

# SEMAGLUTIDE USE AMONG INDIVIDUALS DIAGNOSED WITH METABOLIC-DYSFUNCTION ASSOCIATED STEATOTIC LIVER DISEASE IN A MEDICARE ADVANTAGE POPULATION

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# INTRODUCTION

Metabolic dysfunction-associated steatotic liver disease (MASLD) is a condition that is associated with fat build up in the liver. Risk factors for MASLD include obesity and type 2 diabetes. Semaglutide is a glucagon-like peptide-1 receptor agonist medication approved for the treatment of diabetes and weight loss and metabolic dysfunction-associated steatohepatitis (MASH) with moderate to advanced liver fibrosis (F2 to F3) in the US.

# AIM

We describe patient characteristics and real-world treatment patterns among patients with MASLD or MASH receiving treatment with semaglutide.

# **METHODS**

#### **Study Population:**

• Individuals ≥18 years, enrolled in a Medicare Advantage plan, with a diagnosis of MASLD or MASH and initiated on semaglutide SC weekly (SEMA SC) between July 1, 2018 and June 30, 2023 were identified. Patients with other causes of liver disease or advanced liver disease were excluded.

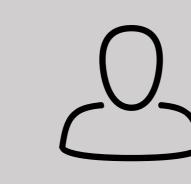
### **Study Design:**

- This was a historical cohort study,
- Index date was the first dispensing of sema SC.
- Twelve months pre-index and 72 weeks post-index enrollment was required.

#### Statistical Analysis:

- Patient demographics and clinical characteristics were summarized descriptively.
- Treatment discontinuation was defined as gap in therapy of ≥45 days (sensitivity analyses conducted using 60- and 90day gap thresholds).
- Individuals were classified based on level of persistent to therapy for descriptive analysis.

# RESULTS



N = 8,432 Individuals with MASLD/MASH initiating SEMA SC



64.8 (±9.6) Years of Age



68.0% Female



77.1% White Race

Figure 1. Sankey Plot of SEMA SC Initiation, Persistence, Discontinuation, and Reinitiation.

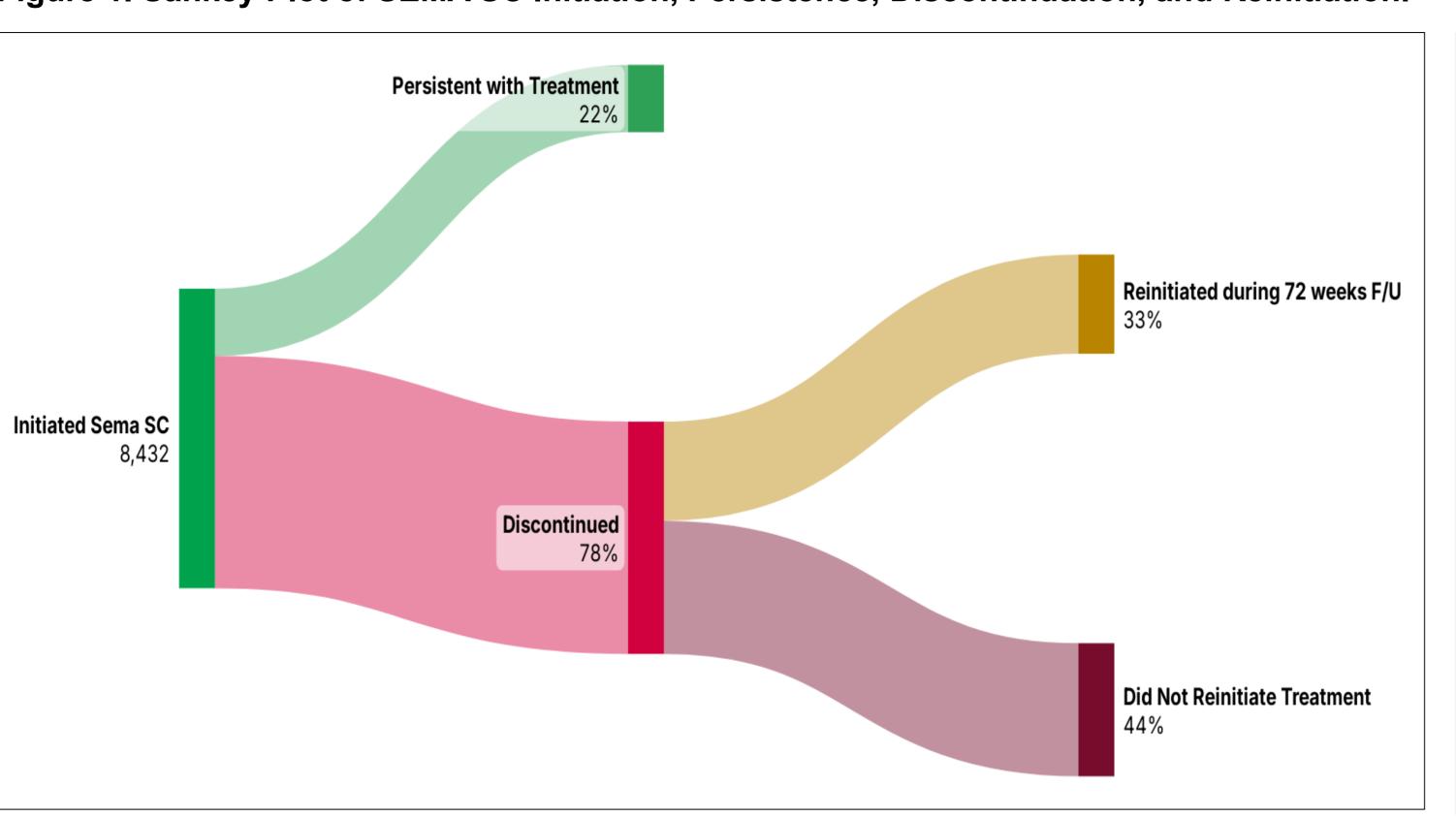


Figure 2. Mean Baseline and Follow-up HbA1c Levels.

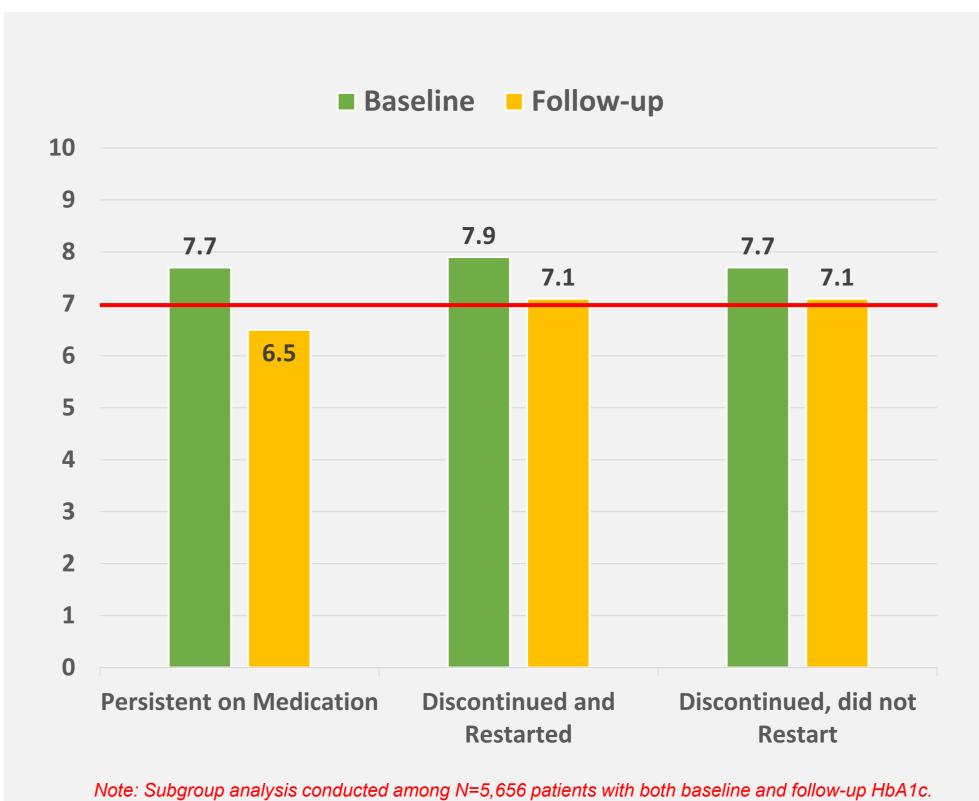
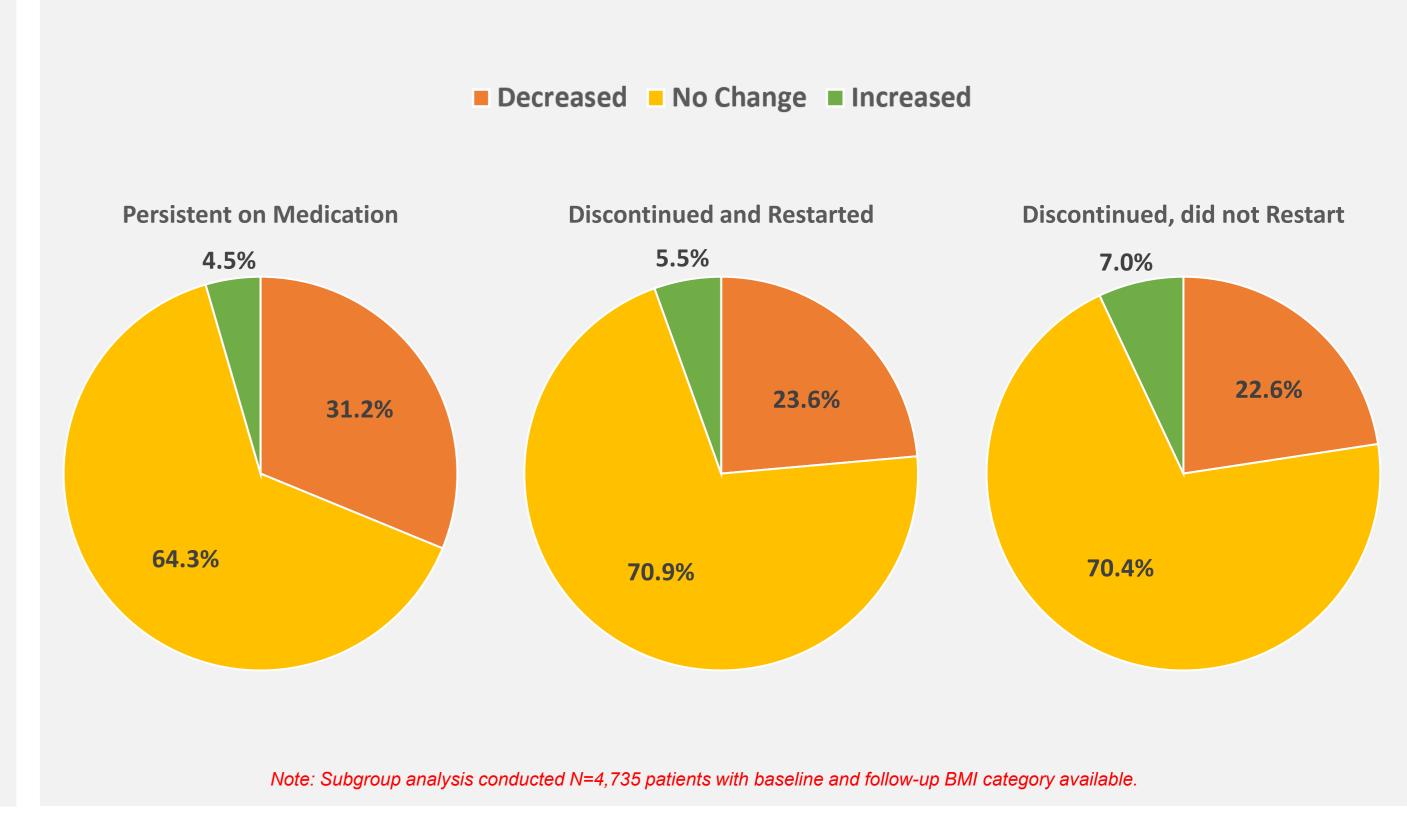


Figure 3. Proportion of Patients with a Body Mass Index Category Change.



- Overall, 77.5% of patients initiated on SEMA SC discontinued treatment, with mean (SD) time to discontinuation was 139.4 (± 107.3) days. Discontinuation rates remained high in sensitivity analyses (45-day gap:73.2%; 90-day gap: 66.8%).
- Among N=6,538 individuals that discontinued treatment, 42.7% reinitiated SEMA SC with mean (SD) days to reinitiation 127.4 (±90.5).
- Among this cohort of individuals initiating treatment with SEMA SC, metabolic conditions including diabetes (87.6%), hyperlipidemia (84.0%), and obesity
  (73.1%) were commonly observed.
- Among individuals with both baseline and follow-up observations, HbA1c overall reduced from 7.8% to 7.0%.
- Overall, 24.8% had a reduction in BMI classification observed during follow-up.

# CONCLUSIONS

- Semaglutide treatment discontinuation rates were high among individuals with metabolic conditions and a co-occurring diagnosis of metabolic associated liver disease. Fewer than half of individuals that discontinued treatment reinitiated treatment during 72 weeks of follow-up.
- With the expansion of approved indications for glucagon-like peptide-1 receptor agonist medications such as semaglutide to the treatment of metabolic liver disease, future research should assess real world treatment persistence and outcomes in patients receiving treatment for hepatic disease.

# ACKNOWLEDGEMENTS

This analysis was carried out by Humana Healthcare Research, Inc. in collaboration with Madrigal Pharmaceuticals, Inc. The work was financially sponsored by Madrigal Pharmaceuticals, Inc.

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