

Prevalence of Major Depressive Disorder and Medication Adherence: A Multi-employer Payer Perspective

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Introduction

- Major Depressive Disorder (MDD) is a burdensome psychiatric condition that appears as changes in mood, cognition, and interest, which affects millions of adults in the US.¹
- Currently, there are limited studies that evaluate trends of healthcare use and medication adherence of MDD in a commercially insured population.

Objective

- To describe the prevalence and demographic characteristics of the MDD population, estimate medication adherence, and explore healthcare resource utilization (HCRU) and costs associated using employer claims data.

Methods

Study design and data:

- Retrospective analysis utilizing pharmacy and medical claims data from a multi-employer claims database covering over 1 million patient lives provided by Gallagher benefits consulting

Study population:

- Individuals aged 18-65 with continuous coverage, MDD related depression ICD code within the first three months of 2021, and anti-depression medication use were included
- Enrollees with psychosis, schizophrenia, mania, bipolar disorder or use of a mood-stabilizing agent were excluded
- Anti-depressant medication adherence was measured based on the proportion of days covered (PDC) during Q2 - Q4
- HCRU and costs were collected based on inpatient, outpatient and emergency room visits, and other visits

Data analysis:

- Descriptive statistics were calculated for all variables of interest

Identification Period

Identify the population on anti-depressant pharmacy claim and a medical claim for MDD

Jan 1, 2021 – Mar. 31, 2021

Measure of healthcare resource utilization and healthcare costs

Post-identification period

Measure medication adherence by PDC

Apr 1, 2021 – Dec. 31, 2021

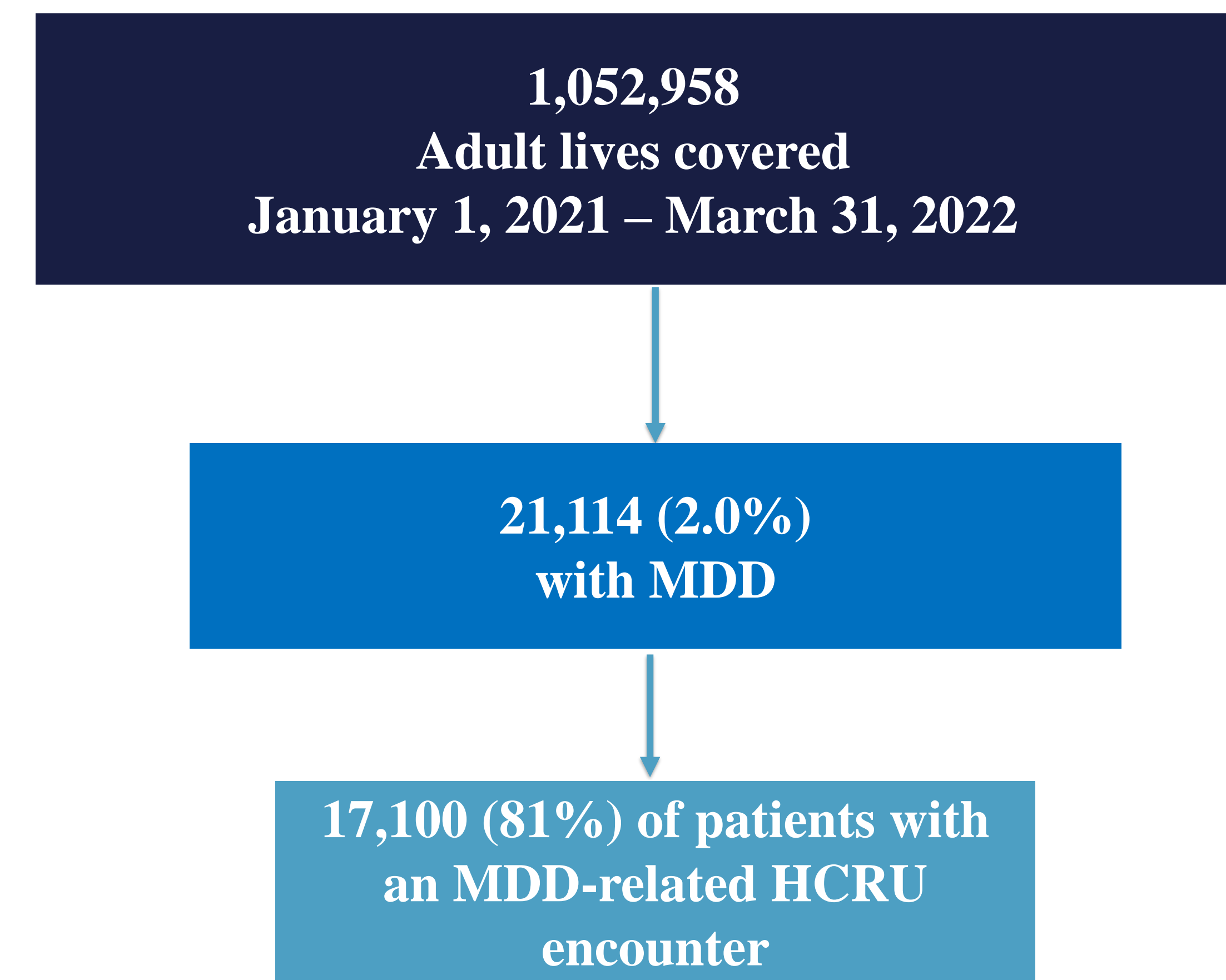
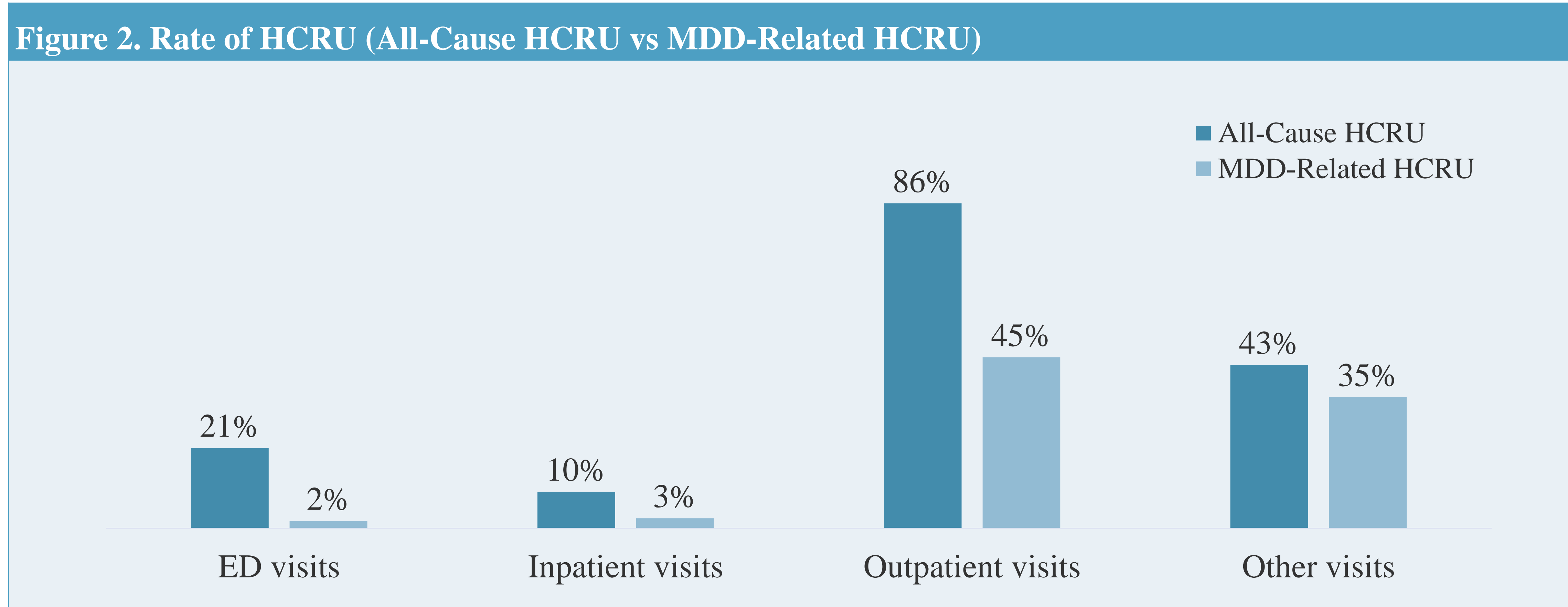
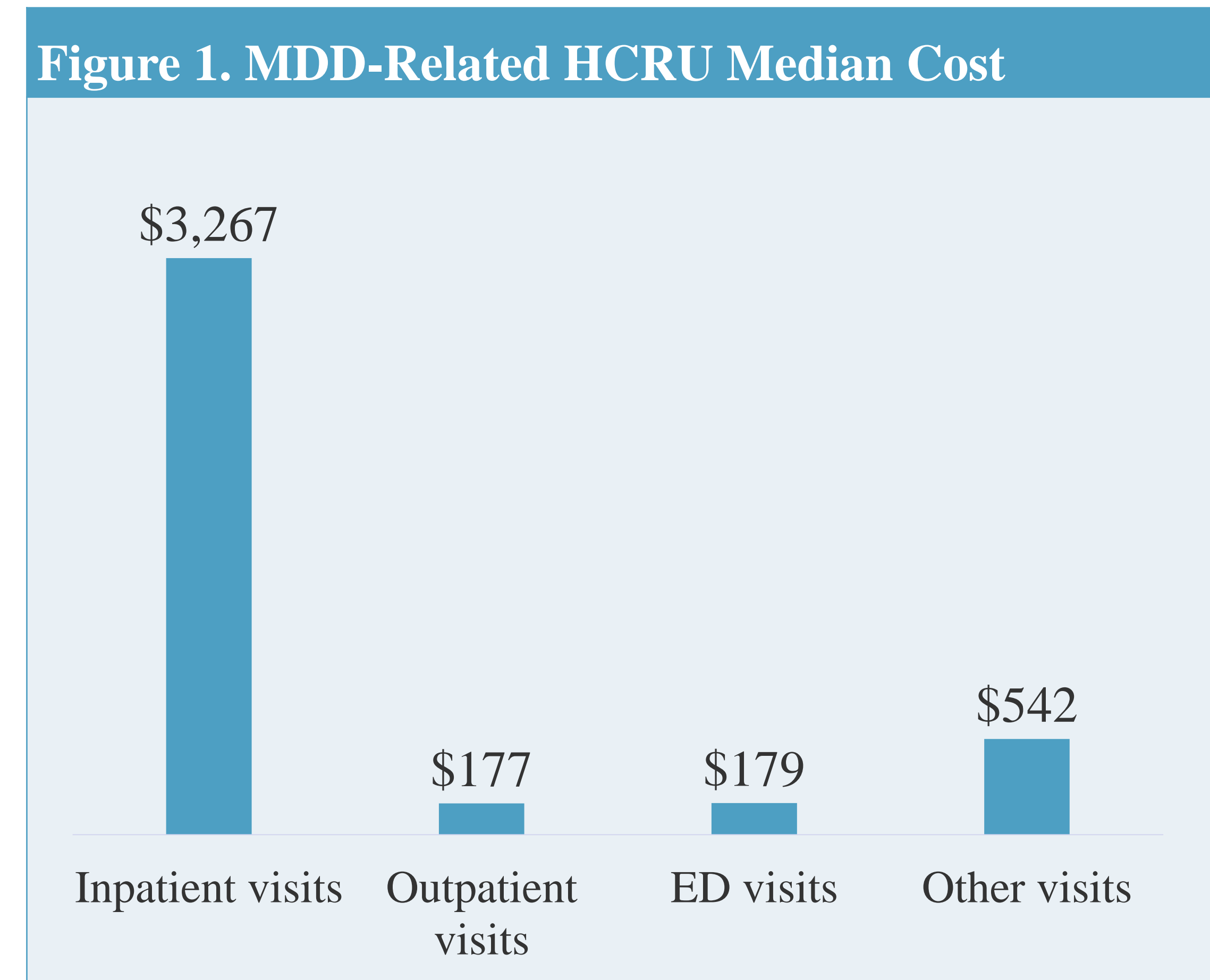
Jan 1, 2021 – Dec 31, 2021

Results

	MDD Patients	PDC < 80%	PDC ≥ 80%	P value
Total, n (%)	21,144	11,367 (54.5)	9,486 (45.5)	
Female sex, n (%)	15,486 (73.3)	8,320 (53.7)	7,166 (46.3)	<0.0001
Age groups, n (%)				
≤29	2,573 (12.3)	1,685 (65.5)	182 (34.5)	<0.0001
30-39	5,248 (25.2)	3,096 (59.0)	2,152 (41.0)	
40-49	5,402 (26.0)	2,825 (52.3)	2,577 (47.7)	
50-59	5,318 (25.5)	2,619 (49.3)	2,599 (50.7)	
60-69	2,312 (11.0)	1,142 (49.4)	1,170 (50.6)	

	All-Cause HCRU	MDD-Related HCRU
All encounters, Median (IQR)	9 (4-19)	2 (1-5)
Inpatient, Median (IQR)	4 (2-9)	2 (1-4)
Outpatient, Median (IQR)	4 (2-8)	1 (1-2)
ED*, Median (IQR)	2 (2-4)	1 (1-2)
Other*, Median (IQR)	7 (2-8)	6 (2-12)

*Other represents hospice/home health, skilled nursing facilities, and mental health
*ED, emergency department



- The median PDC was 0.67 (IQR 0.35-0.96)
- The median prescription drug paid amount was \$83 (IQR 22.6-277) for those with prescription costs (n=14,442)

Conclusion

- The findings from this real-world analysis demonstrate the low prevalence rate of MDD among commercially insured individuals.
- The findings suggest that the overall adherence to medications is modest based on an ideal PDC ≥ 0.80.
- MDD-related HCRU accounts for a modest portion of overall HCRU and costs.
- Additional studies assessing the causes of low medication adherence in MDD are necessary. Further research is needed to identify any relationship between adherence and HCRU.

References

1. Bains N, Abdijadid S. Major Depressive Disorder. [Updated 2022 Jun 1]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK559078/>

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Authors have no relevant conflict of interest to disclose.