

Race, Ethnicity, and Language Differences in Medications for Alcohol Use Disorder Prescribing in Hospitalized Patients

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Background

- Hospital-based medications for alcohol use disorder (MAUD) initiation is associated with reduced risk of hospital readmission, reduced addiction severity, and improved care retention
- Racial and ethnic disparities exist in alcohol-related morbidity and mortality
- Differences in MAUD prescribing in hospital settings by patient race, ethnicity, and preferred language are not well understood

Aims

- Describe prevalence by race/ethnicity and language
- Identify independent predictors of MAUD prescribing

Methods

- Retrospective cohort study using electronic medical record data
- Adult hospitalizations with ICD-9/10 diagnosis code for alcohol withdrawal syndrome (AWS) from 7/2016 to 6/2024
- Exclusion criteria: in-hospital fatality, patients without encounter in the health system within preceding 12 months
- Primary outcome: discharge prescription of FDA-approved MAUD (oral/injectable naltrexone, acamprosate, disulfiram)
- Statistical analysis: generalized linear models (GLM) adjusted for clustering within patient

Approved by the Mass General Brigham Institutional Review Board

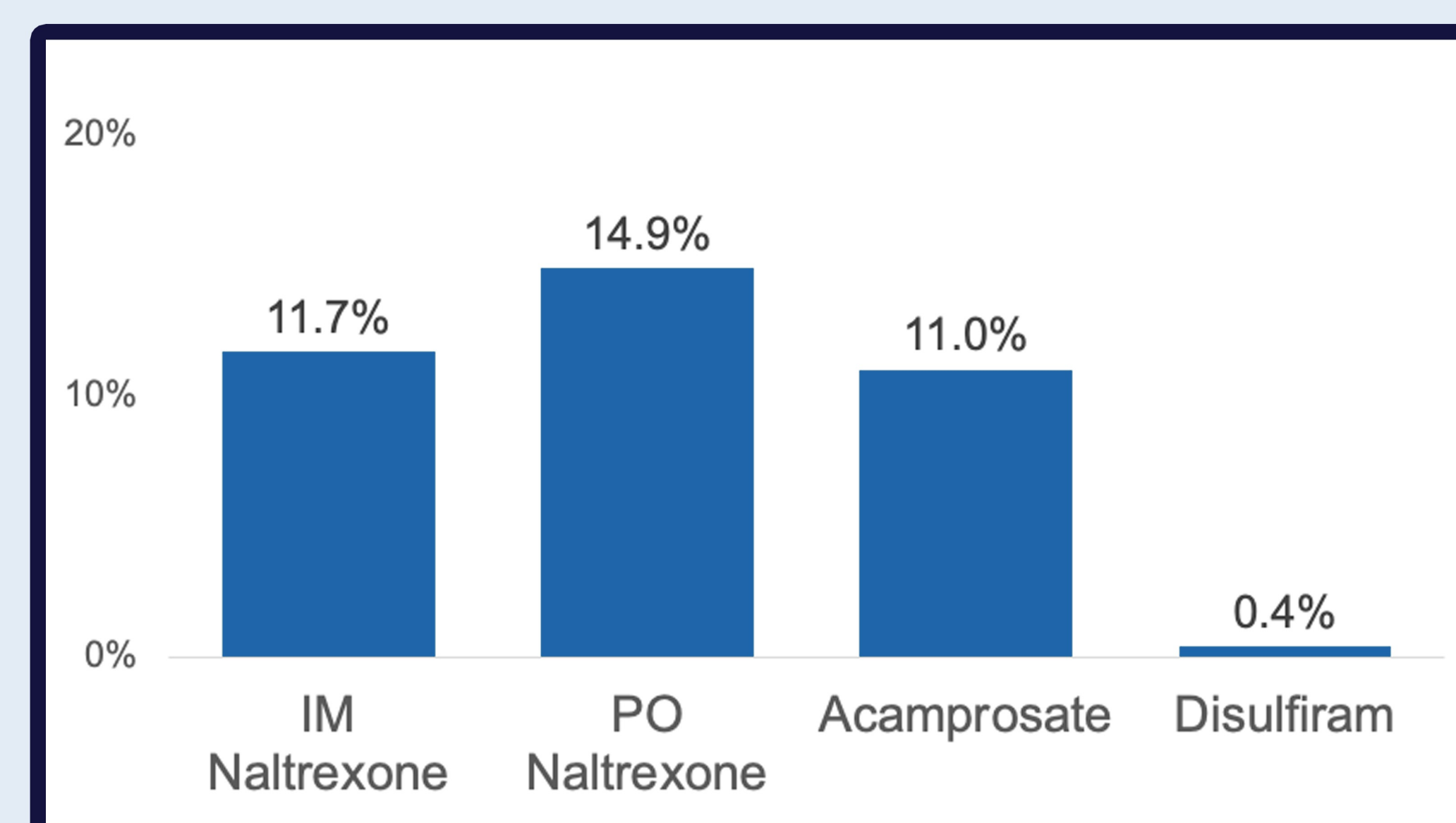
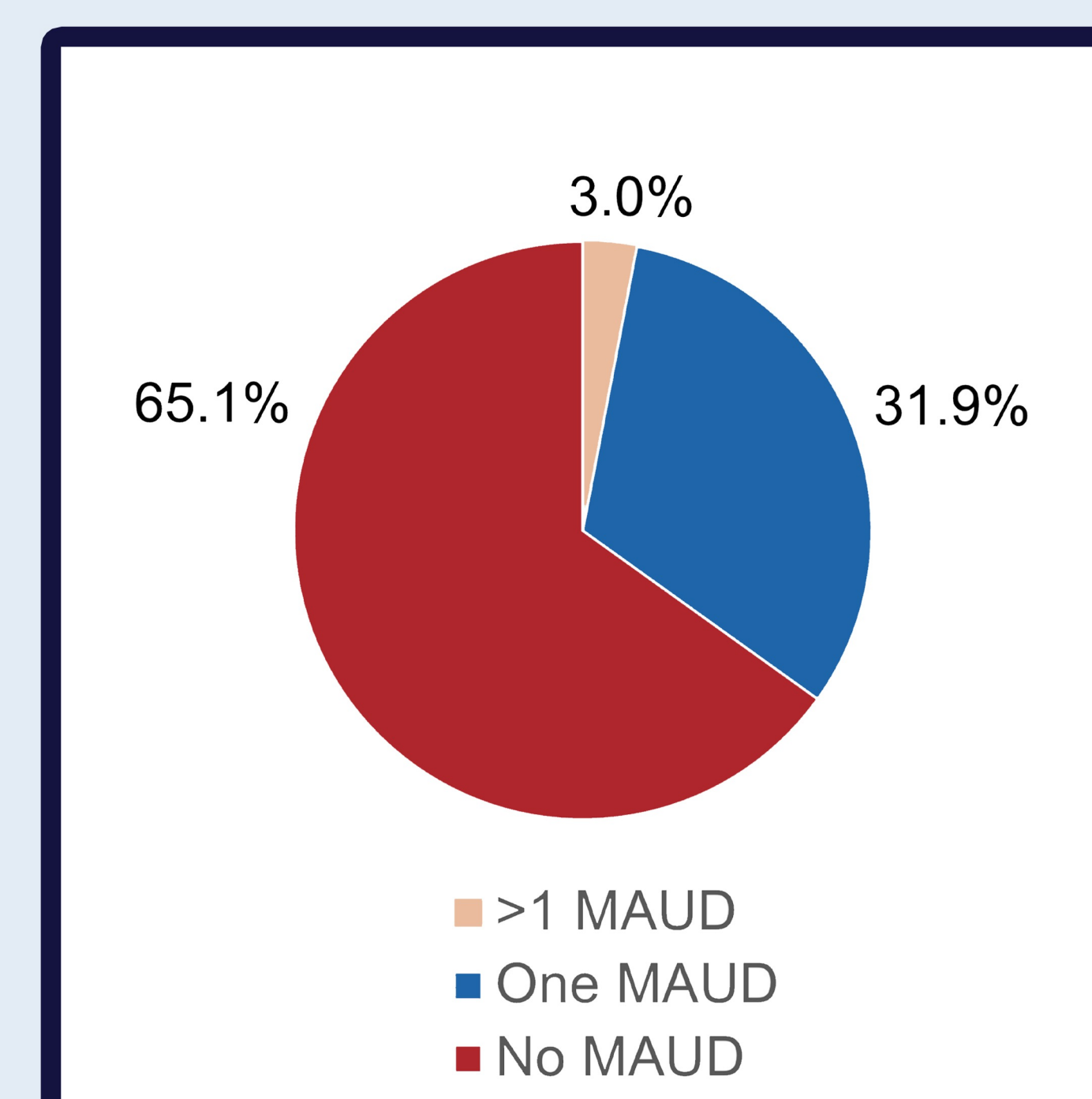
Demographics and Clinical Characteristics

	N	%
Admissions	5551	-
Patients	2564	-
Patient Demographics		
Race/Ethnicity		
AIAN/NHOPI*	56	1.0
Black, non-Hispanic	341	6.1
Hispanic, any race	916	16.5
White, non-Hispanic	4117	74.2
Other	111	2.2
Language, non-English preferred	664	12.0
Age (years)		
<45	1427	25.7
45-54	1204	21.7
55-64	1650	29.7
≥65	1270	22.9
Female sex	1309	23.6
Provider		
Addiction consult	4279	77.1
Hospitalization		
Primary dx alcohol withdrawal	2591	46.7
Self-directed discharge	649	11.7
Patient Clinical		
Moderate/Severe AUD	4866	87.7
Recent opioid prescription	1410	25.4
Opioid use or use disorder	972	17.5
Recent (<90 days) MAUD	2282	41.1

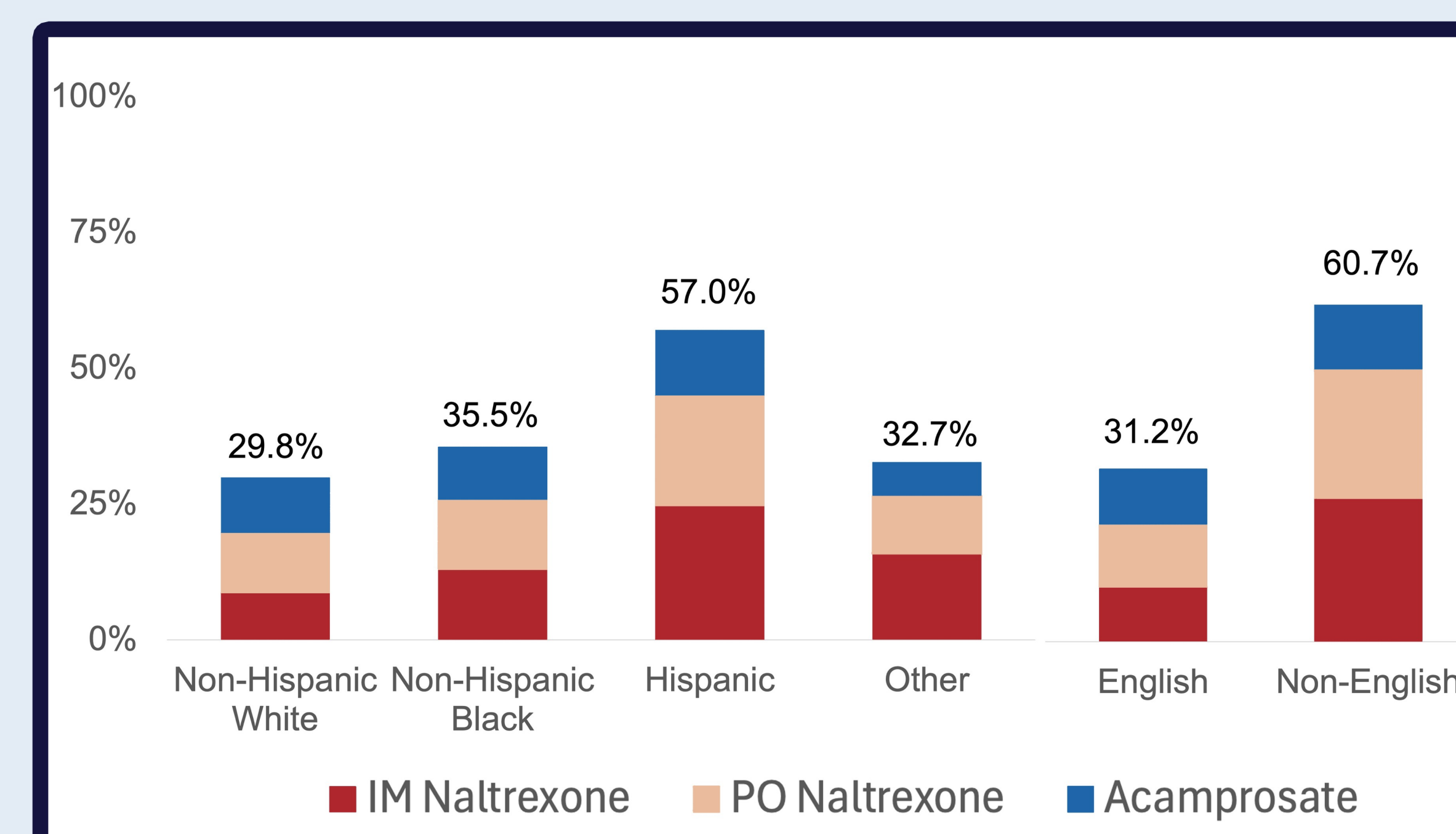
*AIAN/NHOPI: American Indian and Alaskan Native / Native Hawaiian and Other Pacific Islander people

In this single-site cohort, rates of discharge MAUD were higher among racial, ethnic, and language minorities.

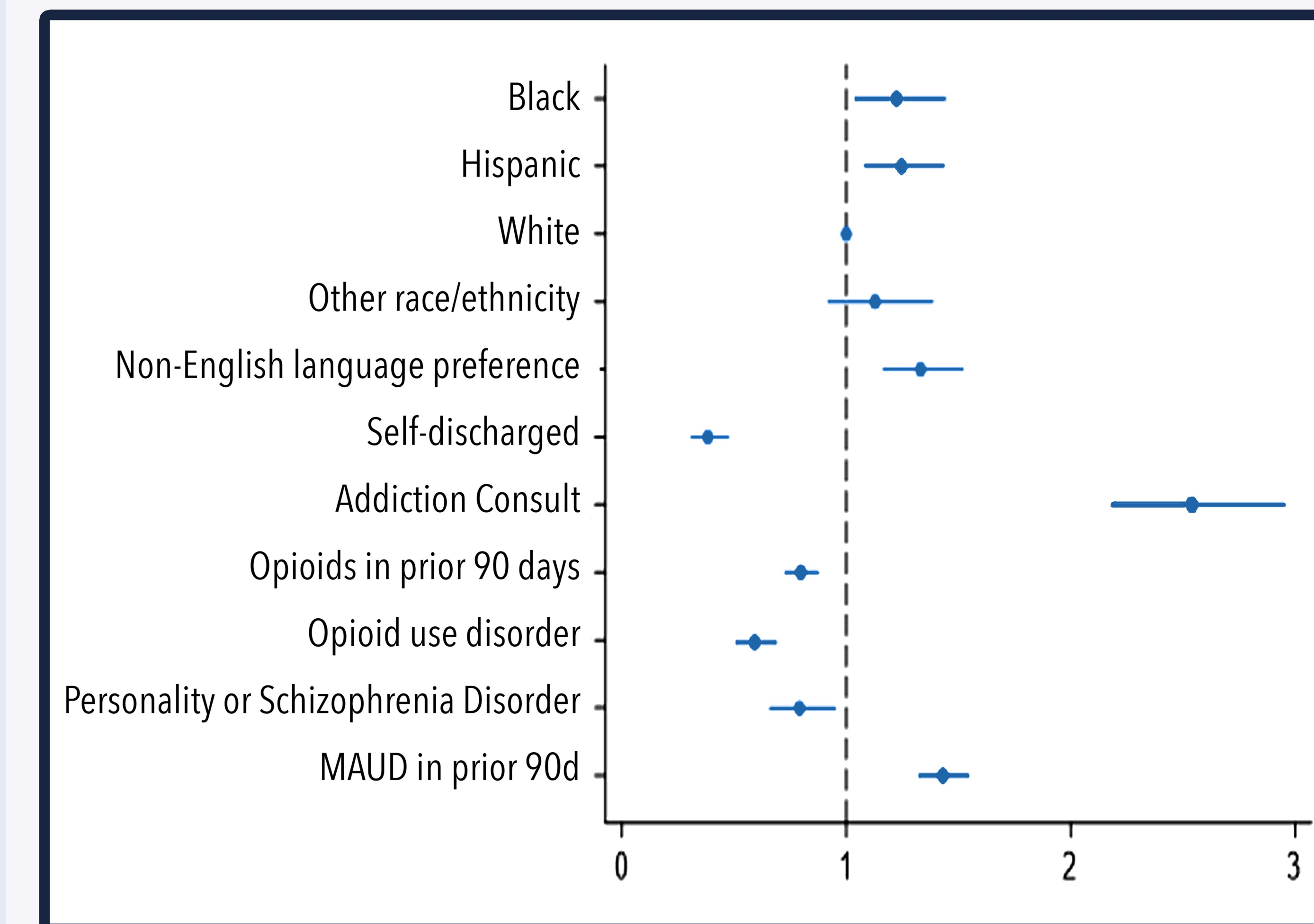
Prevalence of Discharge MAUD



Discharge MAUD Prescribing by Race, Ethnicity, and Language



Predictors of Discharge MAUD among Hospitalized Patients



Analysis adjusted for the following variables

- Patient demographics: age, sex, homelessness, insurance
- Hospitalization: length of stay, ICU stay, year of presentation
- Provider: medicine discharge service
- Clinical
 - Delirium tremens, liver disease, other alcohol-related complications, hepatic encephalopathy
 - HIV, stimulant use/use disorder, anxiety disorder, mood disorder

Conclusions

- 35% of hospitalizations resulted in discharge MAUD, suggesting opportunity for improvement
- We identified higher rates of naltrexone prescriptions among racial, ethnic, and language minorities
- Addiction consultation was a strong predictor of prescription
- Future work is needed to understand patient, provider, and systems-level barriers and facilitators of these differences

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References

- Karaye, I. M., Maleki, N., Hassan, N., & Yunusa, I. (2023). Trends in Alcohol-Related Deaths by Sex in the US, 1999-2020. *JAMA network open*, 6(7), e2326346. <https://doi.org/10.1001/jamanetworkopen.2023.26346>
- Acevedo, A., Adams, R. S., Cook, B. L., Feltus, S. R., Panas, L., & Stewart, M. T. (2025). Disparities in Alcohol Treatment Use at the Intersection of Race, Ethnicity, Gender, and Insurance. *Substance use & addiction journal*, 46(1), 78-89. <https://doi.org/10.1177/29767342241278871>
- Lambert, E., Regan, S., & Wakeman, S. E. (2025). The impact of addiction consultation and medication for opioid or alcohol use disorder on hospital readmission. *Journal of General Internal Medicine*. <https://doi.org/10.1007/s11606-024-09301-9>
- Bernstein, E. Y., Baggett, T. P., Trivedi, S., Herzig, S. J., & Anderson, T. S. (2024). Outcomes After Initiation of Medications for Alcohol Use Disorder at Hospital Discharge. *JAMA network open*, 7(3), e243387. <https://doi.org/10.1001/jamanetworkopen.2024.3387>



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