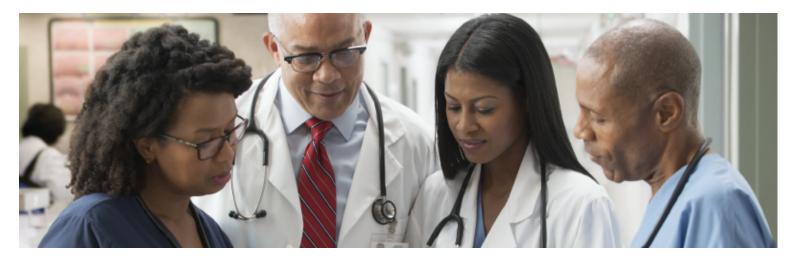


# First Line Selection of Treatment for Multiple Sclerosis in a Medicaid Population Cully A, Holeman A, Sheen JV, Brink D, Williams A



#### Introduction

National multiple sclerosis (MS) treatment guidelines do not include treatment recommendations with newer therapies that were introduced beginning in 2010. This study was designed to evaluate what medications are used as first-line treatment for MS.

### **Objective**

To determine what specific disease-modifying medication is used as first-line therapy in treatment-naïve patients with MS in a Medicaid population.

## **Methods**

Pharmacy and medical claims from January 1, 2013 through May 13, 2016 were analyzed to identify members with either a diagnosis (ICD9 code 340 and/or ICD10 code G35) of or pharmaceutical therapy for MS. Pharmaceutical therapy included dimethyl fumarate, fingolimod, glatiramer, interferon beta-1a, interferon beta-1b, peginterferon beta-1a, and teriflunomide. Dimethyl fumarate, fingolimod, glatiramer 40mg, peginterferon beta-1a, and teriflunomide were considered as non-preferred or restricted agents on the preferred drug list (PDL) during the time studied. Patients with disease-modifying therapy for MS in 2013 were excluded as already having treatment. Pharmacy claims of the remaining members were then examined to determine the first-line medication used for treatment of MS.

#### **Results**

A total of 294 patients with MS who were naïve to treatment as of January 1, 2014 were identified. Glatiramer was the leading first-line medication used in this population at 116 members, followed by interferon beta-1a at 83 members. Even with a non-preferred status, glatiramer 40mg was selected as first-line therapy nearly as often as the preferred glatiramer 20mg product (57 vs. 59 members, respectively). The primary newer therapy, fingolimod, was the third-leading medication used overall as first-line therapy in this analysis, at 35 members.

## **Conclusion**

The data revealed that the leading medication used as first-line therapy in this study for treatment-naïve patients diagnosed with MS is glatiramer, an older, injectable dosage form. The leading newer oral dosage form, fingolimod, placed third in the overall analysis of first-line treatment selections. Even with the introduction of more convenient oral medications to the market, Medicaid members in this analysis were treated with older, injectable medications as first-line therapy for MS. Older injectable medications still lead the market as the preferred first treatment for MS. Future pharmaceutical considerations include oral treatments that can compete with the injectable formulations for first-line treatment of multiple sclerosis.

