

Rejection of Patients with Opioid Use Disorder Referred for Post-Acute Medical Care Before and After an Anti-Discrimination Settlement in Massachusetts

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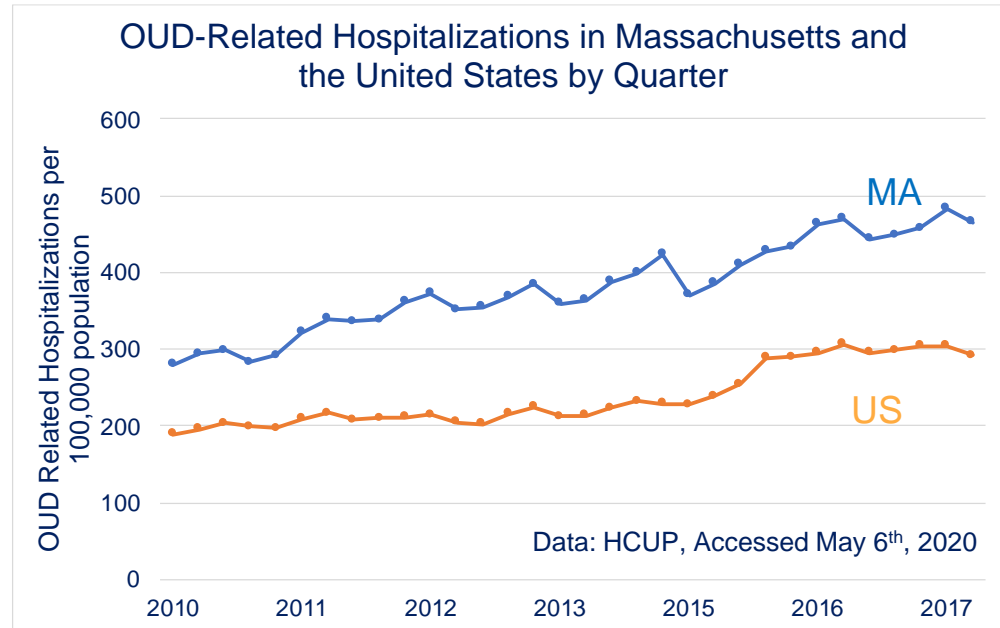


Disclosures

- Consulted for Abt Associates on a Massachusetts Department of Public Health project to expand access to medications for opioid use disorder in post-acute medical care facilities

- NIDA R25DA013582, R25DA033211
- NIAID 5T32AI052074
- 1UM1DA049412-01 (HEALing Communities Study – MA)

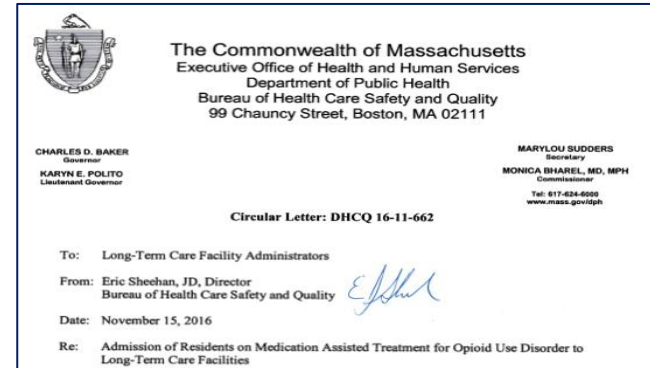
Opioid Use Disorder (OUD) Hospitalizations are Rising



- U.S. OUD hospitalizations increased 3.2x (2000-2015)
- Opportunities to treat OUD with methadone and buprenorphine

OUD Discrimination in Post-acute Medical Care Access

- Case managers make referrals for medically necessary care (PT, nursing, medications including IV antibiotics)
- Challenging to access (regulations, stigma, discrimination)
- Consequences to care, cost, length of stay



Nov 2016: MA Department of Public Health circular letter

May 2018: U.S. Attorney's Office settled with a facility for discrimination by declining a patient due to treatment with buprenorphine under the Americans with Disabilities Act (ADA)

Objectives

- 1) To what extent do hospitalized individuals with OUD in MA experience explicit discrimination in post-acute medical care admissions decisions?
- 2) Did a U.S. Attorney/facility settlement for OUD discrimination reduce episodes of explicit discrimination or overall rejections toward individuals with OUD?

Methods

- Study design: Retrospective cohort study; segmented regression
- Data source: Electronic referrals to private post-acute medical facilities from Boston Medical Center; Linked with clinical data
- Cohort:
 - Hospitalized individuals with OUD (ICD-10 diagnosis codes or receipt of buprenorphine or methadone) in 2018
 - Age ≥ 18
 - Referred to at least 1 private post-acute medical care facility in MA

Methods

- Exposure: U.S. Attorney/facility settlement for discrimination due to OUD on May 10th, 2018
- Primary outcome: Discriminatory rejections where the stated reason for rejection was substance use or treatment with methadone, buprenorphine, or naltrexone
- Secondary outcome: Rejection for any reason

Analyses

- Calculated cohort characteristics
- Two reviewers coded “comment” content
 - methadone, buprenorphine, naltrexone, substance use or non-substance related
- Segmented regression to assess for changes after the settlement
 - 1) Proportion of rejected referrals
 - 2) Proportion of discriminatory rejections related to OUD
 - 26 2-week periods
 - Sensitivity analyses with 8-week lag after settlement

Cohort Characteristics

- 219 hospitalizations (does not include individuals referred only to public/respite care)
- 1648 referrals sent to 285 facilities
- 7.5 referrals per hospitalization

Characteristic	Value
Age, years (mean)	50.2
Male, %	71.7
Race/ethnicity	
White, % (n)	54% (119)
Black, % (n)	29% (63)
Hispanic/Latino, % (n)	3.2% (7)
Unknown, % (n)	13%(29)
Native American, % (n)	0.5% (1)
Language	
English, %(n)	92% (202)
Spanish, % (n)	7.3% (16)
Haitian-Creole, % (n)	0.46% (1)
ICU stay, % (n)	34.3% (75)
Methadone or buprenorphine, % (n)	87.7% (192)
Insurance	
Medicaid, % (n)	53% (117)
Medicare, % (n)	22% (49)
Commercial, % (n)	15% (32)
Worker's compensation, % (n)	7.3% (16)
Self, % (n)	1.4% (3)
Other, % (n)	0.9% (2)

Cohort Characteristics

- 219 hospitalizations (does not include individuals referred only to public/respite care)
- 1648 referrals sent to 285 facilities
- 7.5 referrals per hospitalization

Characteristic	Value
Primary Diagnosis	
Infection, % (n)	46% (100)
Other, % (n)	18% (39)
Neurologic, % (n)	
Pulmonary, % (n)	7.8% (17)
Pain, % (n)	6.4% (14)
Trauma, % (n)	5.5% (12)
Gastroenterology, % (n)	5.0% (11)
Cancer, % (n)	2.3% (5)
Disposition	
Post-acute medical care facility*	63.9% (140)
Home	17.8% (39)
Home with services	9.1% (19)
Left against medical advice	7.3% (16)
Deceased	1.8% (4)

*Includes disposition to public facilities and respite care

Explicit OUD discrimination in post-acute medical care is common

Referrals Rejected
82%
(1348/1658)

**Explicit Discrimination
in Rejections***
15%
(208/1348)

**Individuals who
Experienced Explicit
Discrimination**
37%
(82 of 219)

**Facilities which
Explicitly Discriminated**
29%
(83 of 285)

"UNFORTUNATLEY
CANNOT ACCEPT PT
AS ON SUBOXONE.
TKS FOR THE
REFERRAL!"

"WE DO NOT TAKE
PATIENTS ON
METHDONE
MAINTENANCE"

"POSITIVE DRUG
SCREEN"

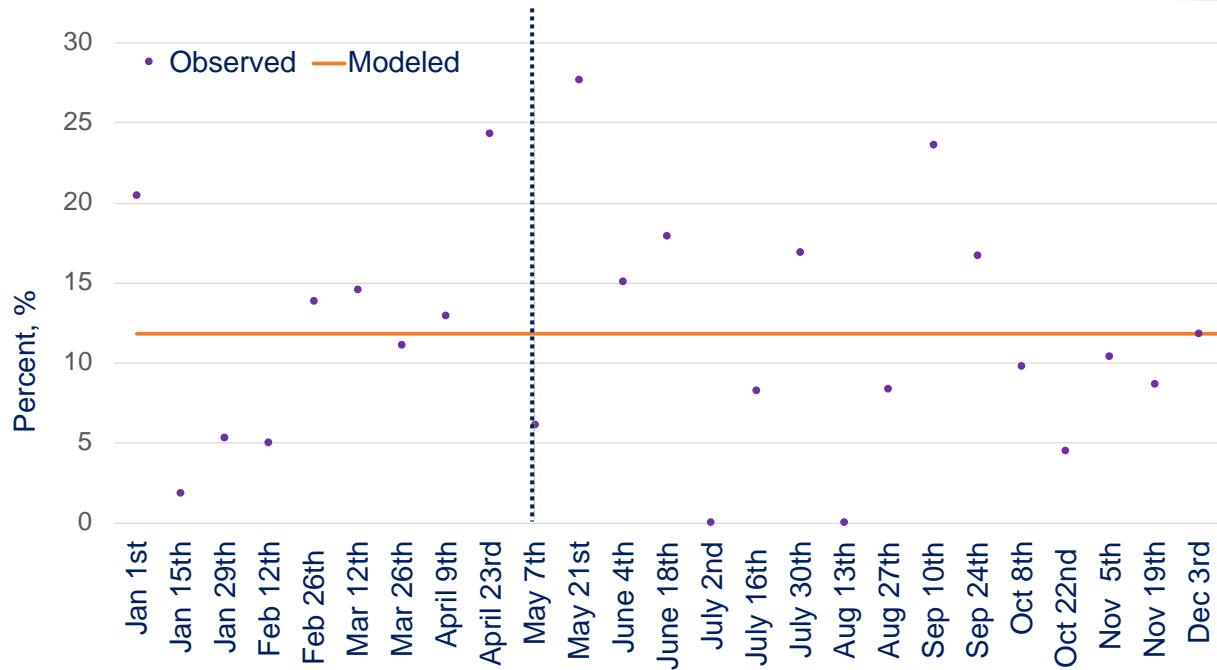
*52% of rejections included a comment

Substance use content in rejections

Opioid agonist, % (n)	7.8% (105)
Buprenorphine, % (n)	3.0% (38)
Methadone, % (n)	5.0% (65)
Buprenorphine and Methadone, % (n)	0.1% (2)
Naltrexone, % (n)	0% (0)
SUD Only, % (n)	7.3% (98)
Total, % (n)	15.1% (203)

*52% of rejections included a comment

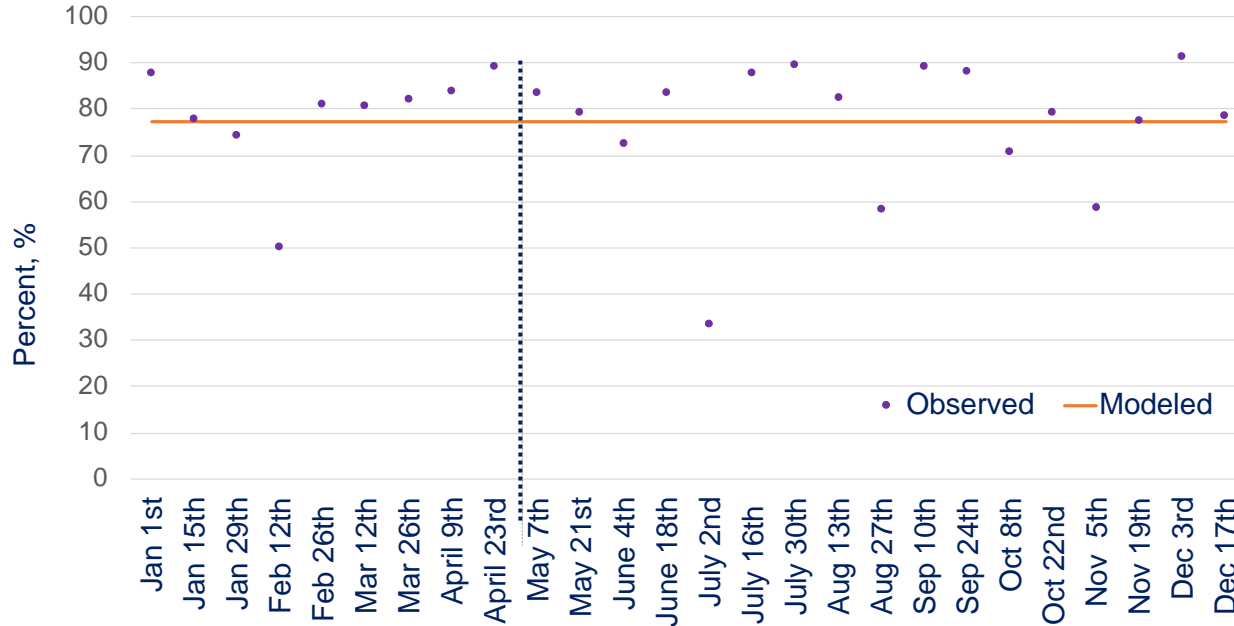
Proportion of discriminatory rejections did not change following settlement



Before settlement
638 (38.7%) referrals

After settlement
1010 (61.3%) referrals

Proportion of rejected referrals did not change following settlement



Before settlement

638 (38.7%) referrals

80.4% rejected

After settlement

1010 (61.3%) referrals

82.7% rejected

Strengths

- First quantitative assessment of this topic
- Unique data source
 - Referral level information not available in administrative data
 - Comments provide window into facility intentions
- Quasi experimental design that includes both discriminatory content and overall rejection data

Limitations

- Single site
- All referrals do not include comments
- Comments may not reflect true reasons for rejection (e.g. no bed available)
- Unable to account for case manager referral patterns
- 3 public and respite facilities known to accept people with OUD were not available in our referral data

Conclusions

- Normalized discrimination due to OUD in post-acute care admissions despite state policy and federal law
- A single settlement did not change practices
- Enhanced legal enforcement
- Address barriers facing facilities
 - Regulatory: Methadone regulations, cost of transport, psychotherapy
 - Behavioral: Stigma
 - Technical: Clinical capacity, training, specialist support
- Additional evaluation comparing OUD vs non-OUD referrals

Thank you!

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Commentary by Kelly Dineen

Questions?

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Table 3. Segmented linear regression model results with backwards selection¹

a) Discriminatory Comments Model, post-intervention period begins May 12th, 2018

	Time	Level Change	Slope Change
Full Model	1.17 (p=0.2570)	-3.31 (p=0.5837)	-1.37 (p=0.1993)
Step 1	0.82 (p=0.2693)		-1.13 (p=0.2350)
Step 2			-0.12 (p=0.6357)
Step 3			

Intercept = 11.84 when all terms sequentially removed

b) Rejection Model, post-intervention period begins May 12th, 2018

	Time	Level Change	Slope Change
Full Model	1.17 (p=0.5317)	-8.49 (p=0.4641)	-0.96 (p=0.6311)
Step 1	0.33 (p=0.6123)	-6.25 (p=0.5481)	
Step 2		-1.91 (p=0.7414)	
Step 3			

Intercept = 77.29 when all terms sequentially removed