Observed Disparities in Emergency Department-Initiated Buprenorphine Across Five Health Care Systems

Wesley C. Holland; Fangyong Li, MPH, MS; Bidisha Nath, MBBS, MPH; Molly M. Jeffery, PhD; Maria Stevens, MPH; Edward R. Melnick, MD, MHS; James D. Dziura, PhD; Rachel Skains, MD, MSPH; Gail D'Onofrio, MD, MS; William E. Soares III, MD MS

Disclosures

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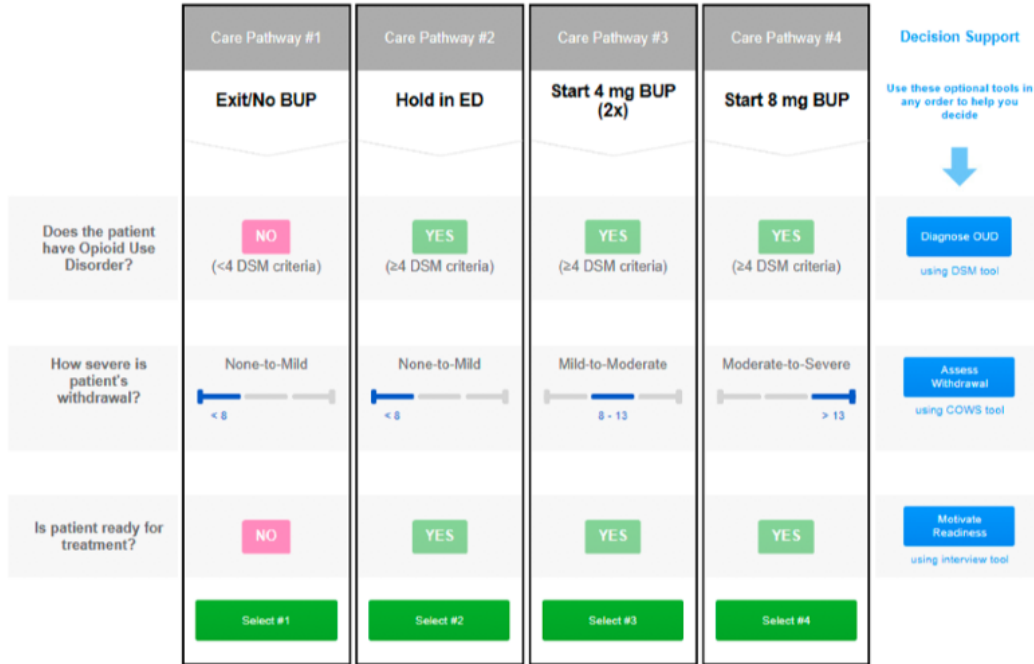
Background

Aims

1. *Characterize racial and ethnic differences in the receipt of BUP*

2. *Explore racial and ethnic differences in ED Buprenorphine administration by provider and hospital level variables.*

Data Source

- Data obtained from the EMBED (***EM**ergency department-initiated **B**uprenorphin**E** for opioid use **D**isorder*) trial

EMBED:
PRAGMATIC TRIAL OF USER-CENTERED CLINICAL DECISION SUPPORT TO IMPLEMENT EMERGENCY DEPARTMENT-INITIATED BUPRENORPHINE FOR OPIOID USE DISORDER

Methods

Race
- White or Caucasian
- Black or African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Pacific Islander
- Other

+

Ethnicity
- Hispanic
- Non-Hispanic

Four Analysis Groups
- Hispanic
- Non-Hispanic Black
- Non-Hispanic White
- Other

Methods

- **Type of Study:** Secondary analysis of EMBED data
- **Primary Outcome:** Proportion of patients who received BUP on index ED visit for OUD
  - Buprenorphine administered in ED or given as a prescription
- **Secondary Outcomes:**
  - Community vs academic ED
- **Analysis:** Generalized linear mixed models with repeated effects (GLIMMIX) clustered for provider and site

Results

Table 1. Patient Characteristics

	Hispanic (N = 701)	Non-Hispanic Black (N = 801)	Non-Hispanic White (N = 3154)
Age (mean, SD)	39.0 (12.3)	43.0 (14.4)	38.5 (12.8)
Gender (N, %)			
Female	172 (24.5%)	247 (30.8%)	1184 (37.5%)
Male	529 (75.5%)	554 (69.2%)	1970 (62.5%)
Insurance (N, %)			
Medicaid	312 (44.5%)	348 (43.4%)	1073 (34.0%)
Medicare	59 (8.4%)	126 (15.7%)	368 (11.7%)
Private	232 (33.1%)	102 (12.7%)	732 (23.2%)
Self-Pay	79 (11.3%)	197 (24.6%)	833 (26.4%)
Diagnosis (N, %)			
Overdose	317 (45.2%)	273 (34.1%)	1046 (33.2%)
Withdrawal	109 (15.5%)	102 (12.7%)	565 (17.9%)

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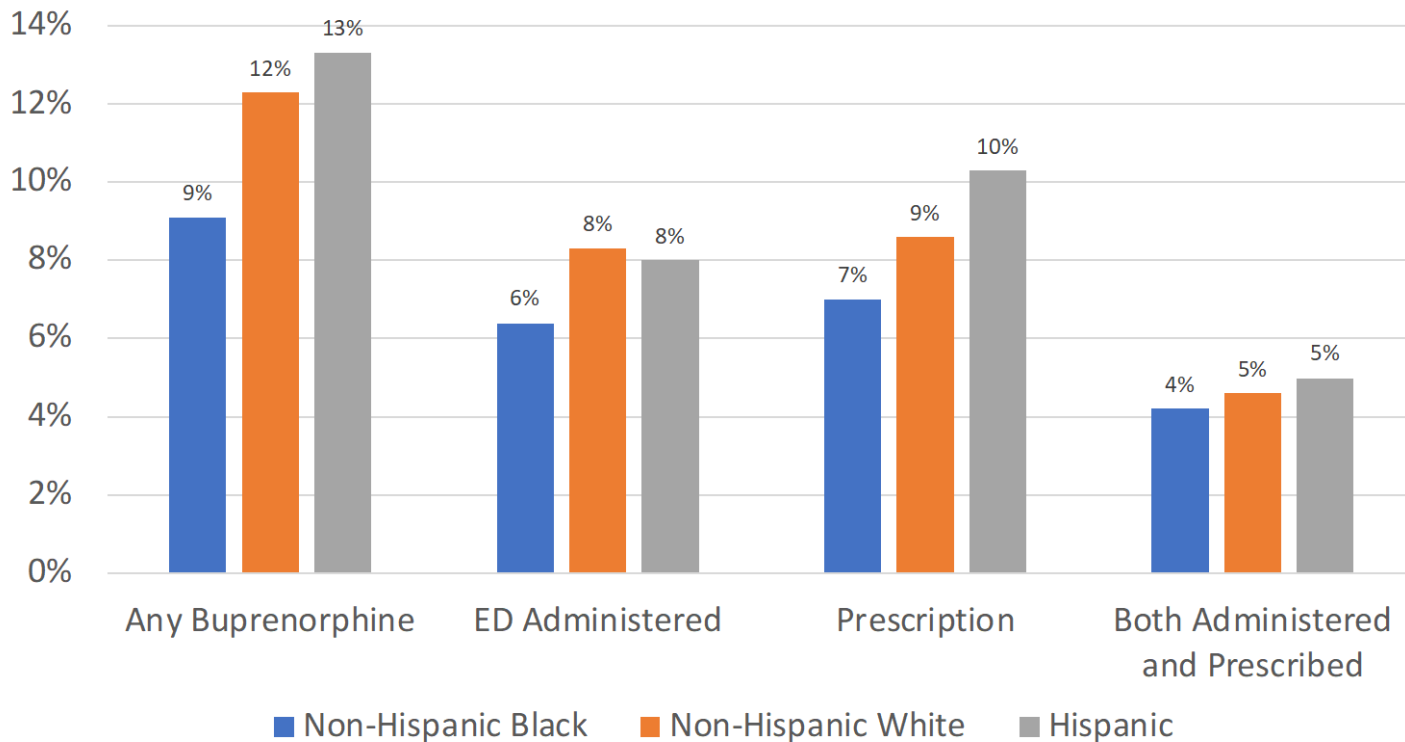|	Hispanic (N = 701)	Non-Hispanic Black (N = 801)	Non-Hispanic White (N = 3154)
Provider Gender (N, %)			
Female	260 (37.1%)	213 (26.6%)	831 (26.3%)
Male	430 (61.3%)	559 (69.8%)	2135 (67.7%)
Provider Age (N, %)			
35-44	314 (45.5%)	344 (44.6%)	1164 (39.2%)
45+	269 (39.0%)	299 (38.7%)	1227 (41.4%)
<35	107 (15.5%)	129 (16.7%)	575 (19.4%)
Provider X-Waivered (N, %)	441 (62.9%)	488 (60.9%)	1786 (56.6%)
Community ED	357 (50.9%)	441 (55.1%)	1890 (59.9%)
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Results

Receipt of Buprenorphine by Race / Ethnicity

Results

Table 3. GLIMMIX model with cluster effects for site and provider evaluating the odds of ED buprenorphine receipt by race and ethnicity

	Unadjusted OR (95% CI)	P value	Adjusted OR (95% CI)	P value
Non-Hispanic White vs Non-Hispanic Black	1.57 (1.18, 2.09)	0.002	1.42 (1.06, 1.9)	0.02
Hispanic vs Non-Hispanic Black	1.88 (1.28, 2.77)	0.0012	1.78 (1.21, 2.62)	0.004
Hispanic vs Non-Hispanic White	1.20 (0.89, 1.62)	0.23	1.25 (0.93, 1.69)	0.14

Adjusted for patient age, gender, insurance, provider X-Waiver status and type of ED

Results

- We found no difference in racial disparity in receipt of buprenorphine between community and academic sites. (interaction p=0.94)

Results

Table 4. GLIMMIX model with cluster effects for site and provider evaluating the odds of ED buprenorphine receipt by race.

	Adjusted* OR (95% CI)	P value
White vs. Black**	1.57 (1.19, 2.08)	0.002

*Adjusted for patient age, gender, insurance, provider X-Waiver status and type of ED

**Insufficient numbers of patients categorized in other racial groups for analysis (Asian=15, American Indian or Alaska Native=13, Native Hawaiian or Pacific Islander=7)

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Limitations

- Generalizability
- Variable and inconsistent recording of race/ethnicity data
- Missing race and/or ethnicity data

Conclusions

- Non-Hispanic Black patients were significantly less likely to receive BUP in ED.

- Add one more bullet point, maybe academic vs community secondary outcome

Questions?

- And thank you to all of the co-authors and collaborators!

- Contact Info: Wesley Holland

    Wesley.holland@yale.edu