005 may indicate that for persons under the care of MCO, the under-diagnosis of ADRD may drop to a certain level in recent years. The substantially higher prevalence of co-morbid conditions among ADRD patients and its constantly increasing trend may pose both challenge and opportunity to MCO managers in their strategies for containing costs.

RISK STRATIFICATION BASED ON PATIENT DATA FROM A GERMAN INNOVATION DATABASE

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OBJECTIVES: Worldwide, data on the long term prognosis of Parkinson’s disease (PD) are limited, particularly in South-east Asia. This study was carried out to investigate the time taken to transit between Hoehn & Yahr (H&Y) stages among patients with PD in Singapore. METHODS: Patients were recruited from a tertiary neurosci- ence clinic in Singapore. Both patients’ clinical and demographic information were obtained from hospital’s database. Time-to-transition was computed using Kaplan-Meier analysis. Cox regression analysis was performed to examine the influence of gender, race, duration of PD and age-at-diagnosis on time-to-transition. RESULTS: A total of 691 patients (mean age: 65.3, male: 58%) consented to participate in the study. Log-rank analysis, the time to 2, from 2 to 2.5, from 2.5 to 3 were 22.3, 52.9 and 30.3 months, respectively. Time-to-transition from stage 3 to 4, and from stage 4 to 5 were 27.4 and 30.0 months, respectively. In Cox regression analysis, younger-onset (age at diagnosis = 83.6 as reference group, p = 0.008; age at diagnosis = 56.1, \( \beta = -1.713 \), p = 0.011) and shorter PD duration (duration = 14.7 as reference group, p = 0.002; duration = 4.9, \( \beta = -2.188 \), p = 0.001; duration = 7.5, \( \beta = -1.443 \), p = 0.030) predicted longer time-to-transition from stage 2 to 2.5. Shorter PD duration (duration = 22.8, p = 0.021) similarly predicted longer duration from stage 4 to 5. CONCLUSIONS: To the best of our knowledge, this is the first study to report on disease progression using time-to-transition between various H&Y stages. Our findings were similar from current litera- ture in that younger-onset patients took longer to reach advanced stages. However, unlike the published literature, disease progression was not slower among female compar- ed to male patients in our study. This could be a real difference or could be due to different ways of measuring disease progression. The data are thus interesting and worth further exploration. These information are also important to clinicians to help patient management.

COMPARISON OF COSTS FOR INTERFERON BETA-1A AND NATALIZUMAB IN PATIENTS WITH MULTIPLE SCLEROSIS

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OBJECTIVES: To compare cost of care for interferon beta (IFNβ)-1a subcutaneous (SC) and natalizumab in patients with multiple sclerosis (MS). METHODS: In this post hoc analysis, eligible patients (>18 and >65 years) had an MS diagnosis in a national managed care database, ≥1 new medical or prescription claim for IFNβ-1a SC or natalizumab during the July 1, 2006 to December 31, 2006 selection period, and were continuously eligible for 12 months before and after the index date. CONCLUSIONS: Patients initiating modifying drug (DMD) claim in the selection period. Managed care costs represented both total and component costs. A propensity score was calculated as the probability of being in either treatment group from preperiod variables (eg, age, sex, region). Analysis of covariance was used to evaluate total and component costs by treatment cohort. RESULTS: A total of 421 patients (IFNβ-1a SC = 222, natalizumab = 199) met study criteria. Most patients were women (IFNβ-1a SC, 77.9%; natalizumab, 74.4%), but were older in the natalizumab group (mean [SD] 45.5 [9.7] vs 42.2 [12.7] years). DMD use differed by region, and more natalizumab patients were enrolled in HMOS (43.2% vs 32.4%). The percentage of patients with no evidence of DMD use in the preperiod was 26.6% for natalizumab and 63.5% for IFNβ-1a SC. Least square (LS) means differences between IFNβ-1a SC and natalizumab for total and prescription costs were a function of the number of days at exposure. At the average exposure of ~290 days, total LS mean cost for IFNβ-1a SC and natalizumab were $26,433 and $33,980, respectively (P < 0.0001). Prescription costs were significantly higher for natalizumab compared with IFNβ-1a SC [$26,775 vs $20,187; P < 0.0001]. Outpatient costs were significantly greater for natalizumab patients ($8640) than for IFNβ-1a SC patients ($4930; P < 0.0001). CONCLUSIONS: Patients initiating on natalizumab had greater total, prescription, and outpatient costs than did patients initiated on IFNβ-1a SC.

RELATION OF HEADACHE FREQUENCY TO HEALTH CARE UTILIZATION, WORK PRODUCTIVITY, AND TOTAL COSTS: RESULTS FROM THE AMERICAN MIGRAINE PREVALENCE AND PREVENTION (AMPP) STUDY

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OBJECTIVES: To assess the impact of headache frequency on health care utilization, medication use, productivity loss, and total costs. METHODS: The American Migraine Prevalence and Prevention (AMPP) Study is a 5-year, national, longitudinal