

# Assessing Comorbid Behavioral Health Conditions, Healthcare Resource Utilization, and Medication Use in Patients Seeking Mental Health Care within a Large, Representative Real-World Multiple Sclerosis Registry

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## Background

- Multiple sclerosis (MS) has previously been associated with increased prevalence of behavioral health conditions compared to the general population, particularly depression and anxiety<sup>1,2</sup>
- Behavioral health conditions are thought to be underdiagnosed and undertreated for patients with MS<sup>1</sup>
- Additional research is needed to understand the true burden of behavioral health conditions for patients with MS

## Objective

- To describe comorbid behavioral health conditions, healthcare resource utilization (HCRU), and medication use among patients with MS who were seeking mental health care (SMHC) in a real-world MS registry

## Methods

- Data were derived from the OM1 MS Registry (OM1, Boston, MA), a multisource real-world registry with linked healthcare claims and electronic medical records data on patients with MS in the United States from 2013-2021
- The first observed MS diagnosis date was considered the index date
- All patients with MS SMHC were included
  - SMHC was defined as having any encounter with a behavioral health specialist, a behavioral health-related procedure code, or a record for a behavioral health-related medication on or after index
- Patient characteristics were assessed on or before index, while comorbidities, HCRU, and medication use included data post-index

## Results

- Of 19,133 patients with MS, 15,384 patients (80.4%) were SMHC
- Patients with MS SMHC were on average 49.3 years old (standard deviation [SD]: 12.5), 78.4% female, 62.2% White, 3.9% Hispanic or Latino, 43.9% had commercial insurance, and 7.3% were current smokers (**Table 1**)
- Most patients with MS SMHC had a behavioral health comorbidity (71.3%) - with anxiety disorders (42.4%), depression (40.9%), and substance use disorders (37.3%) as the most frequent (**Figure 1**)
- Patients with MS SMHC most frequently saw psychiatrists (28.6%) and had non-substance use related psychotherapy (25.8%)
- Most patients with MS SMHC used behavioral medications (87.8%) - with the highest use for anti-anxiety medications (63.3%), antidepressants (58.1%), and mood stabilizers (46.9%) (**Figure 2**)

## Conclusions

- Four out of five patients with MS were SMHC
- Anxiety and depression were the most common behavioral health comorbidities among patients with MS SMHC
- Patients with MS SMHC were frequently treated with behavioral health-related medications

Table 1. Characteristics of Patients with MS SMHC

Characteristic		Count (%) or Mean (SD) (N=15,384)
Age at Index		49.3 (12.5)
Sex	Female Male	12,062 (78.4%) 3,322 (21.6%)
Race	Asian Black White Other Unknown	68 (0.4%) 1,528 (9.9%) 9,563 (62.2%) 708 (4.6%) 3,517 (22.9%)
Ethnicity	Hispanic/Latino Not Hispanic/Latino Other Unknown	595 (3.9%) 9,783 (63.6%) 25 (0.2%) 4,981 (32.4%)
Insurance Type	Commercial Medicaid Medicare Multiple Other Unknown	6,759 (43.9%) 497 (3.2%) 2,174 (14.1%) 352 (2.3%) 124 (0.8%) 5,478 (35.6%)
Census Region	East North Central East South Central Middle Atlantic Mountain New England Pacific South Atlantic West North Central West South Central Unknown	1,631 (10.6%) 580 (3.8%) 2,409 (15.7%) 1,778 (11.6%) 471 (3.1%) 1,552 (10.1%) 3,572 (23.2%) 1,334 (8.7%) 1,809 (11.8%) 248 (1.6%)
Current Smoking Status	Yes No/Unknown	1,128 (7.3%) 14,256 (92.7%)
Baseline Duration (Months)		12.0 (17.7)
Follow-up Duration (Months)		75.6 (24.5)
Maximum EDSS*		4.6 (1.8)
Any DMT Use*		11,187 (72.7%)

\*EDSS or DMT could occur pre- or post-index

Figure 1. Proportion of Patients with MS SMHC with Behavioral Health (BH) Comorbidities

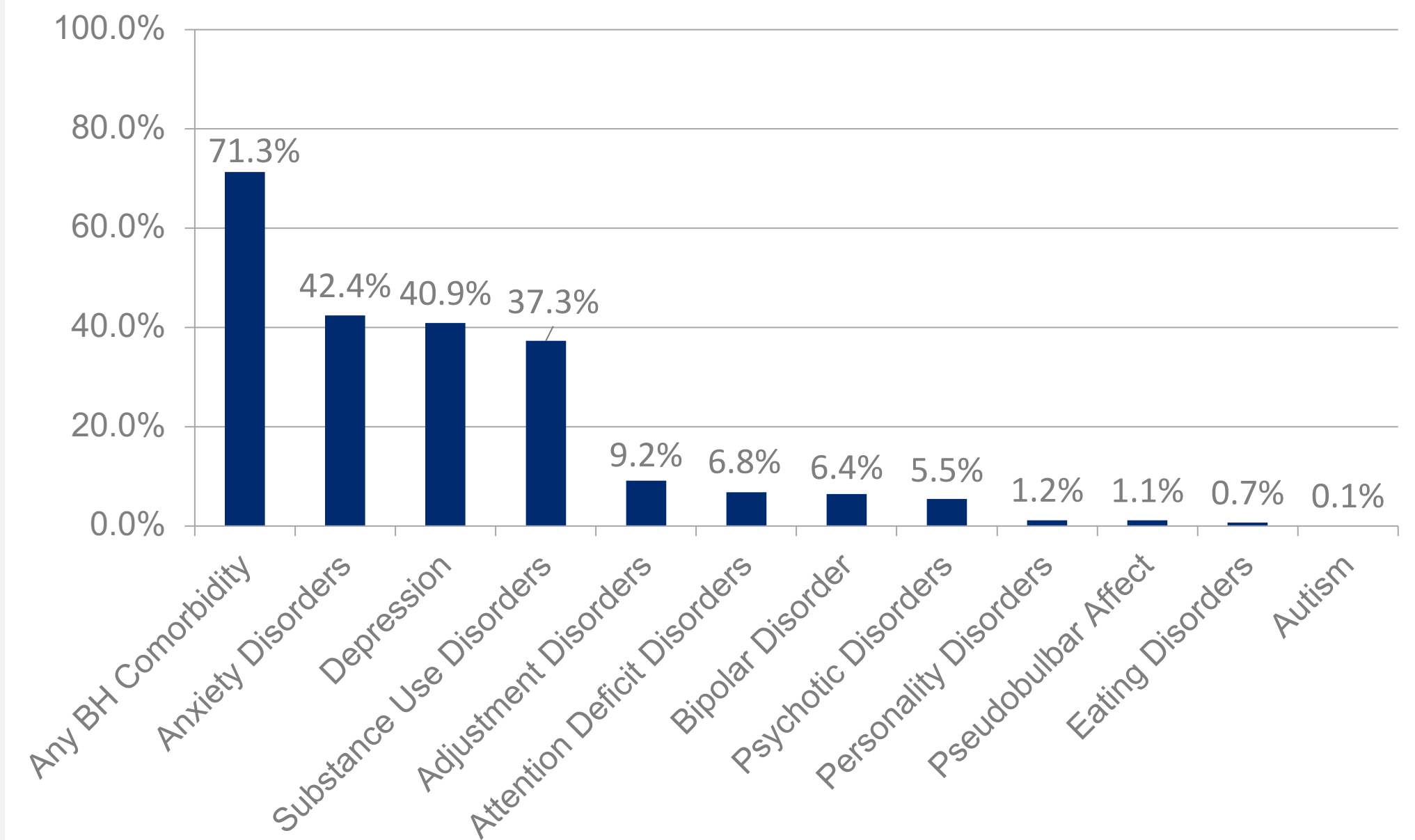


Figure 2. Proportion of Patients with MS SMHC with Behavioral Health (BH) Medication

