Comparisons of the Health Benefit Costs Among Monotherapy and Adjunctive Therapy Patients with Epilepsy and Their Employed Spouses

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BACKGROUND

- Approximately 1/3 of patients with partial-onset seizures (POS) are drug resistant and frequently require adjunctive treatment.

METHODS

  - Represents multiple geographically diverse, US-based employers in the retail, service, manufacturing, and financial industries and includes information on more than 2 million employees plus spouses and eligible dependents.
  - Comorbidity Index Score (of the person being modeled), and other measures.
  - Spouses of employees (subjects) with partial onset seizures were identified to comply with the Health Insurance Portability and Accountability Act and the contractual obligations between HCMS and its employer-contributors.
  - Inclusion criteria: Spouses of employees (subjects) with partial onset seizures were identified by any primary, secondary or tertiary claims containing International Classification of Diseases 9th revision Clinical Modification (ICD-9) codes for localization-related (focal) partial epilepsy: complex partial seizures (ICD-9: 345.4x) or, simple partial seizures (ICD-9: 345.5x).
  - Subjects were required to have at least 2 years of continuous eligibility following initial anti-epileptic drug (AED) use.
  - Exclusion criteria: Employee-partners of the spouses (employees) with partial onset seizures who were missing data or had open epilepsy (ICD-9: 345.9).

Cohort assignment and index date:

- Subjects with concomitant use of a second AED for ≥90 days were classified as adjunctive therapy users and assigned an index date based on their second AED use.
- Subjects without concomitant use of a second AED were classified as monotherapy users and their initial AED prescription date was the index for monotherapy patients.
- All employee-spouse pairs had ≥365 days continuous eligibility post index.

RESULTS

- The 367 employee-subject pairs were classified based on the subject’s partial-onset seizure therapy:
  - 129 (35.1%) were receiving adjunctive therapy
  - 238 (64.9%) were receiving monotherapy
- Demographic comparisons between the two cohorts are in Table 1.
- The analysis of lost time due to absences (Figure 1), revealed:
  - Compared with employees whose spouses were treated with monotherapy, employed spouses of adjunctively-treated subjects had:
    - Short-term disability absence time (0.69 vs. 0.26; p < 0.05)
    - No days lost for either cohort under the long-term disability or workers’ compensation benefit.

CONCLUSIONS

- In this retrospective study, adjunctively-treated subjects with epilepsy and their employed spouses had significantly higher medical and sick leave costs than the monotherapy-treated subjects (p < 0.05).
- These differences were present in nearly all cost categories.

The findings of this study suggest an increased burden of direct and/or indirect costs on subjects and employees.

REFERENCES


Supported by funding from Sunovion Pharmaceuticals, Inc., JB, JES and JYF are consultants that provide services to several pharmaceutical companies, including Sunovion Pharmaceuticals Inc. JB is employee of an Sunovion Pharmaceuticals Inc.