

THERAPY-SPECIFIC OUTCOMES:

A LOOK INTO MULTIPLE SCLEROSIS

Multiple sclerosis is a neurological immune mediated disease. Recent estimates have suggested that the prevalence of MS in the United States has doubled to approximately 900,000 cases from prior estimates of 400,000.¹ MS patients experience a broad range of symptoms which include muscle weakness, fatigue, vision changes, balance loss, and diminished quality of life. Patients may experience periodic relapses that can be treated with anti-inflammatory drugs and may experience increasing levels of disability over time, which can result in high utilization of healthcare resources.

There are several therapies that aim to reduce the frequency of an MS related relapse and slow disease progression. The effectiveness of these high-cost therapies is often scrutinized by various healthcare stakeholders. This can manifest through a need to obtain a prior authorization or high patient cost sharing requirements, which have potential to impact a patient's access to therapy. Health system specialty pharmacies are uniquely positioned to address these barriers and have robust clinical services that aim to maximize health outcomes and the patient's experience. Loopback has partnered with health system specialty pharmacies to develop an MS dashboard which analyzes several clinical outcomes for MS patients managed by health system providers.

OUTCOMES MEASURED

The MS dashboard summarizes a blend of outcomes to generate insights for health system specialty pharmacies. Several frequently reported outcomes tracked by specialty pharmacies include adherence, time to therapy, and inpatient/ed utilization. The dashboard also aims to summarize clinical outcomes specific to MS that have been historically difficult to measure due to the complexity of linking medical and pharmacy data.

The clinical outcomes evaluated for MS include:

- Annualized Relapse Rate
 - Identified by administration therapies commonly used to treat relapses
- Infection History
 - Composite of patients that had either:
 - Anti-infective drug administrations, prescriptions orders, or fills
 - Positive findings on urinalysis, indicating a potential urinary tract infection
 - Low/high lymphocyte counts
 - Compliance with Baseline labs
 - Identifies patients who have completed recommended labs, such as a complete blood count or liver function test, prior to starting a new therapy
- Analyzing outcomes for patients who had a change in therapy
 - Provides a summary that compares outcomes such as relapse rate after a patient experiences a change in therapy

Pharmacy Leadership

- Analyze patient outcomes by pharmacy dispensing channel (health system dispensed vs. non health system dispensed)
- Benchmark health system outcome performance against other health systems
- Provides real world data that enables discussions across health system stakeholders to:
 - a. Determine which MS therapies are performing the best in the health system population, which could help guide therapy selection and hospital formulary decisions.
 - b. Identify optimal therapy pathways for patients requiring changes in therapy
 - c. Evaluate risk-based contract opportunities

Clinical Users

- Enable pharmacists to identify and develop intervention strategies for specific patients with poor outcomes
- Prioritize patients based on appointment date and observed patient outcomes

VALUE TO OTHER STAKEHOLDERS

In an effort to explore ways health systems can partner with other healthcare stakeholders by sharing insights generated from the MS population, Loopback is able to deidentify data that enables payers, manufacturers, life science, and advocacy groups to benefit from the information generated through the MS dashboard.

Pharmaceutical Manufacturers

- > Natural History & Epidemiology
- > Disease Progression
- > Disease Burden
- > Post-Market Surveillance & Pharmacovigilance

Life Science

- > Clinical Trial Assessment
- > Historical Control Groups
- > Evaluation of Off-Label / Compassionate Use

Payers

- > Clinical Outcome Assessment to better inform coverage policy
- > Test feasibility of new authorization criteria
- > Evaluate value-based contract opportunities

The dashboards developed serve as a tool for pharmacy leaders and clinicians to help improve outcomes within the health system population. The insights generated can also help other stakeholders with initiatives that aim to promote innovation within MS treatment. By partnering with health system specialty pharmacies in addressing and maximizing health outcomes, Loopback's initiatives generate meaningful improvements for not only MS patients, but the overall continuity of care within the organization.

1. Wallin, MT, Culpepper WJ, Campbell JD, et al. The Prevalence of MS in the United States. Neurology. March 2019, 92 (10) e1029-1040; 10.1212/WNL.0000000000007035