

Pilot Outcomes from a Harm-Reduction Street Psychiatry Buprenorphine Treatment Program

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Background

- Americans are now more likely to die from an opioid overdose than a car crash (National Safety Council, 2017)
- Homeless individuals particularly vulnerable to overdose
- These deaths could be prevented through medication-assisted treatment (MAT) such as buprenorphine
- Office-based buprenorphine treatment presents multiple barriers for homeless individuals
- Street psychiatry may be a promising approach to addressing substance use in homeless populations
- Evaluation of street psychiatry programs use in increasing access to MAT among homeless populations is nascent

Methods

Study Design:

- Descriptive pilot study examining patient characteristics and preliminary outcomes for patients assessed for buprenorphine

Participants:

- Participants were drawn from the patient population served by the Street Psychiatry program
- 19 patients in the Street Psychiatry program were given a prescription for buprenorphine and included in analyses

Measures/Data:

- All data was collected via self-report or Controlled Substance Utilization Review and Evaluation System (CURES) from November 2018 – April 2019
- Demographic & clinical differences between groups*
 - Filled prescription vs. never filled prescription
 - Of those who filled the prescription, received buprenorphine at the clinic vs. received in field
- Adverse events: precipitated withdrawal and overdose while on buprenorphine
- Substance use outcomes: heroin/other substance use and medication non-adherence
- Harm-reduction outcomes: soft tissue infections, mode of drug use, and overdose reversals
- Health-promotion benefits: hospitalizations, overdoses, emergency room visits, and linkage to primary care

Study Setting

- The TRUST Clinic in Oakland, CA is a partnership between Lifelong Medical Care and Alameda County Health Care for the Homeless
- This program was highlighted by the Health Resources & Services Administration as a promising practice (search "HRSA promising practices Alameda County")
- Street Psychiatry program (est. 2018)
 - Encampment-based outreach, MAT, and psychiatric services
 - Serves a population with high rates of opioid and other substance use disorders

Table 1. Patient Demographics and Clinical Characteristics

		Total Sample (N = 19)	Filled prescription (n = 14)	Never filled prescription (n = 5)	p-values
Race	Black/African American	58% (11)	57% (8)	60% (3)	0.91
	White	26% (5)	29% (4)	20% (1)	
	Other	16% (3)	14% (2)	20% (1)	
Gender	Male	79% (15)	71% (10)	100% (5)	0.18
	Female	21% (4)	29% (4)	0% (0)	
Average Age	(years)	43.7 (29 - 60)	43.3 (31 - 60)	44.8 (29 - 58)	0.77
	Buprenorphine history	61% (11)	54% (7)	80% (4)	
	Methadone history	17% (3)	23% (3)	0% (0)	
	History of both	11% (2)	15% (2)	0% (0)	
MAT History	No MAT history	11% (2)	8% (1)	20% (1)	0.42
	Negative	64% (9)	64% (7)	67% (2)	
	Positive	36% (5)	36% (4)	33% (1)	
Hepatitis C Status	Negative	64% (9)	64% (7)	67% (2)	0.92
	Positive	36% (5)	36% (4)	33% (1)	

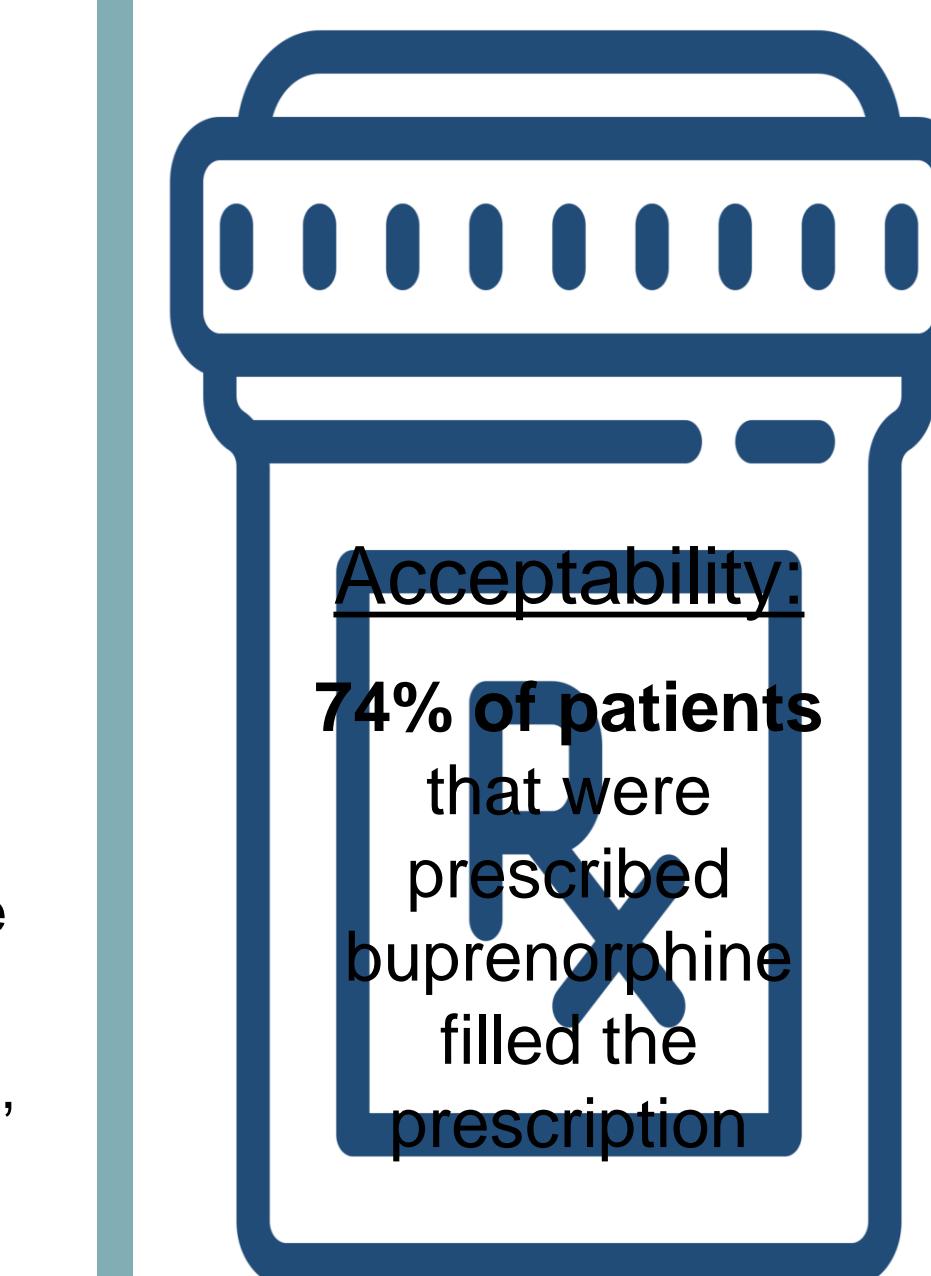
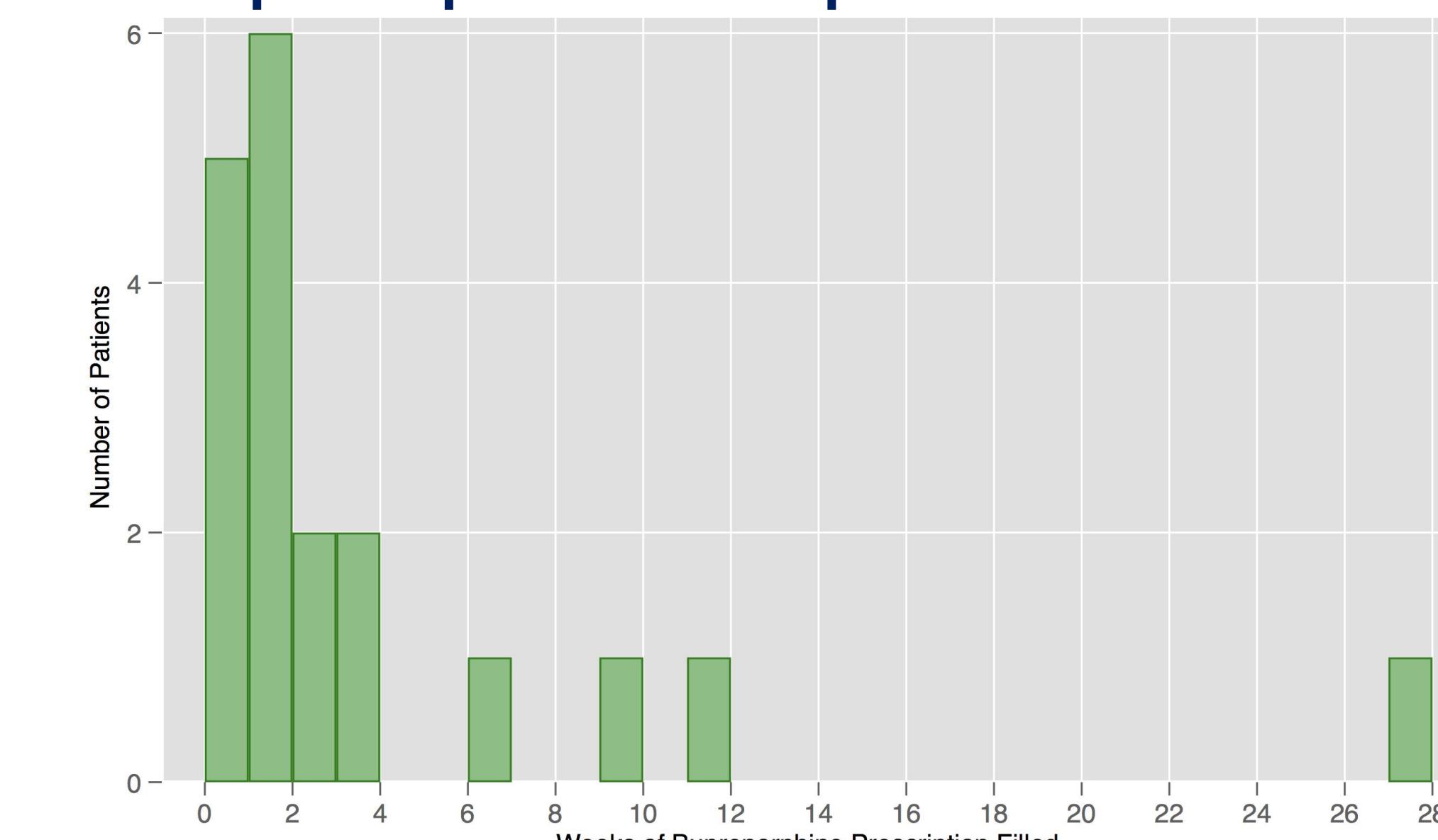


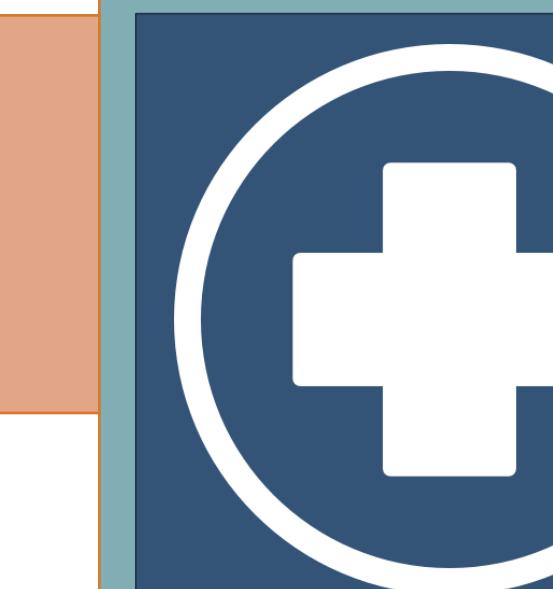
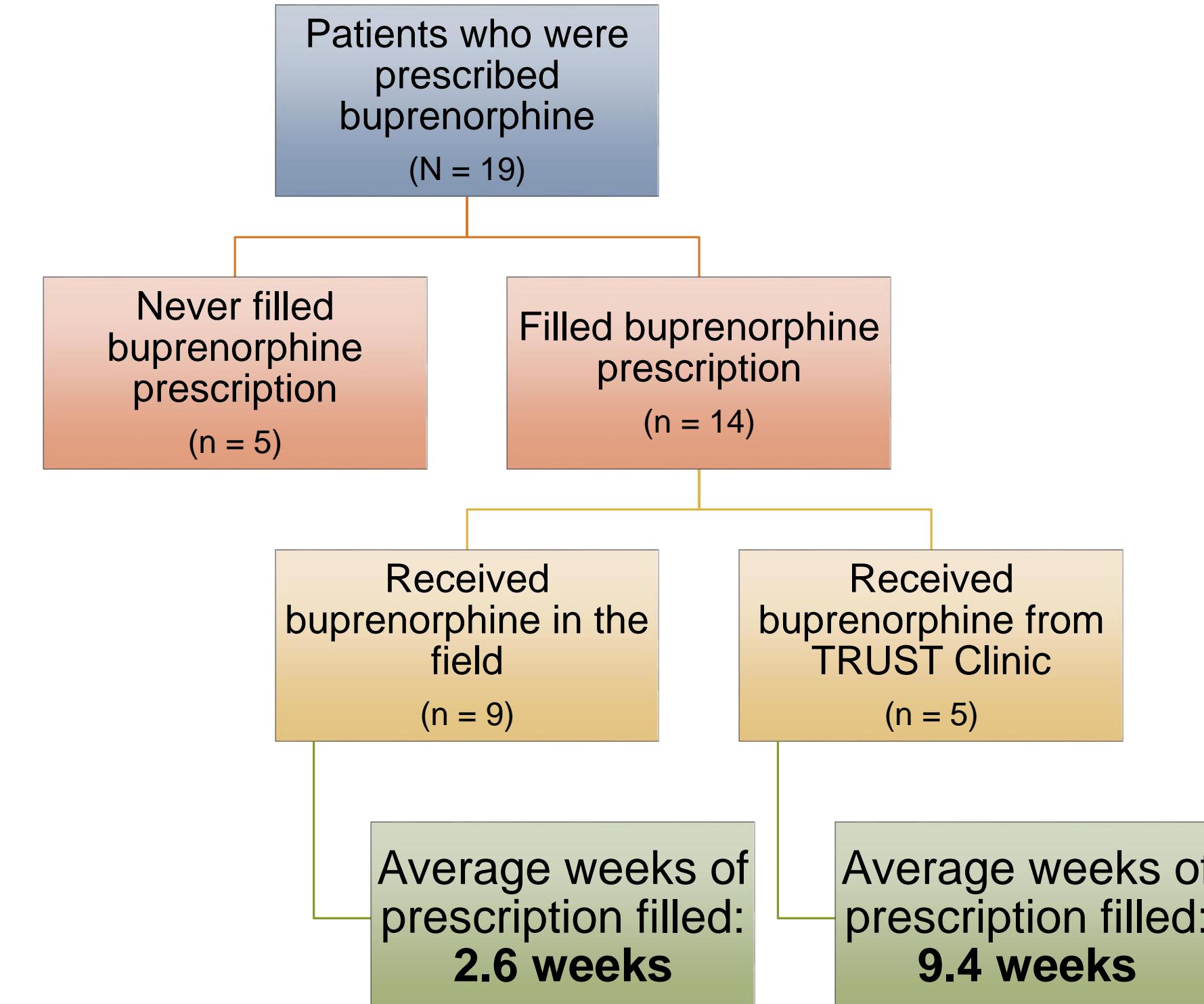
Figure 1. Buprenorphine Prescription Utilization



Objective

- Demonstrate the feasibility, acceptability, and preliminary outcomes of a street-based buprenorphine pilot program

Patient Care Pathways



Is street induction safe?

Adverse events:

- No overdoses documented while taking buprenorphine
- 1 patient experienced precipitated withdrawal



Results

- No differences in demographics (age, race, gender, route of heroin use, or years homeless) between those that filled the prescription or those that transitioned to getting buprenorphine at the clinic, and those that did not
- Substance use outcomes:
 - Patients who transitioned to receiving buprenorphine at TRUST filled more weeks than those continuing in the street
 - 9.4 weeks at TRUST versus 2.6 weeks in the street
- Harm reduction outcomes:
 - Not enough patients followed up to determine if participation affected infections, mode of drug use, overdose reversals, hospitalizations, or ER utilization
- Primary care outcomes:
 - 7 patients linked to brick-and-mortar clinic for primary care
 - Linkage defined as 3 or more visits to PCP
 - All patients who were linked to primary care filled their buprenorphine prescription
 - Patients with MAT history were significantly more likely to link to primary care ($p = .025$)

Discussion

- Prescribing buprenorphine in the field is feasible and acceptable to most patients
- Low rates of adverse events suggest that scaling up this model is likely safe
- Linking patients to a brick and mortar clinic may improve retention in care
- More research is needed to understand factors determining which patients fill buprenorphine prescriptions and link to primary care

Future directions:

- Focus groups and qualitative analysis as the Street Psychiatry program continues to develop its street-based buprenorphine model
 - Examine the motivations and barriers for patients to go to the clinic for buprenorphine
 - Understand characteristics of those who do or do not fill the prescription
 - Experience with street buprenorphine, discrimination at pharmacies, stage of change, etc.