A Retrospective Analysis of Real-World Medical Data to Evaluate Differences in Utilization and Expenditure of Natalizumab within Various Sites of Care

T.C. Lord, K.M. Hassan, M. Lopes, H. Makanji, S. Leo, B.C. Buckley, T.P. Livingston, P. Pearson

Magellan Rx Management, Newport, RI • Biogen Idec, Weston, MA

AMCP 2015 • San Diego, CA

BACKGROUND

- Multiple Sclerosis (MS) is a chronic, disabling, neurological disease that affects the central nervous system (CNS).
- Though there is no cure for MS, effective treatments exist for the reappearing, remitting form of the disease (RRMS) that may modify the disease course, treat symptoms, improve function and quality of life.
- Although the clinical management of MS has improved drastically following the availability of disease modifying drugs (DMDs), clinical and financial challenges remain for both patients and healthcare insurance providers (payers).
- The major challenge from the payer perspective is related to cost. DMDs used to treat MS cost hundreds of thousands of dollars per year for each patient and remain for both patients and healthcare insurance providers (payers).
- For certain DMDs, the cost can be variable based on the site of administration, however, the extent of the price disparity, especially within different geographic regions, has not been clearly identified.

OBJECTIVE

- To analyze the impact that site of care (SOC) administration has on natalizumab utilization, adherence, and cost within various geographic regions.

METHODS

- The data used for this retrospective analysis was real-world medical claims data obtained from four regional health plans from different geographic regions (northeast, southeast, midwest, and west coast).
- Inclusion criteria:
  - Patients identified as having MS via ICD-9 340.95 (northeast, southeast, midwest, and west coast).
  - Medical diagnosis, SOC location, and utilization data, which included patient age, sex, and race were included.
- Patients identified as having MS via ICD-9 340.95 were included in this analysis.
- Exclusion criteria:
  - Patients with limited use of infusions were excluded from analysis.
  - Patients not meeting study criteria were excluded from analysis.
- The accuracy of this analysis relies on the accuracy of the medical claims data submitted by the physicians and paid for by the health plans.

RESULTS

- A total of 582 unique patients were administered natalizumab representing 4,347 total claims.
- A Retrospective Analysis of Real-World Medical Data to Evaluate Differences in Utilization and Expenditure of Natalizumab within Various Sites of Care

Figure 1. Total Spend by Region and SOC

Figure 2. Relative Allowed Amount per Claim by Region and SOC

DISCUSSION

- A total of 582 unique patients were administered natalizumab representing a 4,347 total claims.
  - The average allowed amount per claim in home infusion specialty pharmacy was 8% lower than physician office claims.
  - The average allowed amount per claim in a HOP was 49% higher than physician office claims.
- The percent of claims administered in hospital outpatient facilities were 44% (northeast), 40% (southeast), 36% (midwest), and 39% (west coast).
  - Average allowed amount per claim in hospital outpatient facility was 65%, 15%, 43%, and 49% higher compared to physician offices in each region, respectively.
  - The percent of claims by SOC was very similar across all regions, with one exception: the midwest had a higher proportion of HI versus P expenses utilization - 25% compared to 3-8% in the other regions.
- There were no large differences in adherence observed between different SOC, except for the midwest, where hospital outpatient facilities had 82% compared to 92% in patients administered natalizumab through alternative SOCs.

LIMITATIONS

- The accuracy of this analysis relies on the accuracy of the medical claims data submitted by the physicians and paid for by the health plans.
- Patient history and progress notes were not available to identify reason(s) for administration of natalizumab therapy at a specific SOC.
- Economic impact associated with various SOCs was only evaluated for one medical benefit injectable drug.

REFERENCES


DISCLOSURES

- BCR, TPL, PP employers and shareholders of Biogen Idec. This study was funded by Biogen Idec.

Table 1. Medical Claims and Cost Breakdown by SOC

Table 2. Cost Breakdown by Region and SOC