

# Impact of an Integrated Specialty Pharmacy Model on Patient Access to Dalfampridine

Gabrielle Givens, PharmD Candidate<sup>1</sup> | Aimee Banks, PharmD, BCPS, MSCS<sup>2</sup> | Josh DeClercq, MS<sup>3</sup> | Leena Choi, PhD<sup>3</sup> | Autumn Zuckerman, PharmD, BCPS, AAHIVP, CSP<sup>2</sup> | Megan Peter, PhD<sup>2</sup>

<sup>1</sup>Lipscomb University College of Pharmacy, <sup>2</sup>Specialty Pharmacy, Vanderbilt University Medical Center, <sup>3</sup>Department of Biostatistics, Vanderbilt University Medical Center

## BACKGROUND

Dalfampridine, an oral specialty medication, increases walking speed and duration in patients with multiple sclerosis (MS).<sup>1</sup>

Patients often struggle to access specialty medications due to:

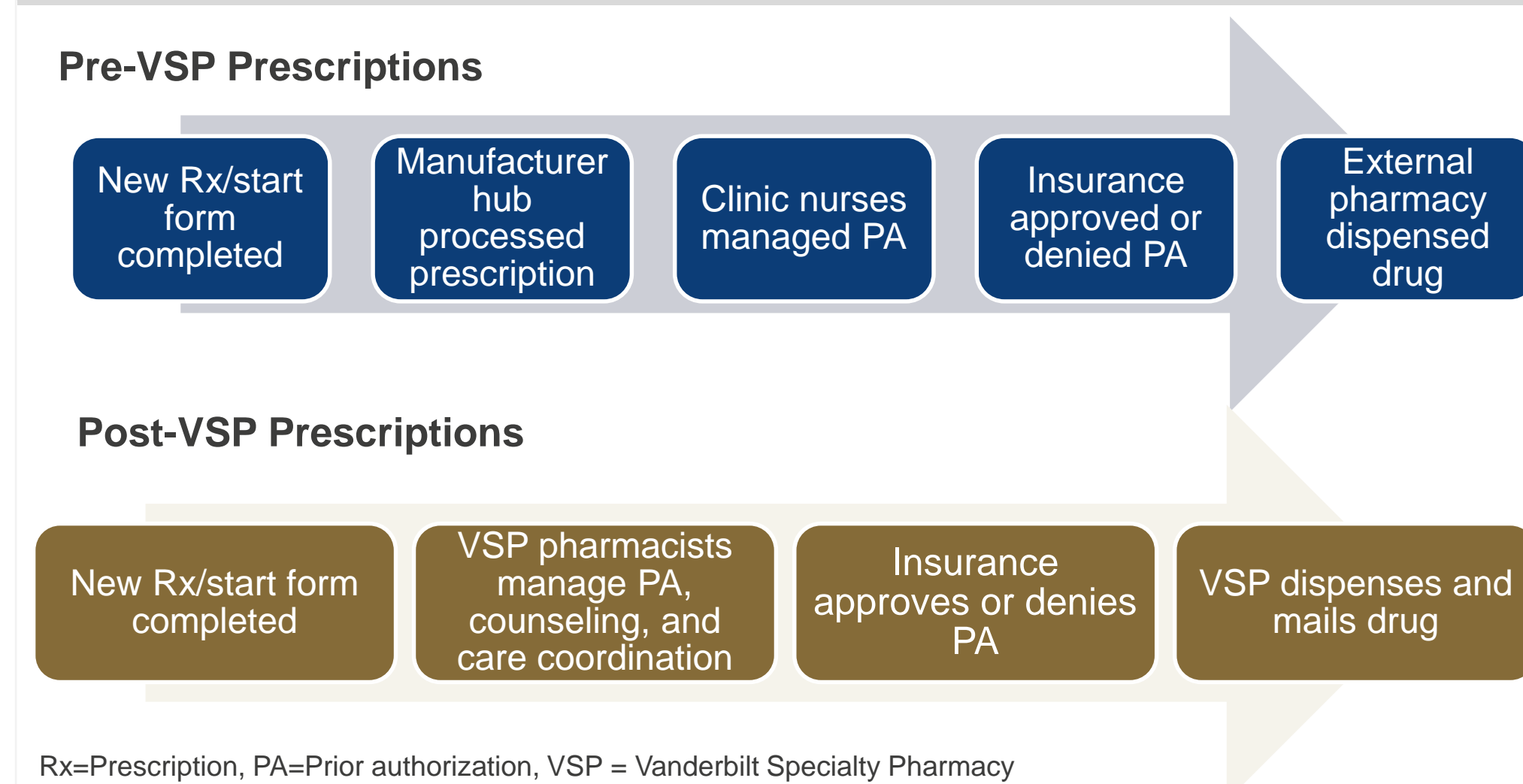
- Limited distribution networks (LDNs), which restrict which pharmacies can dispense a drug, requiring patients to fill medication from select pharmacies
- Insurance restrictions, costs, or challenges navigating specialty pharmacies.<sup>2</sup>

Integrated specialty pharmacies embed pharmacists in clinics and dispense drugs from the internal pharmacy.<sup>3</sup>

## OBJECTIVE

To assess the impact of LDNs on patient access to dalfampridine by comparing patient access before and after Vanderbilt Specialty Pharmacy (VSP) gained access to dispense the medication.

Figure 1. Prescription Timeline



## METHODS

|                 |                                                                                                                                                                                                                                                                                                             |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DESIGN</b>   | Single center retrospective cohort study                                                                                                                                                                                                                                                                    |
| <b>SAMPLE</b>   | <i>Inclusion:</i> Adult patients with MS, prescribed dalfampridine by a VUMC provider from 3/2010 to 12/2018<br><i>Exclusion:</i> Prescriptions initiated at an external pharmacy or non VUMC provider, transferred to VSP (without need for new PA), or without documentation of the original prescription |
| <b>OUTCOMES</b> | 1. Insurance approval<br>2. Medication access time: time from decision to treat to insurance approval<br>3. Rate of therapy initiation                                                                                                                                                                      |

## RESULTS

Figure 2. Median Time from Decision to Treat to Insurance Approval

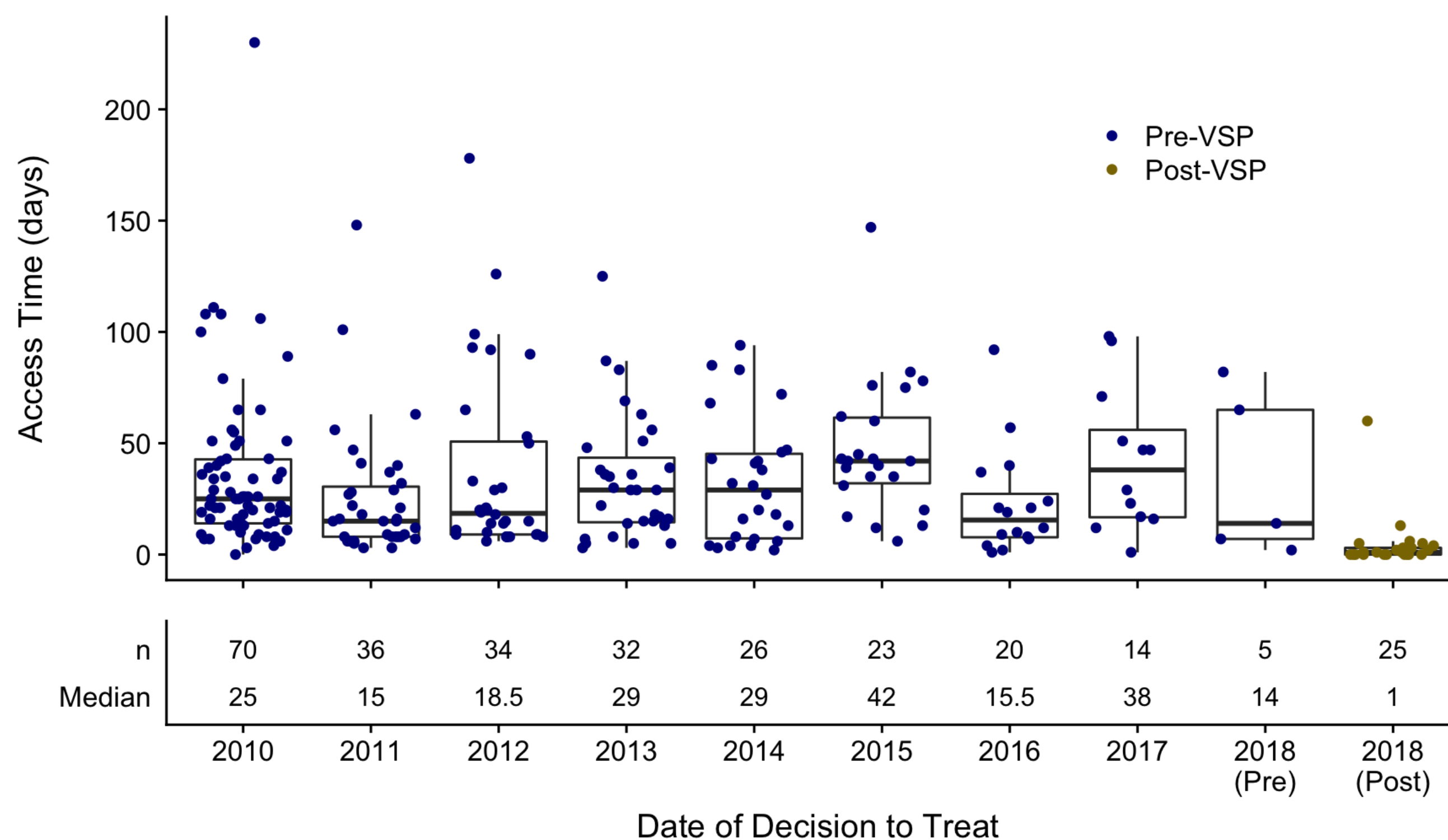
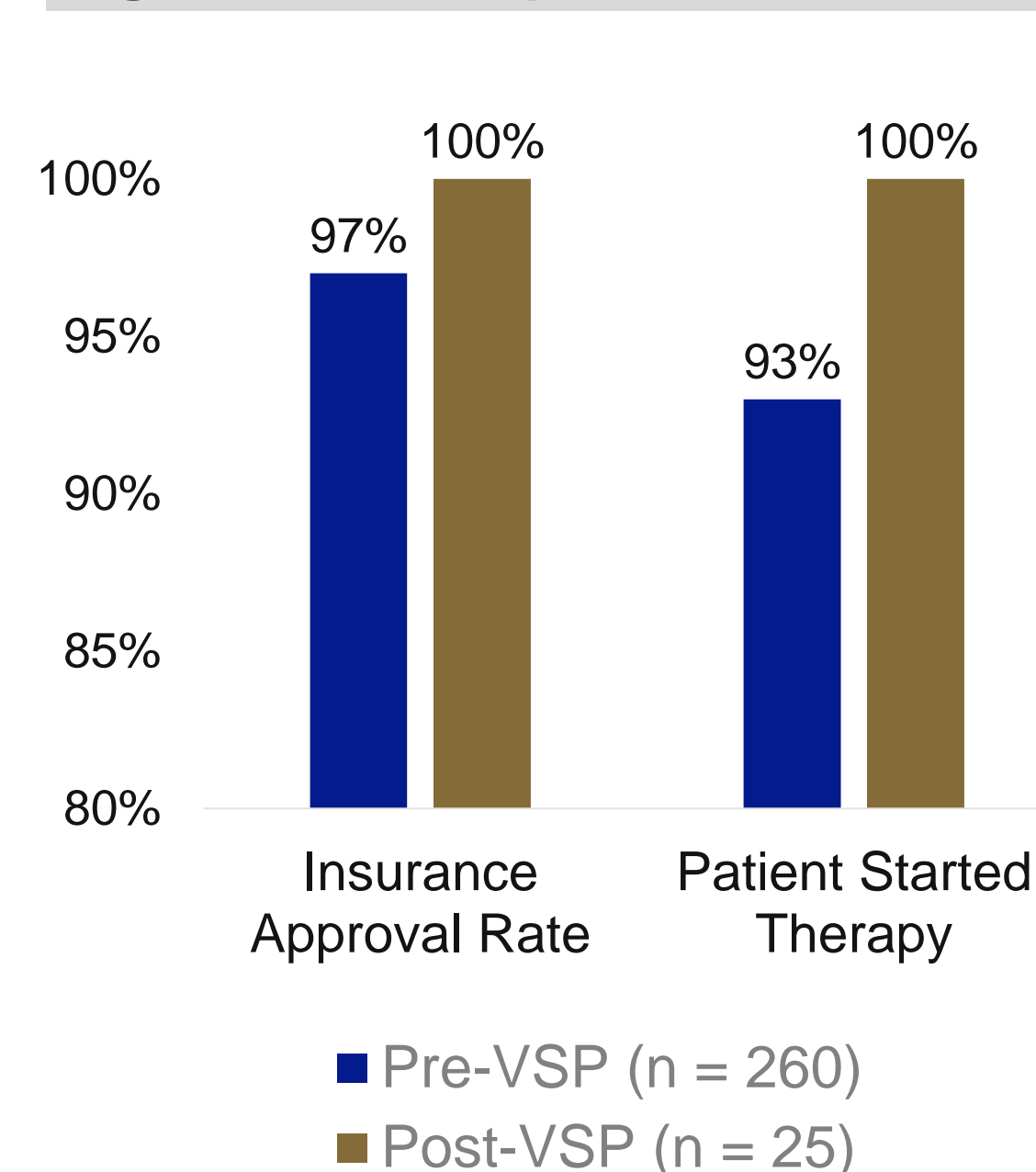


Table 1. Sample Characteristics

| Characteristic                              | Mean [SD] or n (%) |
|---------------------------------------------|--------------------|
| <b>Patient characteristics (n=258)</b>      |                    |
| Age, years                                  | 52 [11]            |
| Gender, female                              | 174 (67%)          |
| Race, Caucasian                             | 228 (88%)          |
| <b>Prescription characteristics (n=285)</b> |                    |
| <b>Patient diagnosis</b>                    |                    |
| Relapse Remitting MS                        | 118 (41%)          |
| Secondary Progressive MS                    | 107 (38%)          |
| Primary Progressive MS                      | 58 (20%)           |
| Transverse Myelitis                         | 2 (<1%)            |
| Patient ambulatory status                   | 261 (92%)          |
| Concurrent DMT use                          | 144 (51%)          |

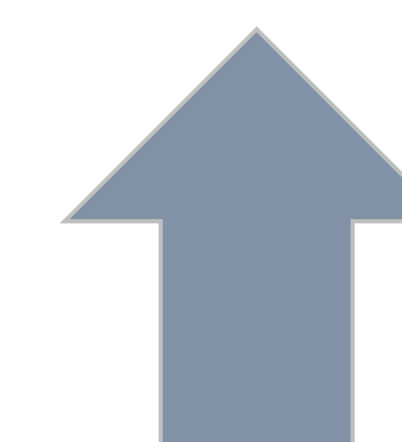
MS=multiple sclerosis  
DMT=Disease Modifying Therapy

Figure 3. Prescription Outcomes



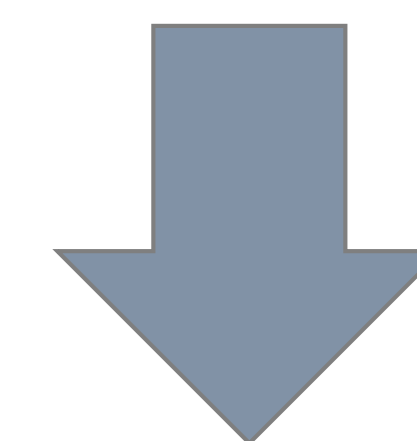
## Prescriptions

- Twenty-six patients had more than one prescription due to prior discontinuation or lapse in therapy, resulting in 285 dalfampridine prescriptions from 258 patients.
- Most (84%) prescriptions were new starts, 16% were restarts after a prior lapse or discontinuation.



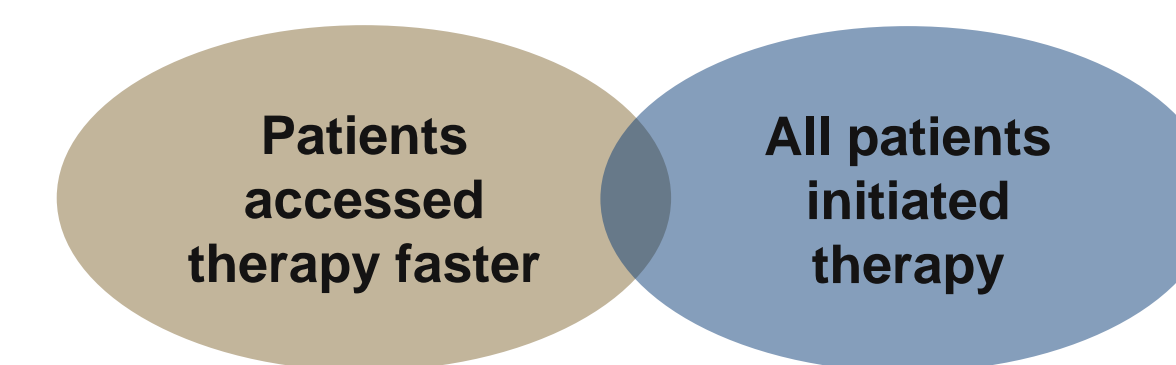
Post-VSP, rates of insurance approval and number of patients starting therapy increased to 100%. (Figure 3).

Post-VSP, median access time decreased to 1 day (IQR 0 - 3) (Figure 2).



## CONCLUSIONS

- After VSP gained access to dispense dalfampridine,



- When LDNs are removed, integrated specialty pharmacists can provide medication monitoring, counseling, and safety interventions after patients initiate treatment.

## REFERENCES

1. AMPYRA (dalfampridine) [package insert]. Ardsley, NY: Acorda Therapeutics, Inc.;2017.
2. Karas L, Shermock KM, Proctor C, et al. Limited distribution networks stifle competition in generic and biosimilar drug industries. *Am J Manag Care*. 2018 Apr 1;24(4):e122-e127
3. Bagwell A, Kelley T, Carver A, et al. Advancing Patient Care Through Specialty Pharmacy Services in an Academic Health System. *J Manag Care Spec Pharm*. 2017;23(8):815-820.