

# Follow the Script: Assessing Access Time and Adherence in Patients with MS



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## BACKGROUND

- Multiple sclerosis is a neurodegenerative disorder that results in the destruction of the myelin sheath in the central nervous system due to an inflammatory immune response. There is currently no cure, and in the absence of treatment to slow progression, this disease can lead to loss of mobility, bladder dysfunction, sensory issues, fatigue, and other debilitating symptoms.
- Because multiple sclerosis causes a decline in health over time, it is critical that patients seek early treatment for this disease and that therapy is consistently provided in order to prevent the disease from worsening and from decreasing the patient's quality of life.
- Due to barriers such as high medication costs, limited distribution drug networks, and prior authorizations, time to medication access for patients with multiple sclerosis can be prolonged and results in reduced patient outcomes.
- Additionally, adherence rates, shown through proportion of days covered (PDC), are usually suboptimal for disease-modifying agents treating multiple sclerosis.
- In previous studies, integrating a clinical pharmacist into the health system interdisciplinary team has been shown to reduce time to medication access and improve patient compliance in specialty disease states, including multiple sclerosis.

## OBJECTIVES

This study evaluated script-to-mouth time for disease modifying therapies (DMT) used to treat multiple sclerosis and the rates of adherence between prescriptions filled with health system specialty pharmacies (HSSP) and external pharmacies not affiliated with the health system.

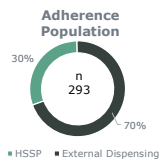
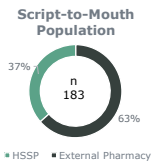
## METHODS

- Design**
- Retrospective
  - Multisite

**Analysis** Script-to-mouth time: = (date prescription filled) - (date prescription was written)

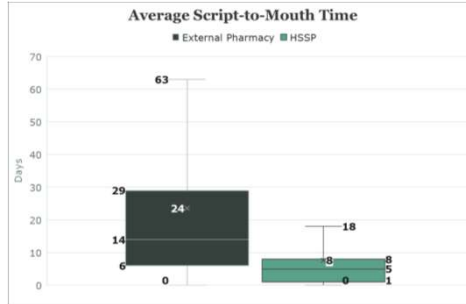
**Adherence:** PDC was calculated based on their first three fills of medication with the pharmacy.

	Inclusion	Exclusion
Whole Study	<ul style="list-style-type: none"> <li>✓ Diagnosis of MS</li> <li>✓ Prescribed a self-administered DMT</li> </ul>	<ul style="list-style-type: none"> <li>✗ DMT dispensed by manufacturer patient assistance program</li> </ul>
Script-to-Mouth	<ul style="list-style-type: none"> <li>✓ Patients receiving a first fill</li> </ul>	
Adherence	<ul style="list-style-type: none"> <li>✓ Patients with at least 3 fills</li> </ul>	



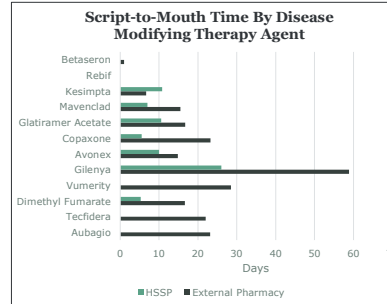
## RESULTS

FIGURE 1:



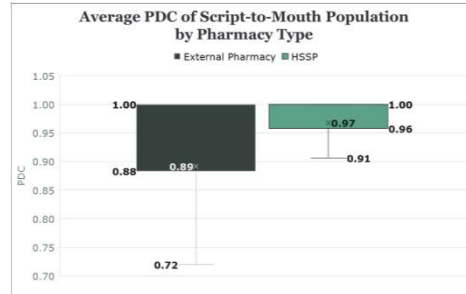
The average script-to-mouth time for disease modifying therapy agents filled at an external pharmacy was 24 days, compared to 8 days for those filled with the health system specialty pharmacy.

FIGURE 2:



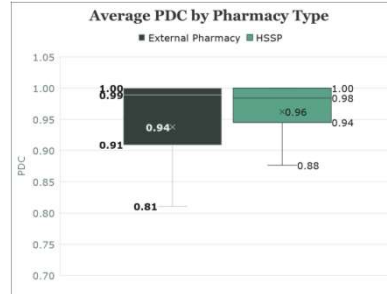
For each medication, the external script-to-mouth time was longer than the HSSP script-to-mouth time, with the exception of Kesimpta.

FIGURE 3:



The average PDC for the Script-to-Mouth Population when filled at an external pharmacy was 0.89. For those filled with an HSSP, the average PDC was 0.97.

FIGURE 4:



The average PDC for medications when filled at an external pharmacy was 0.94. For those filled with an HSSP, the average PDC was 0.96.

## CONCLUSIONS

**Script-to-Mouth Time**

- **3X faster script-to-mouth time** when comparing the prescriptions filled at an external pharmacy vs the HSSP.
- HSSP was able to dispense nearly all prescriptions in less time (max 18 days) than the average (24 days) and Q3 (29 days) of external pharmacies.

**Adherence (PDC)**

- Patients filling with **HSSP had better PDC** than those filling with external pharmacies.
- For the Script-to-Mouth population, where adherence is most at risk due to it being a new medication, **HSSP patients had near 10% higher PDC** than those filling with external pharmacies.
- While both HSSP and external pharmacies PDC >80, HSSP patients more consistently had PDC between 90-100 compared to external pharmacy patients.

**Overall Conclusions**

- Patients with MS enrolled in HSSP services had a script-to-mouth time more than three times faster and higher adherence levels than those patients filling with external pharmacies.
- The faster patients get on treatment and the more adherent they are, the higher chance of reducing the progression of MS.

## Limitations:

- Script-to-mouth time was not assessed if the initial written date was not available via the electronic health record or from the external pharmacy.
- Several of the medications evaluated were part of limited drug distribution networks and were not able to be filled with the health system specialty pharmacy.

## REFERENCES

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