



# Access to Disability Benefits and Recidivism Outcomes for Justice-Involved Adults with Serious Mental Illness

Evan M. Lowder<sup>1</sup>, Sarah L. Desmarais<sup>1</sup>, Robin P. Telford<sup>2</sup>, John Petrila<sup>2</sup>, & Richard A. Van Dorn<sup>3</sup>

<sup>1</sup>North Carolina State University, <sup>2</sup>University of South Florida, <sup>3</sup>RTI International



## Introduction

Adults with mental illnesses are overrepresented in U.S. jails and more likely to recidivate post-release compared to offenders without mental illnesses (Steadman et al., 2009, Baillargeon et al., 2009). Diversion programs, designed to connect adults with mental illnesses to routine mental health treatment as an alternative to incarceration, have not had universal success in increasing use of treatment services or decreasing recidivism (Broner et al., 2004, Shafer et al., 2004). Routine mental health treatment, however, can play a key role in decreasing recidivism (Van Dorn et al., 2011; Van Dorn et al., 2013). Income support programs administered by the Social Security Administration (SSA), including Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI), may provide a way to access to treatment services through receipt of Medicaid and Medicare insurance, which have been shown to increase access to community-based treatment services (Morrissey et al., 2006; Burt & Sharkey, 2002).

The SSI/SSDI Outreach, Access, and Recovery (SOAR) program is a federal U.S. initiative to improve SSI/SSDI application approval rates by training case managers on the disability determination process (Kauff et al., 2009). Early data on the SOAR program suggests it is having a positive effect on application approval rates as well as on time to approval of benefits (SOAR TAC, 2012). The SOAR program is currently being piloted in a mental health jail diversion program and preliminary results showed some support for its effectiveness (Telford, 2013); however, its impact on recidivism remains unclear.

## The Present Study

The purpose of the present study is to investigate the impact of the SOAR model on recidivism for adults with mental illnesses participating in jail diversion programs. Specifically, we examined: 1) rate of acceptance, time to application, and time to receipt of benefits among SOAR referrals, and 2) associations of receipt of disability benefits and processing time with recidivism.

## Methods

### Study Context

Miami-Dade County, Florida (USA) has a high prevalence of adults with mental illnesses in the general population and the criminal justice system. The 11<sup>th</sup> Judicial Circuit of Florida developed the Criminal Mental Health Project (CMHP) in 2000 to identify and divert adults with mental illnesses into community-based mental health treatment. SOAR was implemented in 2007 to increase access to disability benefits for adults with mental illnesses participating in the CMHP.

### Sample

The total sample includes 355 mental health jail diversion clients (77.5% male) who were referred to the SOAR program between August 2011 and October 2013. The average age was 35.51 years ( $SD = 12.89$ ). Half (50.7%) of the clients identified as Caucasian and around half identified as African American (47.6%). Participant diagnoses were primarily schizophrenia spectrum and psychotic (62.5%), major depressive and mood (15.1%), and bipolar (22.4%) disorders. At this time, recidivism data are available for 188 participants.

### Procedures

All data were collected from official records maintained by the CMHP.

## Variables

**SSI/SSDI receipt.** Participants whose applications were approved outright or approved upon reconsideration were coded as having *received benefits*. Participants whose applications were denied, who were deemed ineligible by SOAR staff, or who refused to submit an application were coded as having *not received benefits*.

**Pre/post referral.** *Pre/post* refers to the time elapsed from one year prior to one year following date of referral to account for the within-subjects repeated measurement.

**Criminal activity.** Criminal activity measures included *number of arrests, jail days, and charges*.

**Processing time.** *Time between referral and application* was measured by days between referral to SOAR and date of SSI/SSDI application. *Time between application and disposition* was measured by days between date of application and disability determination by the SSA.

## Data Analysis

We ran descriptive statistics and frequencies for all study variables. We compared the fit of Poisson versus negative binomial regression models to test for associations between study variables. Preliminary models suggested a negative binomial model (QIC range: 375.74 to 428.36) would be a better fit than a Poisson model (QIC range: 599.73 to 48,744.36). Potential covariates of race, age, and sex then were tested in negative binomial models for associations with each recidivism variable, but only age with arrests was significant.

## Results

### Descriptive Statistics

About half (50.2%) of all referrals were approved for disability benefits. Submitted applications had an 84.0% success rate. Overall, average time between referral and SSI/SSDI application was 48.03 days ( $SD=38.08$ , Range=0-176) and time between application and disposition was 31.42 days ( $SD=20.17$ , Range=0-118). Table 1 presents descriptive statistics for recipients and non-recipients.

### SSI/SSDI Receipt

Regression analyses showed that SSI/SSDI disability recipients had fewer jail days and charges compared to non-recipients (see Table 2). All participants showed significant decreases in arrests, jail days, and charges from pre-referral to post-referral. No significant interaction was found between time and disability receipt for arrests and charges. However, there was a trending interaction effect of time by disability receipt on jail days,  $p=.067$ , with recipients experiencing a 1.67 times greater decrease from pre-referral to post-referral jail days compared to non-recipients.

Table 1. Descriptive Statistics

APPLICATION OUTCOMES	All Participants (N = 355)			
	n	%		
Approved	178	50.2		
Denied	34	9.6		
Ineligible	73	20.6		
Pending	20	5.6		
Refused	25	7.0		
Reinstatement	21	5.9		
Other	4	1.1		
CRIMINAL ACTIVITY	Recipients (n = 97)		Non-Recipients (n = 74)	
	M	SD	M	SD
Pre-Referral				
Arrests	1.78	2.18	1.65	1.24
Jail Days	68.99	104.27	94.04	115.70
Charges	3.25	12.72	2.99	3.04
Post-Referral				
Arrest	0.73	1.19	0.85	1.26
Jail Days	27.79	86.18	63.01	98.38
Charges	1.04	1.89	1.93	4.05
PROCESSING TIME	Recipients (n = 177)		Non-Recipients (n = 34)	
	M	SD	M	SD
Time Between				
Referral-Application	45.01	35.49	63.76	46.97
Application-Disposition	29.97	19.97	38.94	19.84

Table 2. Summary of Negative Binomial Regression for SSI/SSDI Receipt

	ARRESTS			JAIL DAYS			CHARGES		
	Wald X <sup>2</sup>	OR	95% CI	Wald X <sup>2</sup>	OR	95% CI	Wald X <sup>2</sup>	OR	95% CI
Receipt	0.67	1.21	[0.76, 1.93]	5.13*	2.27	[1.12, 4.60]	4.15*	1.86	[1.02, 3.36]
Pre/Post	22.09***	2.41	[1.67, 3.48]	14.94***	2.48	[1.56, 3.94]	6.75**	3.12	[1.32, 7.36]
Receipt x Pre/Post	0.74	0.81	0.50, 1.31]	3.36 <sup>‡</sup>	0.60	[0.35, 1.04]	1.86	0.50	[0.18, 1.36]

Note. N = 171. CI = confidence interval for odds ratio. For group, non-recipients are coded as 0. <sup>‡</sup>p < .10 \*p < .05 \*\*p < .01 \*\*\*p < .001

## Processing Time

**Referral to application.** Regression analyses revealed a small but significant association between time from referral to application and jail days while controlling for both disability receipt and changes in pre/post jail days (see Table 3). Specifically, each additional day between initial referral and application was associated with a small increase in the number of jail days served. There was a trend for the number of charges incurred to increase as time between initial referral and application increased,  $p = .070$ .

**Application to disposition.** Regression analyses also showed a small but significant association between time from application to disposition and arrests while controlling for disability receipt, changes in pre/post arrests, and age (see Table 3). Specifically, each additional day between the date of application and disposition was associated with a small increase in the number of arrests.

Table 3. Summary of Negative Binomial Regressions for Processing Times

	ARRESTS			JAIL DAYS			CHARGES		
	Wald X <sup>2</sup>	OR	95% CI	Wald X <sup>2</sup>	OR	95% CI	Wald X <sup>2</sup>	OR	95% CI
<b>TIME FROM REFERRAL TO APPLICATION</b>									
Receipt	0.01	1.02	[0.68, 1.53]	1.96	0.63	[0.33, 1.21]	0.23	0.84	[0.42, 1.68]
Pre/Post	23.82***	2.20	[1.60, 3.02]	19.46***	2.39	[1.62, 3.52]	6.43*	2.49	[1.23, 5.04]
Referral-Application	0.29	1.00	[0.99, 1.00]	7.92**	1.01	[1.00, 1.02]	3.28 <sup>‡</sup>	1.01	[1.00, 1.01]
<b>TIME FROM APPLICATION TO DISPOSITION</b>									
Receipt	0.20	0.91	[0.59, 1.39]	0.17	1.14	[0.61, 2.12]	0.04	0.94	[0.53, 1.66]
Pre/Post	23.75***	2.21	[1.60, 3.03]	17.73***	2.25	[1.54, 3.28]	5.61*	2.52	[1.17, 5.43]
Application-Disposition	6.38*	1.01	[1.00, 1.02]	2.57	0.99	[0.98, 1.00]	0.05	1.00	[0.99, 1.02]

Note. N = 120. CI = confidence interval for odds ratio. For group, non-recipients are coded as 0. <sup>‡</sup>p < .10 \*p < .05 \*\*p < .01 \*\*\*p < .001

## Discussion

Findings provide evidence of high approval rates and low processing times for SSI/SSDI applications processed through the SOAR program for justice-involved adults with mental illnesses. Additionally, results suggest receipt of SSI/SSDI benefits is associated with decreased jail days, and shorter SSI/SSDI application processing times are associated with decreased recidivism. However, conclusions are limited because participants were clients in a successful diversion program, resulting in low base rates of criminal activity overall. Future studies should aim to replicate these findings with longer follow-up periods and in different diversion settings. Future research should continue to explore associations between disability benefits and community reintegration outcomes (e.g. recidivism, mental health treatment) in this population.

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