Implementation of MISSION–Criminal Justice in a Treatment Court: Preliminary Outcomes Among Individuals With Co-occurring Disorders

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Objective: Mental health courts provide an alternative to incarceration and address both mental health and criminal justice needs. Many individuals within these treatment courts also have co-occurring substance use disorders. This pilot study examined the preliminary effectiveness of Maintaining Independence and Sobriety through Systems Integration, Outreach, and Networking–Criminal Justice (MISSION-CJ), an intervention that targets co-occurring disorders and criminal justice risk factors within a mental health court.

Methods: Participants (N=97) were enrolled in mental health court and MISSION-CJ community wraparound services.

Results: Participants were primarily male with an average age of 34, had spent an average of more than 5 years incarcerated, and had an average of 13.94 years of illegal drug use; 91% had experienced depression. Preliminary 6-month outcomes showed significant reduction in nights incarcerated ($p<0.002$), illegal drug use ($p<0.003$), trauma symptoms ($p<0.004$), and behavioral health symptoms ($p<0.006$).

Conclusions: Preliminary findings suggest promise for delivery of MISSION-CJ to participants in a mental health court.

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Individuals with mental and substance use disorders are overrepresented in the criminal justice system (1). Specialty treatment courts were established to meet the mental health and substance use needs of participants, beginning with drug courts in the 1980s (2) and followed by mental health courts. Typically serving individuals presenting with a range of offenses, high levels of co-occurring substance use, and a range of mental health diagnoses, mental health courts provide court-monitored treatment referral and support. Studies of mental health courts demonstrate positive outcomes (3), although specific populations, especially those with higher lifetime criminal justice involvement and co-occurring disorders, remain challenging (4, 5). Given the complex needs of individuals with co-occurring disorders, researchers have called for novel interventions that offer comprehensive treatment and community support alongside probation and usual treatment court operations (6) to effectively span boundaries between criminal justice and behavioral health providers to enhance services, engagement, and outcomes.

Despite extensive literature on the needs of this population, few comprehensive approaches are supported by research. Maintaining Independence and Sobriety through Systems Integration, Outreach, and Networking–Criminal Justice (MISSION-CJ) (7) is an intervention specifically developed to meet these needs. MISSION-CJ includes six integrated evidence-based components: critical time intervention case management (8), intensive in-community support that decreases in intensity over time as participants

HIGHLIGHTS

- Findings from this pre- and posttest study suggest that at six months post-enrollment, when integrated in a mental health court, Maintaining Independence and Sobriety through Systems Integration, Outreach, and Networking-Criminal Justice (MISSION-CJ) reduced criminal justice involvement, substance use, and behavioral health and trauma symptoms among persons with co-occurring disorders.
- Boundary-spanning interventions with rigorously defined roles and responsibilities based on known successful practices in community behavioral health and criminal justice services show promise in meeting the needs of justice-involved persons with co-occurring disorders.
- MISSION-CJ services can inform behavioral health and criminal justice partnerships and collaborations by gathering evidence from both domains and knitting it together for improved outcomes.

transition to community-based care; dual recovery therapy (DRT) (9), composed of 13 structured group treatment sessions designed to simultaneously treat co-occurring mental and substance use disorders; peer support, including 11 recovery-oriented group sessions delivered by an individual with lived experience of co-occurring disorders and criminal justice involvement; vocational and educational support; and trauma-informed care.

MISSION-CJ also includes integration of risk-need-responsivity (RNR) conceptualizations to incorporate treatment planning for people with co-occurring disorders involved in the criminal justice system (1). Based on formal and informal risk-need assessments, participants receive intensive services; frequent coordination with probation officers; and structured programming, including DRT group interventions, referrals and linkages to programs to address symptoms, and increased contact focused on addressing affiliation with antisocial peers. MISSION-CJ is delivered by a team composed of peer specialists and case managers. These teams provide case management that spans across the traditionally siloed behavioral health and criminal justice systems and act as "boundary spanners" to bridge communication (10). The team members understand service gaps and link the behavioral health and criminal justice systems, thus facilitating collaboration on service planning, care, and support for recidivism reduction goals. The MISSION-CJ model also uses standardized instruments to track and ensure fidelity to the clinical practice of the model.

In this pilot study, we augmented traditional mental health court services by providing the wraparound service support of MISSION-CJ to participants in an urban mental health court in Massachusetts. This mental health court serves individuals with a range of criminogenic risk levels and co-occurring disorders. Although mental health courts vary across the country, Massachusetts mental health courts are generally consistent with the basic elements of these types of courts, including encompassing a defined population, regular appearances before a judge, assignment of a specialized probation officer or case coordinator, and linkage to community-based treatment. Through this pilot study, we sought to add the MISSION-CJ intervention to the standard mental health court practices to analyze the effectiveness and practicality of this model in improving participant behavioral health and criminal justice outcomes.

METHODS

This pilot study examined the preliminary effectiveness of MISSION-CJ with mental health court participants. To be eligible for this mental health court, individuals had to be age 18 or older; have criminal charges in the district court with possibility of incarceration; have a confirmed mental illness or present with symptoms suggesting a mental illness or a co-occurring disorder with substance use; have a guilty finding for the criminal charges with a probation sentence or already be on probation with a violation of probation notice; and agree to comply with program requirements. The mental health court serves individuals with a variety of psychiatric diagnoses and criminal charges. Approximately 70% of participants in this mental health court had co-occurring disorders; the most common diagnoses were bipolar disorder, schizophrenia or schizoaffective disorder, major depression, and posttraumatic stress disorder (PTSD). At least 50% had multiple past violent and nonviolent crimes, ranging from offenses against property and people to prostitution and drug-related offenses, and many had violated terms of probation.

Participant eligibility for MISSION-CJ was determined after a referral for screening for clinical eligibility. Participants who had new offenses met with their attorneys to determine whether participation in the mental health court in general, and participation in MISSION-CJ services specifically, made sense for their defense, and participants facing probation violations made similar determinations prior to the legal disposition. Judicial orders for participation at case adjudication were the formal initiation of services, although participation was considered voluntary for defendants as an alternative to incarceration. In addition to meeting these mental health court criteria, to enroll in MISSION-CJ, individuals also had to meet criteria for a *DSM-IV-TR* axis I psychiatric disorder (gathered from court or provider records) and have past or current substance use. Individuals with acute psychiatric or medical conditions, including active psychosis, acute suicidality, acute substance use treatment needs, or severe intellectual or developmental disability or cognitive impairment, were excluded from participation in MISSION-CJ. In addition, given that MISSION-CJ and the mental health court were considered postadjudication interventions, individuals who were deemed incompetent to stand trial by the court were ineligible to enroll. Ineligible participants received treatment as usual within the court, which mainly consisted of service linkages and unstructured contact provided by probation officers or the case manager assigned to the specialty court rather than the specified structured care and linkage provided by the MISSION-CJ model.

This project was approved by both of the relevant state and university institutional review boards (IRBs). Both IRBs waived requirements for informed consent because this study was a program evaluation. Once enrolled in MISSION-CJ, participants completed a comprehensive baseline assessment, which included the Addiction Severity Index (11), the Behavior and Symptom Identification Scale-32 (BASIS-32) (12), the PTSD Checklist–Civilian Version (PCL-C) (13), and the Government Performance and Results Act Discretionary Services Tool (14). This assessment was readministered 6 months after the baseline assessment. This study includes baseline and 6-month follow-up data collected from March 2015 through October 2017.

Analyses were computed via IBM SPSS Statistics (version 22.0). We measured baseline participant characteristics via frequency and descriptive analyses. For pre- and posttest

TABLE 1. Preliminary 6-month outcomes of 97 justice-involved adults enrolled in a mental health court and MISSION-CJ[a]

	Baseline				6 months postenrollment					
Outcome	M	SD	Median	Range	M	SD	Median	Range	z	p
GPRA[b]										
Incarcerated (nights)	58.30	57.33	37.00	0–180	28.10	46.78	.00	0–180	−3.430	<.002
Serious depression (days)	75.99	74.01	42.00	0–180	54.80	63.96	30.00	0–180	−3.045	<.003
Serious anxiety (days)	106.67	77.19	135.00	0–180	87.23	79.58	60.00	0–180	−2.964	<.004
Illegal drug use (days)	55.28	64.33	18.00	0–180	34.74	57.62	2.00	0–180	−3.031	<.003
PCL-C score[c]	37.66	15.92	35.00	17–81	29.04	13.97	25.00	17–76	−2.939	<.004
BASIS-32[d]										
Depression/anxiety subscale	1.08	.81	.83	0–2.83	.85	.77	.67	0–2.83	−2.073	<.039
Daily living/role functioning subscale	.74	.64	.57	0–2.86	.50	.51	.29	0–1.71	−2.522	<.013
Total score	.61	.49	.41	0–1.75	.45	.43	.34	0–1.44	−2.777	<.006

[a] Maintaining Independence and Sobriety through Systems Integration, Outreach, and Networking–Criminal Justice.
[b] Government Performance and Results Act Discretionary Services Tool questions (14). Values are for the past 6 months.
[c] PCL-C, PTSD Checklist–Civilian Version (13). Scores range from 17 to 85, with higher scores indicating more severe PTSD symptoms.
[d] Behavior and Symptom Identification Scale–32 (12). Scores range from 0 to 4, with higher scores indicating more difficulty.

outcomes, we conducted normality tests on continuous measures. Because the data were not normally distributed, we used Wilcoxon signed-rank tests to analyze 6-month postenrollment outcomes across all pre- and posttest continuous measures.

RESULTS

Baseline participant characteristics are presented in the online supplement. The participants (N=97) were racially and ethnically diverse: 49% (N=48) were Hispanic/Latino; 51% (N=49), non-Hispanic/Latino; 37% (N=33), African American; 1% (N=1), Native American; 53% (N=48), Caucasian; and 9% (N=8), multiracial. Participants were primarily male (80%), with a mean±SD age of 34.18±10.05 years (median=33.00 years, minimum=19 years, maximum=60 years). During their lifetime, participants experienced 12.02±11.78 arrests (median=8.00 arrests, minimum=1 arrest, maximum=60 arrests) and spent 60.28±81.24 months incarcerated (median=24.50 months, minimum=0 months, maximum=456 months). Ninety-one percent (N=84 of 91 with available data) of participants reported experiencing serious depression for a significant period of their life, and participants reported a lifetime mean of 13.94±8.63 years of illegal drug use (median=11.00 years, minimum=0 years, maximum=40 years).

Pre- and posttest outcomes data are presented in Table 1. Participant data indicated that nights incarcerated were significantly reduced from a mean of 58.30 nights incarcerated (median=37.00 nights, minimum=0 nights, maximum=180 nights) in the 6 months prior to enrollment in MISSION-CJ to a mean of 28.10 nights (median=0.00 nights, minimum=0 nights, maximum=180 nights) after 6 months of enrollment (z=–3.430, $p<0.002$). Moreover, the total BASIS-32 (12) score revealed a significant reduction in behavioral health symptoms, from a mean score of 0.61 (median=0.41, minimum=0.00, maximum=1.75) at enrollment to a mean score of 0.45 (median=0.34, minimum=0.00, maximum=1.44) after 6 months of enrollment (z=–2.777, $p<0.006$). Furthermore, the number of days of illegal drug use decreased from a mean of 55.28 days (median=18 days, minimum=0 days, maximum=180 days) during the 6 months before enrollment to a mean of 34.74 days (median=2.00 days, minimum=0 days, maximum=180 days) after 6 months of enrollment (z=–3.031, $p<0.003$). Last, the PCL-C (13) score demonstrated a significant reduction in PTSD symptoms from a mean score of 37.66 (median=35.00, minimum=17, maximum=81) at enrollment to a mean score of 29.04 (median=25.00, minimum=17, maximum=76) after 6 months of enrollment (z=–2.939, $p<0.004$).

DISCUSSION AND CONCLUSIONS

The data showed that at the 6-month follow-up assessment, mental health court participants receiving the MISSION-CJ intervention had several areas of positive change. For example, positive outcomes were seen in criminal justice involvement, as well as in some behavioral health symptoms, including trauma symptoms and substance use. Our findings are consistent with a prior open pilot test of MISSION-CJ in a drug court setting, where improved criminal justice and substance use outcomes were shown (15). Although many models of support interventions are available to address the needs of justice-involved individuals with co-occurring disorders, behavioral health and criminal justice system staff and administrators repeatedly express having insufficient guidance and skill in working with these populations. The MISSION-CJ intervention uniquely addresses this issue through augmenting wraparound general support with the following key elements: a manualized approach that guides structured and unstructured service delivery specific to individuals with co-occurring disorders; an RNR treatment planning support tool that promotes progress and positive outcomes around criminogenic risks and needs, such as decreased recidivism and increased prosocial behavior and thinking; a curriculum that promotes prosocial behavior and

thinking; and behavioral health teams consisting of a case manager and peer specialist who partner with and are trained and supported to work directly with community supervision (i.e., probation officers).

MISSION-CJ also has a strong staff development component to address gaps in knowledge and skills for administrators and staff members, including regular fidelity monitoring and feedback to inform quality monitoring and staff training needs. This component furthers the program's ability to guide staff supervision and support and to foster positive engagement between behavioral health providers and criminal justice staff to achieve better outcomes for the individuals served and the public. The improvements observed in these key outcomes may reflect the ability of MISSION-CJ to meet the complex needs of justice-involved individuals, who are often caught between the criminal justice and behavioral health systems, by integrating both behavioral and criminogenic risks and needs during treatment planning. For example, the MISSION-CJ model allows flexibility to increase service intensity for participants with high risks and needs, such as providing booster DRT sessions focused on criminogenic needs (7, 9). Our outcomes may also suggest the positive impact of a boundary spanning intervention and support work by Steadman and colleagues (10), who cite boundary spanning as a central feature of effective diversion programs for justice-involved individuals with co-occurring disorders.

Several limitations of this pilot study should be acknowledged. The sample size was small. Additionally, participants entered the mental health court postadjudication after consulting with their attorneys and deciding that the alternative to incarceration of intensive treatment and community supervision was worthwhile; thus the participants may have constituted a somewhat homogeneous sample. Study data showed that almost three-quarters of participants were motivated to join the program to avoid possible criminal punishment; motivation and stage of change in this population should be explored in future studies. Our study also did not tease apart the therapeutic effects of MISSION-CJ compared with the impact of court mandates. Also, model fidelity, measured during the implementation but beyond the scope of this article, would require further assessment relative to outcomes. Last, and perhaps most critical, given the preliminary nature of the study, we did not have a comparison group, nor did we use randomization to explore results for mental health court participants who did not receive MISSION-CJ as an augmentation to treatment as usual.

Despite these limitations, this pilot study demonstrates that the MISSION-CJ intervention could be offered to mental health court participants as a community-based but behavioral health- and criminal justice-integrated service alongside the mental health court, with promising preliminary results. The behavioral health and criminal justice systems are beginning to learn to work together, but all too often they operate in separate silos with different goals and approaches while working with the same individuals. MISSION-CJ attempts to cross those boundaries and target what Wolff and colleagues (6) called the next generation in interventions for these challenging populations—promoting recovery, reducing recidivism, and avoiding the "revolving door" in which, historically, justice-involved individuals with co-occurring disorders repeatedly cycle through the criminal justice system (4). Future studies comparing the effectiveness and cost-effectiveness of MISSION-CJ, usual mental health court processes, and any alternative interventions are needed to address the needs of this growing population.

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REFERENCES

1. Osher FC, D'Amora DA, Plotkin M, et al: Adults with Behavioral Health Needs Under Correctional Supervision: A Shared Framework for Reducing Recidivism and Promoting Recovery. New York, Council of State Governments Justice Center, 2012
2. Horas PF, Stalcup T: Drug treatment courts in the twenty-first century: the evolution of the revolution in problem-solving courts. Georgia Law Rev 2008; 42:717–811
3. Lowder EM, Rade CB, Desmarais SL: Effectiveness of mental health courts in reducing recidivism: a meta-analysis. Psychiatr Serv 2018; 69:15–22
4. Goodale G, Callahan L, Steadman HJ: What can we say about mental health courts today? Psychiatr Serv 2013; 64:298–300
5. Anestis JC, Carbonell JL: Stopping the revolving door: effectiveness of mental health court in reducing recidivism by mentally ill offenders. Psychiatr Serv 2014; 65:1105–1112
6. Wolff N, Frueh BC, Huening J, et al: Practice informs the next generation of behavioral health and criminal justice interventions. Int J Law Psychiatry 2013; 36:1–10
7. Pinals DA, Smelson DA, Sawh L, et al: The MISSION-Criminal Justice Treatment Manual. Worcester, University of Massachusetts Medical School, 2014

8. Susser E, Betne P, Valencia E, et al: Injection drug use among homeless adults with severe mental illness. Am J Public Health 1997; 87:854–856
9. Ziedonis D, Stern R: Dual recovery therapy for schizophrenia and substance abuse. Psychiatr Ann 2001; 31:255–264
10. Steadman HJ, Morris SM, Dennis DL: The diversion of mentally ill persons from jails to community-based services: a profile of programs. Am J Public Health 1995; 85:1630–1635
11. McLellan AT, Kushner H, Metzger D, et al: The fifth edition of the Addiction Severity Index. J Subst Abuse Treat 1992;9: 199–213
12. Eisen SV, Dill DL, Grob MC: Reliability and validity of a brief patient-report instrument for psychiatric outcome evaluation. Hosp Community Psychiatry 1994; 45:242–247
13. Weathers FW, Huska JA, Keane TM: PCL-C for DSM-IV. Boston, National Center for PTSD–Behavioral Science Division, 1991
14. GPRA Modernization Act of 2010. Washington, DC, US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2010
15. Smelson D, Farquhar I, Fisher W, et al: Integrating a co-occurring disorders intervention in drug courts: an open pilot trial. Community Ment Health J 2019; 55:222–231