



IMPROVING LINKAGE TO ADDICTION TREATMENT WITH EXTENDED-RELEASE NALTREXONE

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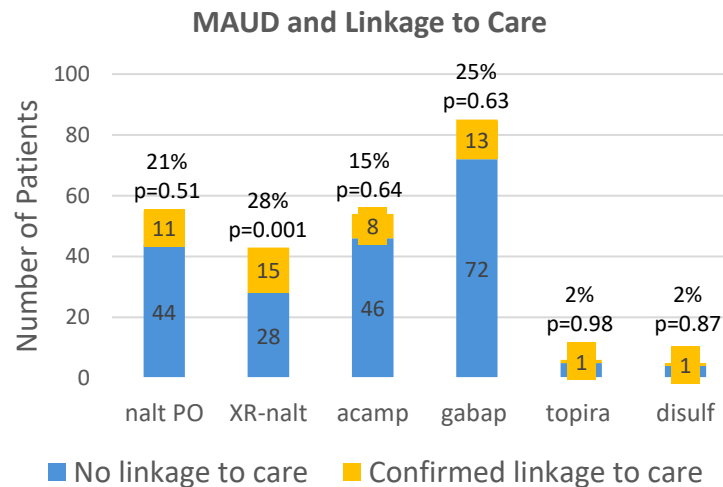
BACKGROUND

- Patients admitted to a medically managed alcohol withdrawal unit often fail to link to post-discharge outpatient addiction treatment.
- We sought to evaluate whether continuation or initiation of medication for alcohol use disorder (MAUD) is associated with improved rates of linkage to post-discharge outpatient addiction treatment by performing a retrospective review of patients admitted for management of alcohol withdrawal.

METHOD

- ASAM Level 4 unit for medically managed withdrawal embedded in an academic community hospital in Boston, MA.
- Retrospective electronic chart review of all patients admitted for alcohol withdrawal during the time of September 2021 to November 2022.
- Includes the FDA-approved medications: extended-release (XR) naltrexone, oral naltrexone, acamprostate, and disulfiram.
- Retrospective electronic chart review of all patients admitted for alcohol withdrawal during the time of September 2021 to November 2022.
- We defined successful linkage to care as confirmation in our electronic health record of attendance at the planned post-discharge visit within 30-days of discharge.
- Analyses were conducted using STATA and descriptive statistics were used to summarize the results. Chi-square or t-test for categorical and continuous variables were used to compare those with and without confirmed linkage to care, and logistic regression was used to conduct adjusted analyses.

Table 1				
	Total	Total cohort extracted (n=312)		P-value
		Confirmed linkage (n=53)	linkage (n=259)	
Age (SD)	50.8 (12.5)	53.4 (10.6)	50.2 (12.8)	0.096
Sex, F, n (%)	91 (29.2%)	15 (28.3)	76 (29.3)	0.88
Race, n (%)				0.50
White	239 (76.6)	39 (73.6)	200 (77.2)	
Black	48 (15.4)	10 (18.9)	38 (14.5)	
Asian	2 (0.64)	1 (1.9)	1 (0.39)	
other	23 (7.4)	3 (5.7)	20 (7.7)	
Ethnicity, Hispanic (%)	23 (7.4)	5 (9.4)	18 (7.0)	0.17
Marital status, n (%)				0.10
Single	175 (56.1)	25 (47.2)	150 (57.9)	
Married	86 (27.6)	15 (28.3)	71 (27.4)	
Divorced	40 (12.8)	12 (22.6)	28 (10.8)	
other	11 (3.5)	1 (1.9)	10 (3.9)	
Employment, n (%)				0.10
Unemployed	175 (56.1)	25 (47.2)	150 (57.9)	
Employed	86 (27.6)	15 (28.3)	71 (27.4)	
Retired	40 (12.8)	12 (22.6)	28 (10.8)	
Disability	11 (3.5)	1 (1.9)	10 (3.9)	
Home status, n (%)				0.043
Housed	236 (75.6)	44 (83.9)	192 (74.1)	
Homeless	48 (15.4)	9 (17.0)	39 (15.1)	
Unstably housed	28 (9.0)	0	28 (10.8)	
Psychiatric history, n (%)				
Depression	171 (54.8)	28 (53.8)	143 (55.2)	0.75
Panic disorder	10 (3.2)	3 (5.7)	7 (2.7)	0.27
Bipolar	45 (14.4)	5 (9.4)	40 (15.4)	0.26
PTSD	41 (13.1)	6 (11.3)	35 (13.5)	0.57
ADHD	26 (8.3)	5 (9.4)	21 (8.1)	0.75
GAD	153 (49.0)	24 (45.3)	129 (49.8)	0.55
AUD history, n (%)				
Drinks/d (SD)	20.4 (8.7)	15.9 (8.7)	21.4 (14.5)	0.008
History of withdrawal seizure	119 (38.4)	14 (26.4)	105 (40.9)	0.049
History of delirium tremens	73 (23.4)	8 (15.1)	65 (25.1)	0.26
SUD history, n (%)				
Opioid	60 (19.2)	6 (11.3)	54 (20.9)	0.11
Cannabis	45 (14.4)	8 (15.1)	37 (14.3)	0.88
Cocaine	54 (17.3)	7 (13.2)	47 (18.2)	0.39
Amphetamine	17 (5.5)	1 (1.9)	16 (6.2)	0.21
Benzodiazepines	23 (7.4)	1 (1.9)	22 (8.5)	0.22
Tobacco	153 (49.0)	19 (35.9)	134 (51.7)	0.035
Hospital stay				
LOS, d (SD)	4.9 (1.9)	5.0 (1.9)	4.9 (1.9)	0.79
AMA/PPD, n (%)	58 (18.6)	5 (9.4)	53 (20.5)	0.06
BAL on admission	156.7 (153.6)	150.1 (140.9)	158.0 (156.3)	0.74
MAUD on admit, n (%)				
Oral naltrexone	36 (11.5)	6 (11.3)	30 (11.6)	0.96
ER naltrexone	19 (6.1)	7 (13.2)	12 (4.6)	0.017
Acamprostate	30 (9.6)	4 (7.6)	26 (10.0)	0.58
Gabapentin	73 (23.4)	9 (17.0)	64 (24.7)	0.23
Topiramate	8 (2.6)	1 (1.9)	7 (2.7)	0.73
Disulfiram	5 (1.6)	2 (3.8)	3 (1.2)	0.17
MAUD on discharge, n (%)				
Oral naltrexone	55 (17.6)	11 (20.8)	44 (17.0)	0.51
ER naltrexone	43 (13.8)	15 (28.3)	28 (10.8)	0.001
Acamprostate	54 (17.3)	8 (15.1)	46 (17.8)	0.64
Gabapentin	85 (27.2)	13 (24.5)	72 (27.8)	0.63
Topiramate	6 (1.9)	1 (1.9)	5 (1.9)	0.98
Disulfiram	5 (1.6)	1 (1.9)	4 (1.5)	0.86
Any MAUD on discharge	127 (40.7)	18 (34.0)	109 (42.1)	0.27
Readmission				
ED readmission, n (%)	92 (29.5)	13 (24.5)	79 (30.5)	0.39
ARP readmission, n (%)	30 (9.6)	4 (7.6)	26 (10.0)	0.58



Only XR-naltrexone was associated with improved linkage to post-discharge addiction treatment. Patients who received XR-naltrexone were 2.7 times more likely to link to care within 30-days.

RESULTS

- A total of 312 unique patient encounters remained after 13 patients were excluded due to having an admitting diagnosis other than alcohol withdrawal.
- Linkage to care was confirmed in 53 patients (17%).
- XR-naltrexone was the only medication associated with a significantly greater likelihood of post-discharge linkage to formal addiction treatment (28% compared to 11%, p=0.001).
- A logistic regression model was used with age, home status, drinking amount, patient-directed discharges, and receipt of XR-naltrexone entered as covariates. Significant predictors of linkage to care were determined to be those receiving XR-naltrexone prior to discharge (aOR 2.7, 95% CI 1.3-5.6, p=0.009) and drinks per drinking day (aOR 0.96, 95% CI 0.92-0.99, p=0.016).

CONCLUSION AND DISCUSSION

- 41% percent of patients admitted to the unit for medically managed alcohol withdrawal were either continued or initiated onto medication for alcohol use disorder.
- Only XR-naltrexone was associated with improved linkage to post-discharge addiction treatment. Patients who received XR-naltrexone were 2.7 times more likely to link to care within 30-days.
- XR-naltrexone requires a once-monthly injection which inherently improves adherence and confirmation of adherence compared to oral MAUD formulations.
- The results of this study suggest that XR-naltrexone may increase the chances that patients discharged from a unit for medically managed withdrawal adhere to follow-up outpatient addiction treatment.
- Overall, more research is needed examining the potential role of MAUD in improving AUD-related outcomes after inpatient withdrawal treatment.

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