



Participation in Recovery Housing and Outcomes Among Adults with a Felony History

Abstract

People with a felony history face numerous challenges during reintegration post incarceration. The present research brief sought to determine characteristics of people with a felony history versus not, to what extent people with a felony history utilize recovery housing during treatment, the impact of recovery housing on treatment outcomes among people with a felony history, and to what extent people with a felony history utilize housing and treatment resources after discharge from treatment. It examined these areas in a sample of 6301 people receiving intensive outpatient services (IOP) for co-occurring substance use and mental health challenges. Participants with a felony history were more likely to be male, older, non-white, less educated, court-ordered to treatment, use amphetamines, report a diagnosis of PTSD or ADD/ADHD, have more previous treatment attempts for substance use, and first use a substance at a younger age. Moreover, those with a felony history were less likely than those without a history to live in recovery housing during treatment, but those who did were more likely than those who did not to discharge “successfully” from the IOP, and to have more sober days upon discharge. Well below 50% of survey respondents with a felony history reported receiving professional services for a substance use disorder at three-month follow-up and beyond post IOP discharge. Supporting people with a felony history is key to creating healthier communities.

Background

Extensive research underscores the link between substance use and criminal charges, with 25-30% of individuals convicted of crimes admitting substance use involvement in their crimes (Bureau of Justice Statistics, n.d.). Over half of people incarcerated at the state and federal level meet Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for drug dependence or abuse (Bureau of Justice Statistics, 2017). While a substantial portion of people who are incarcerated with substance use disorders participate in treatment programs within the criminal justice system (Bureau of Justice Statistics, 2021), upon reentry, they face challenges like housing insecurity and limited support, elevating the risk of recidivism, overdose (Waddell et al., 2020), and relapse (Baker, et al., 2023). Interviews with people who were recently on parole who are in recovery underscore the priority placed on maintaining sobriety, housing, and employment (Dong, et al., 2018).

To address these challenges, the integration of recovery-oriented housing programs for individuals with felonies shows capacity to positively impact communities. A study partnership between the Center for Practice Transformation and NUWAY®, a Midwest non-profit offering intensive outpatient programming (IOP) with a recovery residence option for those in need, allows assessment of participant outcomes, such as days sober, recovery, and mental health symptoms, comparing participants convicted of a felony to participants without a felony. This study and program provide crucial insights into the efficacy of an integrated approach for people convicted of felonies.

The present brief sought to answer the following questions:

1. What differences exist in characteristics of people with a felony history versus not?
2. Compared to people without a felony history, to what extent do people with a felony history utilize recovery housing during IOP treatment?
3. Does utilization of recovery housing during IOP treatment impact outcomes for people with a felony history?
4. What housing and treatment resources are accessed after discharge from IOP by people with a felony history?

Methods

Clients receiving intensive outpatient (IOP) services at NUWAY® were given the option at intake to enroll in a study examining the impact of recovery housing on outcomes, such as depression, anxiety, and recovery. The present brief was generated from this dataset. Electronic surveys were completed at intake and discharge, and then at three, nine and sixteen months after discharge. Surveys included demographic questions and outcome-related questions. Identifying information was removed for analysis to protect the privacy of participants.

Statistical Analysis:

To examine the associations between felony history and other participant characteristics at intake, felony history and participation in a recovery residence, and felony history and outcomes from admission to discharge, logistic regression models were used (odds ratios and 95% confidence intervals were calculated, and significance was set at $p < 0.05$). For associations between felony history and participant

characteristics, regression analyses were first unadjusted. Then, where there were statistically significant relationships in unadjusted models, adjusted multiple logistic regression models were used to examine the relationship between the participant characteristic and felony history while accounting for possible confounding variables. For each characteristic that had a significant unadjusted association, confounding variables were selected if there was a significant association between the characteristic and the variable as measured by chi-square tests of independence ($p < 0.05$).

For associations between felony history and recovery residence participation, the logistic regression model was adjusted for all other participant characteristics that were significantly associated with felony history as measured by chi-square tests of independence ($p < 0.05$).

For analyses of improvement of outcomes (PHQ-9, GAD-7, SURE total score, sober days, discharge status) as a function of felony history and recovery residence participation, logistic regression models adjusted for participant characteristics that remained significantly associated with felony history in adjusted logistic regression models. Outcomes were all binary and included PHQ-9 (Kroenke, Spitzer & Williams, 2001) score improvement from admission to discharge (any vs. no improvement), GAD-7 (Spitzer et al., 2006) improvement (any vs. no improvement), SURE (Neale et al., 2016) total score improvement (any vs. no improvement), discharge status (“successful” (with staff approval) vs. “unsuccessful” (against staff approval, transfer elsewhere, incarcerated, death)), and days sober from a substance at discharge (less than 139 days (median at discharge) vs. 139 days or more).

Results

What are the characteristics of people with a felony history?

See Supplemental Tables 1-4 for participant characteristics. After adjusting for possible confounding characteristics, the following associations were found. Females (OR: 0.45, CI: 0.35-0.57) were less likely than males to have a felony history. Participants 35 years or older were more likely than those younger than 35 (OR: 2.16, CI: 1.77-2.64) to report a felony history. Compared to White only participants, those who were Black only (OR: 2.65, CI: 2.10-3.36), American Indian/Alaska native only (OR: 2.04, CI: 1.46-2.84), and multiracial (OR: 1.43, CI: 1.05-1.94) were more likely to report a felony history. Those who had completed at least some college or more were less likely than people with some high school to have a felony history.

Those who had used alcohol (OR: 0.55, CI: 0.44-0.68) and sedatives (OR: 0.56, CI: 0.41-0.77) in the past year were less likely than those who didn't to have a felony history. However, those who had used amphetamines (OR: 1.96, CI: 1.59-2.43) were more likely to have a felony history. Those who reported being 15 years or older when they first tried a substance were less likely to report a felony history (OR: 0.67, CI: 0.50-0.92) than those who were younger. Those had four or more prior treatment attempts for substance use (OR: 3.43, CI: 1.79-6.57) were more likely than those with no prior attempts to have a felony history. Those who had been in an inpatient, hospital, or detox setting prior to their IOP intake were less likely (OR, 0.75, 0.56-0.98)

Table 1. Associations between recovery housing participation and felony history (odds ratios and 95% CI)

Characteristic	Recovery housing <i>N</i> = 1815		Self-housed <i>N</i> = 436		Unadjusted			Adjusted		
	<i>n</i>	%	<i>n</i>	%	OR	95% CI	<i>p</i> ^a	OR	95% CI	<i>p</i> ^a
Felony history										
No	1108	61.1	242	55.5	Ref					
Yes	707	38.9	194	45.5	0.80	0.65-0.98	*	^b 0.52	0.35-0.77	**

^a * <0.05 , ** <0.01 , *** <0.001

^bAdjusted for age, sex, race, education, alcohol use, opioid use, amphetamine use, sedative use, treatment setting prior to intake, depression dx, anxiety dx, PTSD dx, ADD/ADHD dx, schizophrenia/schizoaffective dx, eating dx, personality dx, unhoused in the last 6 months, court ordered to treatment, age of first substance use, # of prior substance use treatment attempts, PHQ-9 score, GAD-7 score, SURE total score, and sober days.

Table 2. Associations between felony history, housing status, and sober days, discharge status from intake to discharge (odds ratios, 95% CI)

Characteristic	Days sober from a substance (>138 days vs. <139 days)			Discharge status (successful vs. unsuccessful)		
	OR ^b	95% CI	<i>p</i> ^a	OR ^b	95% CI	<i>p</i> ^a
Felony history and housing status						
Felony history, no recovery housing	Ref			Ref		
No felony history, no recovery housing	0.62	0.28-1.41	0.26	1.02	0.60-1.73	0.95
Felony history, recovery housing	1.96	1.02-3.78	*	2.42	1.56-3.76	***
No felony history, recovery housing	2.50	1.28-4.88	**	2.42	1.56-3.78	***

^a * <0.05 , ** <0.01 , *** <0.001

^bAdjusted for age, sex, race, education, age of first substance use, # of prior substance use treatment attempts, treatment setting prior to intake, court ordered to treatment, alcohol use, amphetamine use, sedative use, PTSD dx, and ADD/ADHD dx.

than those who had not been in treatment to have a felony history. Moreover, those who were court ordered to IOP treatment (OR: 2.69, CI: 2.17-3.33) were more likely to have a felony history than those were not.

Those who reported being diagnosed with PTSD (OR: 1.55, CI: 1.26-1.91), or ADD/ADHD (OR: 1.31, CI: 1.09-1.57) were more likely than those without those diagnoses to have a felony history. Although not quite significant (p=0.06), people diagnosed with an anxiety disorder were less likely to have a felony history. Similarly, although not significant (p=0.08), those with moderate or worse severity depression on the PHQ-9 were less likely to have a felony history.

To what extent do people with a felony history utilize recovery housing during IOP treatment?

Adjusting for possible confounders, compared to people without a felony history, people with a history were less likely to live in recovery housing during their IOP treatment engagement (OR: 0.52, CI: 0.35-0.77) (Table 1).

Does utilization of recovery housing during IOP treatment impact outcomes for people with a felony history?

Adjusting for possible confounders, participants with a felony history who lived in recovery housing were more likely than those who did not to have 139 days or more of sobriety upon discharge (OR: 1.96, CI: 1.02-3.78) (Table 2). Similarly, participants with a felony history who lived in recovery housing were more likely than those who did not to discharge “successfully” (OR, 2.42, 1.56-3.76). There were no significant associations between recovery residence participation and improvement in PHQ-9, GAD-7, and SURE total score (Table 3).

What housing and treatment resources are accessed after discharge from IOP by people with a felony history?

Overall, a large percentage of participants who enrolled in the study were lost to follow-up at each time point (Figure 1). However, those with a felony history were lost to follow-up more than those without a history (chi-squared tests at each time point were significant). The percentages of participants who were receiving professional services for a substance use disorder at post-discharge follow-up time points were similar among those with a felony history and those without, and dropped and stayed below 50% by three month follow-up (chi-squared tests at each time point were non-significant) (Figure 2). Similarly, housing status was broadly comparable between participants with a felony history and those without at follow-up time points (chi-squared tests were non-significant) with a decrease in those living in recovery housing and an increase in those living at a permanent address the more time had elapsed from IOP discharge (Supplemental Figure 1).

Figure 1. Percentage of participants lost to follow-up (n=6301 at intake)



Table 3. Associations between felony history, housing status, and change in PHQ-9, GAD-7, and SURE total scores from intake to discharge (odds ratios, 95% CI)

Characteristic	PHQ-9 (any improvement in score vs. no improvement)			GAD-7 (any improvement in score vs. no improvement)			SURE Total (any improvement in score vs. no improvement)		
	OR ^b	95% CI	p ^a	OR ^b	95% CI	p ^a	OR ^b	95% CI	p ^a
Felony history and housing status									
Felony history, no recovery housing	Ref								
No felony history, no recovery housing	1.61	0.83-3.12	0.16	1.31	0.68-2.52	0.42	1.17	0.60-2.26	0.65
Felony history, recovery housing	1.39	0.80-2.42	0.25	1.04	0.60-1.80	0.88	1.02	0.59-1.78	0.93
No felony history, recovery housing	1.60	0.91-2.82	0.11	1.40	0.80-2.45	0.24	1.36	0.77-2.40	0.29

^a *<0.05, **<0.01, ***<0.001

^b Adjusted for age, sex, race, education, age of first substance use, # of prior substance use treatment attempts, treatment setting prior to intake, court ordered to treatment, alcohol use, amphetamine use, sedative use, PTSD dx, and ADD/ADHD dx.

Conclusions

Almost half (44.3%) of the present sample had a felony history, raising the importance of better understanding this group's experience in treatment and ways to best support it. Participants with a felony history were more likely to be male, older, non-white, less educated, court-ordered to treatment, use amphetamines, report a diagnosis of PTSD or ADD/ADHD, have more previous treatment attempts for substance use, and first use a substance at a younger age. Those who used alcohol and sedatives in the past year were less likely to report a felony history, as were those who had been in an inpatient, hospital, or detox setting relative to those not in any treatment prior to their IOP intake.

Those with a felony history who lived in recovery housing during treatment were more likely than those who had not to discharge "successfully" from the IOP, and to have more sober days upon discharge. This is notable given that those with a felony history were less likely to live in recovery housing than those without a history. Living in recovery housing for participants with a felony history did not appear to be associated with added improvement for depression and anxiety symptoms, or recovery.

Many people with a felony history were lost to follow-up in the present study (over 85% of participants who completed an intake survey did not complete a survey at 3 months), illustrating the need to further engage and support this population. Well below 50% of survey respondents with a felony history reported receiving professional services for a substance use disorder at three-month follow-up and beyond post IOP discharge. After IOP discharge, known respondents with a felony history shifted away from recovery housing and into permanent addresses. Nevertheless, close to 9% were unhoused/had unstable housing three months after discharge, and almost 13% at nine months post-discharge.

Although the present research brief is notable for including a large and somewhat diverse sample, several limitations should be acknowledged. First, the present brief used observational data, and thus inferences about causality should be tempered. Secondly, there was no way to determine how long prior to IOP treatment engagement a participant had been convicted of a felony, or how many convictions they had. Third, as mentioned above, there was significant loss to follow-up after the intake survey. Further research would benefit from examining outcomes of people with a felony history beyond IOP discharge.

Figure 2. Percentage of participants receiving professional services for a substance use disorder post-discharge from IOP



If you would like access to supplemental tables and figures, please e-mail cptresearch@umn.edu.

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SUGGESTED CITATION

Van Wert, M. & Gus, E. (2024). Research Brief: Participation in recovery housing and outcomes among adults with a felony history (March, 2024). Center for Practice Transformation, University of Minnesota.