A Multi-Site Study of the Use of Sanctions and Incentives in Mental Health Courts

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Mental health courts (MHCs) have become widespread in the United States as a form of diversion for justice-involved individuals with mental illness. Sanctions and incentives are considered crucial to the functioning of MHCs and drug courts, yet with little empirical guidance to support or refute their use, and there are no definitions of what they are. The use of sanctions and to a lesser degree incentives is the focus of this article, with particular emphasis on jail sanctions. Subjects are participants (n = 447) in four MHCs across the United States. Results show that jail sanctions are used in three of four MHCs, and other sanctions are similarly used across the four MHCs. Participants charged with "person crimes" are the least likely to receive any sanctions, including jail, whereas those charged with drug offenses are most often sanctioned. The factors associated with receiving a jail sanction are recent drug use, substance use diagnosis, and drug arrests; being viewed as less compliant with court conditions, receiving more bench warrants, and having more in-custody hearings; and MHC program termination. No personal characteristics are related to receiving sanctions. Knowing which MHC participants are more likely to follow court orders and avoid sanctions, and identifying those who have difficulty adhering to court conditions, can help guide court officials on adjusting supervision, perhaps avoiding reoffending and program failure.

Keywords: mental health courts, incentives, sanctions

Frustrated by the revolving door into the criminal court among some defendants, criminal court judges took the initiative and introduced specialty dockets and treatment courts as an alternative to traditional criminal justice processing beginning in the late 1980s. The first treatment courts, drug courts, quickly proliferated from the first in 1989 through today, currently numbering in the thousands (National Association of Drug Court Professionals, 2011). Mental health courts (MHCs), though not as numerous as drug courts, have become widespread with the first specialty docket in Marion County (Indianapolis), Indiana, in 1996 and the first official court starting in Broward County, Florida, in 1997. Unlike drug courts, mental health courts receive no federal funding with the exception of 23 Bureau of Justice Assistance start-up grants in 2002 (Steadman & Redlich, 2005). Many states do not provide funding for mental health courts, despite growing evidence that mental health courts do, indeed, increase public safety outcomes of participants (Steadman, Redlich, Callahan, Robbins, & Vesselinov, 2011; McNiel & Binder, 2007; Moore & Hiday, 2006; Herinckx, Swart, Ama, Dolezal, & King, 2005).

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Mental health courts and drug courts share two common goals-to reduce criminal recidivism and to increase communitybased treatment for the participants. These goals are accomplished through the power of the judiciary to hold both the individual and the community responsible for program success. Both types of treatment courts rely on a multidisciplinary team, headed by the judge, to administer the diversion programs. The treatment court participant must agree to court conditions that include treatment, and the community must provide community-based treatment services. To be sure, the philosophy of mental health courts and drugs courts differ in that mental health courts adhere to a "recovery" model where relapse is considered part of the treatment process, whereas drug courts have built into their "10 Key Components" an abstinence (from drug and alcohol use) model (National Association of Drug Court Professionals, 1997). An additional shared characteristic of treatment courts is the use of sanctions and incentives to assure adherence to court conditions such as treatment compliance, attendance at status hearings, and abstinence from substance use (Thompson, Osher, & Tomasini-Joshi, 2008; Huddleston, 2005; Steadman, Davidson, & Brown, 2001).

The use of sanctions and to a lesser degree incentives in mental health courts is the focus of this article. As an "essential element" of mental health courts (Thompson et al., 2008), incentives and sanctions are used with little empirical guidance to support or refute their use and no definitions of what courts identify as a "incentive" or an "sanction." Mental health courts have an arsenal of possible sanctions they can impose to enforce program conditions ranging from a "scolding" from the judge, to increased supervision such as more frequent reporting or hearings, to the last resort—jail. Incentives also allow the judge to reward participants for compliance, and many include verbal praise, applause, gift

cards, and reduced supervision. We identified five incentives and six sanctions for use in this study that are discussed in the methodology section.

Early studies of sanctions in MHCs rely on court officials' impressions of how often sanctions are imposed for noncompliance, not on objective measures of their use. Therefore, it is useful to first examine the drug court literature to identify critical issues that might offer a framework. Drug court studies find that the perception of the threat of sanctions, or "legal pressure," has an impact on staying in or dropping out of drug court programs (Maxwell, 2000; Young, 2002) as do some individual characteristics; older drug court participants with less criminal justice history and no psychiatric history are more likely to stay in drug court (Young, 2002). Hepburn and Harvey (2007) find that when taking into account characteristics associated with program success (being older, married, and employed), the threat of jail is not a predictor of successful program outcome such as graduation versus termination. Little attention is paid to the importance of mental illness—or co-occurring disorder—in the drug court studies, despite findings that presence of psychiatric problems is associated with program failure (Young, 2002). The conclusions in the 2002 Consensus Report (Council of State Governments, 2002) underscore why this needs to be taken into account: "[i]t must be recognized that decompensation and other setbacks are common occurrences for people under treatment for mental illness" (p. 90), and that "[m]ost mental health and substance abuse treatment providers view relapse and setbacks in treatment as part of the recovery process" (p. 231). Broner, Mayrl, and Landsberg (2005) find that participants with co-occurring disorder in a jail diversion program with high medication compliance and more outpatient counseling have better public safety outcomes. Recognizing the role of mental illness and substance use in treatment engagement and adherence is essential in understanding why some participants fail to comply with conditions, reoffend, or behave in such a way that the court metes out a sanction, including jail.

In an early descriptive study of first generation misdemeanor mental health courts, Griffin, Steadman, and Petrila (2002) find that jail is used sparingly, if at all, as a sanction. They also observe that courts do not typically record their use of sanctions, making it difficult to study. The Bazelon Center's study of 20 mental health courts finds that 64% report using jail as a sanction but provide no further information as to the frequency or circumstances of this severe sanction (2003). Erickson, Campbell, and Lamberti (2006) examine use of sanctions for noncompliance from the 2004 GAINS Center MHC survey, finding one in four courts report using jail as a sanction but do not report the frequency of use. In studying "second generation" mental health courts, Redlich, Steadman, Monahan, Petrila, and Griffin (2005) observe an increased willingness of judges to use jail for noncompliance, perhaps because of the increase in felony defendants admitted to mental health court, but more often as a sanction of "last resort." Redlich, Steadman, Monahan, Robbins, and Petrila (2006), when surveying all existing mental health courts, ask court administrators to estimate to what extent they use jail as a sanction for noncompliance. Most report that they use jail as a sanction in 5–20% of the cases, with those courts accepting felonies and requiring more frequent status hearings reporting higher use of jail as a sanction. Fisler's (2005) study of the felony Brooklyn Mental Health Court finds that the judge relies on the clinical team for recommendations,

including for incentives and sanctions, and that the judge is more likely to adjust services than mete out sanctions. The most frequently used sanctions are reprimands and increased judicial hearings with jail being reserved for heavy drug use, constant failure to comply with program requirements, and absconding. This description provides a better window into the collaboration among MHC team members than it does an empirical picture of the use of sanctions in mental health courts. Ferguson, Hornby, and Zeller's (2008) evaluation of the Anchorage mental health court finds variation by judge in the way sanctions, including jail, are applied and that a consistent set of guidelines is needed to assure both individual appropriateness and fairness within the program. Taken together, these studies show that mental health courts report using jail as a sanction, particularly when dealing with defendants charged with felonies, but there are no data on the frequency of use or which participants are sent to jail for noncompliance with court orders.

The research questions addressed here are as follows: (1) what sanctions and incentives do participants report having received?; (2) to what extent are jail stays used as a sanction for MHC participants' noncompliance with court conditions?; (3) how do MHC participants who receive jail as a sanction differ from those who do not?; and (4) how are jail sanctions related to participants' MHC experiences and outcome?

Method

Study Overview

Data for this article are from the MacArthur Mental Health Court Study, which is a prospective, longitudinal, quasiexperimental study of four MHCs in San Francisco, San Jose, Minneapolis, and Indianapolis (Steadman et al., 2011). The sites were selected based on having a large volume of both misdemeanor and felony cases; a large jail population from which to draw the treatment as usual sample (TAU); the courts' selfreported high (in over 25% of cases) or low (in under 5% of cases) use of jail as a sanction; and program stability. MHC subjects (n =447) are newly enrolled participants in the specialty court and interviewed at study entry (baseline) and 79.6% at six months (2.7% refused, 13% not located, 4.7% other). Additional data were obtained on arrests, jail and prison stays, community treatment, and mental health court hearings and outcomes for all subjects. The TAU subjects (n = 600) are similar persons eligible, but not enrolled in the MHC for any number of reasons (e.g., not identified by jail staff or not referred to MHC) except rejection from MHC. Because the specific study questions in this analysis were based on the mental health court, only data from the MHC sample were included

Subjects for the MHC sample were referred by the court administrators to the on-site researchers who approached potential subjects to participate in the study. All approach scripts, procedures, interviews, and official data instruments were approved by the host Institutional Review Board along with individual IRBs at local and state levels. This study also secured an NIH Confidentiality Certificate.

Data Collection

Self-report & interviews. The baseline interview (BL) was administered to the MHC subjects soon after enrollment in the court program, and the follow-up interview (6M) was conducted at the 6-month mark. Some questions were unique to the BL, some repeated in the 6M interview allowing for measures of change during the first months in the MHC, and additional questions were asked only at the 6M interview. The variables included in these analyses that were asked or measured only at BL are gender, race, age, ever married, and age at first arrest. Variables measured only at 6M include whether they received a sanction for noncompliance or an incentive for compliance with program conditions and perceived coercion in the MacArthur Perceived Coercion Scale (MHC; Gardner, Hoge, Bennet, Roth, Lidz, et al., 1993). MHC participants interviewed at 6M were asked first whether they would be "bothered by" any of the sanctions and second if any had been imposed on them in the past 6M. In this study, sanctions are as follows: (1) having to attend court more often; (2) doing community service; (3) having to see treatment provider or probation officer more often; (4) getting a lecture from the judge; (5) having privileges taken away; and (6) going back to jail. Incentives are as follows: (1) having to attend court less often; (2) praise from the judge or others in the court; (3) having the judge say good things to you; (4) having case manager or probation officer write a good report; and (5) getting a gift certificate.

The variables measured at both BL and 6M included in this article were percent days homeless in prior 6 months; insight (Insight and Treatment Attitudes Questionnaire - McEvoy, Apperson, Appelbaum, Ortlip, Brecosky, et al., 1989); internal and external treatment motivation and confidence in treatment (Treatment Motivation Questionnaire - Deci & Ryan, 1985); psychiatric symptoms (Colorado Symptom Index - Conrad, Yagelka, Matters, Rich, Williams, et al., 2001); number of past 30 days drinking to intoxication (self-report); and number of past 30 days using illegal drugs (self-report).

Objective Records

Arrest and most incarceration records were provided to the researchers via electronic data transmission from the FBI and from the sites' county jail and the states' prison systems. The only exception is that the Indianapolis jail data were manually extracted on site, and the Indiana prison data were obtained by accessing and extracting data from the electronic database by a project researcher. MHC records were obtained at each site and were the source for data on hearings as well as information regarding the participants' progress. Additionally, the MHC coordinators completed a brief assessment of the participants' compliance with MHC terms and conditions. Diagnosis and presence of a substance use disorder were obtained from MHC records and from the objective treatment electronic data obtained from community mental health providers.

The official FBI reports were the source for all objective arrest data for this study including arrest history, new arrests, warrants, and violations. Because of differences in how particular jurisdictions define specific crimes and the distinction between misdemeanor and felony, we recoded crimes into four major crime categories: person (crimes involving a victim such as assault), property (such as theft and fraud), drug (all types of drug charges), and other (e.g., loitering, prostitution, disorderly conduct, and public intoxication). Jail and

prison stays were from booking to release date. MHC records included the date for each hearing, if the person was present, if the individual was in or out of custody, and if a bench warrant was issued. In addition, the court record may have included notes explaining the proceedings. Diagnosis was obtained first from the MHC records and typically included only the most serious, or major, diagnosis. If the diagnosis was missing or pending, we obtained the diagnosis from the official treatment records. Because co-occurring substance use disorders are prevalent and important in this population, we examined all available court and treatment records to determine whether the individual had a substance use disorder when it was not the primary diagnosis.

Measures. While sanctions are viewed as a critical element of MHCs, they are rarely documented in the court records. At the 6M interview, we asked MHC participants whether they had received any of the six sanctions from the MHC for noncompliance and five incentives for program compliance. In determining the extent to which MHCs used jail as a sanction, we drew on multiple databases to link jail stays to whether or not they were sanctions. The specific procedures to determine whether a jail stay was a likely sanction are as follows. Jail stays were first examined from entry date in MHC until either one year after the jail entry date, or until the final court outcome (e.g., graduation or termination) date if it was before the one year mark. While jail records list the booking and release dates, they do not list a reason for the jail stay, which could be the result of a new arrest, warrant, sanction, or some other reason. Because not all participants had a jail stay during their time in MHC, they were considered as having "no jail sanction" for this study. For those with a jail stay during the observed time frame, the next step was to examine the court data from each of the four MHCs. The court records occasionally stated that jail was being used as a sanction, but more often it was inferred by examining all available data. For example, MHC records indicated whether a warrant was issued for failure to appear at a compliance hearing or other required appointment. If MHC issued a "pick up" warrant which resulted in a jail stay, there was usually a note in the court records indicating the jail stay was a result of that warrant. In that case, the jail stay was considered a sanction. Court records were often instrumental in determining whether a jail stay is a sanction. There is no way to validate participants' reports of receiving incentives from the court.

The final step was to compare the self-report data with the coding of whether a jail stay was a jail sanction. Comparisons between the newly created sanction variable and the self-report 6M data resulted in the creation of three categories: 1) variables in agreement, 2) false positives, and 3) false negatives. Jail stays fell into the false positive category if the jail stay was coded as a sanction, but the participant answered "no" to the interview question. The false negative category contained jail stays coded as a nonsanction, but the participant answered "yes" to the 6-month interview question. We then reexamined the court and arrest records to determine whether the initial determination of the sanction variable was correct. Many of the false positives and negatives were resolved, but the data did not always provide enough information to make a definitive decision in each case. For example, some participants did not participate in the 6 month interview or did not answer this particular question. For subjects who did not have a 6 month interview, we randomly selected 12 cases and cross-referenced the data as described above. In cases where the discrepancy could be resolved, the case was coded as a nonsanction. Subjects in jail for the entire 12 months postenrollment were omitted from this analysis.

As a result of this coding process, the outcome variable of whether or not MHC participants received a jail sanction within the first 12 months of MHC enrollment (or to their end date within 12 months) was "no jail sanction" (n = 341; includes participants with no jail stays, jail stays that are not sanctions, or jail stays for which there is insufficient information) and "at least one jail stay" (n = 98).

Results

The first question addressed is what proportion of MHC participants ever receives sanctions and incentives (yes/no). Table 1 presents the results by site and shows that at the 6M interview, 46.5% of MHC report that they never received any MHC sanctions, and 8.6% report receiving no incentives. There are few differences among the sites as to the proportion of participants who report receiving specific types of sanctions in the first 6 months of MHC, but there are some differences among the sites as to what incentives they report receiving. As shown in Table 1, the most common sanction among all subjects is a lecture from the judge (27.6%). This is true in three of the four courts. The next most common type of sanction involves increased supervision through seeing case manager or probation office more often (24.3%) or more court hearings (23.4%). The most common incentive noted by participants is receiving a positive report from the MHC judge (78.2%) or their probation officer/case manager (69.3%). Gender, race, and diagnosis are not related to self-reported sanctions of any type or to most incentives separately by site. Men and women are treated the same by the MHCs.

We next focus on the second question—how often do MHC participants receive a jail sanction from the MHC judge (yes/no). There were no verifiable jail sanctions found in Marion County (Indianapolis), so that site is omitted from subsequent analysis on

jail sanctions presented in Table 2. In the remaining three sites, 77.3% of MHC participants never received a jail sanction during our follow-up period. In San Francisco (20.2%), mental health court participants are less likely to be given a jail sanction than in both San Clara (San Jose) (33.8%) and Hennepin (Minneapolis) (30.7%) Counties ($\chi^2 = 42.89$, 3, p < .001, Cramer's V = 0.31). Also shown in Table 2 is the time to first jail sanction in the MHC supervision process by site - 152 days in Hennepin County, 165 days in Santa Clara County, and 198 days in San Francisco (ns). Across all three courts, the average time for pooled subjects between MHC entry and first jail sanction is 167 days. In San Francisco, MHC participants have more hearings before an eventual jail sanction than in either Santa Clara or Hennepin Counties; on average, participants have two hearings before a jail sanction (F = 4.1, P = .018, Cohen's d = 0.33).

To determine whether there are any differences between MHC participants who receive a jail sanction and those who do not, we first conducted a number of bivariate and multivariate comparisons using χ^2 , t test, and logistic regression. Factors that are associated with receiving a jail sanction include behavioral health and criminal justice measures as well as mental health court experiences, but there are no demographic characteristics associated with receiving a jail sanction, including gender.

Behavioral health factors associated with receiving a jail sanction are presented in Table 3. While primary diagnosis (schizophrenia, bipolar disorder, depression, other) is not related to receiving a jail sanction, participants with a diagnosis of alcohol and/or substance use disorder are more likely than those without that diagnosis to receive a jail sanction ($\chi^2 = 4.4$, 1, p = .035, Cramer's V = 0.1). Of the additional behavioral health variables tested, only drug use at BL and at 6M distinguish those who receive a jail sanction with those using more drugs being more likely to receive a jail sanction. The 6M relationship remains statistically significant when controlling for sex, race, age, education, diagnosis, and substance use diagnosis, whereas the BL measure is no longer significant when controlling for these

Table 1
MHC Participants' Self-Reported Sanctions and Incentives^a by Site

	SF	SC	MN	IN	Total	2	
Site	% (n)	χ^2 , df, p	Cramer's V				
Sanctions ^b							
Never sanction	40.3 (29)	42.7 (44)	48.7 (38)	54.0 (47)	46.5 (158)	3.85, 3, .279	0.11
More MHC hearings	26.4 (21)	23.1 (24)	19.0 (15)	23.6 (21)	23.4 (81)	1.89, 3, .596	0.31
Community service	5.4 (4)	1.9(2)	2.5(2)	3.4(3)	3.2 (11)	1.84, 3, .606	0.07
Saw MD, PhD, PO more often	27.0 (20)	26.0 (27)	20.3 (16)	23.9 (21)	24.3 (84)	1.17, 3, .761	0.06
Lecture from judge	39.7 (28)	27.2 (28)	16.5 (13)	28.1 (25)	27.6 (95)	10.3, 3, .016	0.17
Lost privileges	11.0(8)	20.2 (21)	11.4 (9)	8.0(7)	13.1 (45)	7.04, 3, .071	0.14
Went back to jail	28.8 (21)	32.7 (34)	24.4 (19)	7.9 (7)	23.5 (81)	18.1, 3, < .001	0.23
Incentives ^c							
No incentives	5.3 (4)	7.6(8)	12.5 (10)	9.0(8)	8.6 (30)	2.78, 3, .427	0.09
Clapping/praise	82.4 (61)	74.8 (77)	19.2 (15)	25.0 (22)	51.0 (175)	107.8, 3, < .001	0.56
Gift certificate etc.	23.3 (17)	2.9(3)	22.8 (18)	2.3(2)	11.6 (40)	34.5, 3, < .001	0.32
MHC judge good rpt	89.0 (65)	83.5 (86)	67.9 (53)	72.1 (62)	78.2 (266)	13.4, 3, .004	0.20
PO/CMgr good rpt	74.0 (54)	56.4 (53)	70.3 (52)	79.0 (64)	69.3 (223)	11.7, 3, .008	0.19
See judge less often	58.1 (43)	29.8 (31)	46.2 (36)	39.5 (34)	42.1 (144)	15.0, 3, .002	0.21

^a These data include self-reported sanctions and incentives from MHC subjects who participated in the 6 month interview (n = 344). ^b There is no relationship between gender, race, or diagnosis and reporting receiving types of sanction by site. ^c There are few significant relationships between gender, race, or diagnosis and reporting receiving types of sanction by site.

Table 2
Site Differences in Validated Jail Sanctions in MHC

	Jail sanction	No jail sanction	Significance/Effect size
	% (n)	% (n)	
Site			
SF	20.2 (21)	79.8 (83)	$\chi^2 = 42.89, <.001$
SC	33.8 (46)	66.2 (90)	χ,
MN	30.7 (31)	69.3 (70)	Cramer's $V = 0.31$
IN	0.0(0)	100 (98)	
Total	22.7 (98)	77.3 (341)	
	Mean (95% CI)		
Days to 1st jail sanction			
SF	198 (138-258)		F = 1.09, .340
SC	165 (137–192)		,
MN	152 (108–197)		Cohen's $d = 0.37$
IN (N/A)	_ ′		
Total	167 (145-190)		
	Mean (95% CI)		
# hearings to 1st jail sanction			
SF	3.1 (1.7-4.5)		F = 4.1, .018
SC	1.8 (1.2–2.3)		•
MN	1.3 (0.8–1.7)		Cohen's $d = 0.33$
IN (N/A)			
Total	2.0 (1.5-2.6)		

Note. There is no relationship between sex, race, and ever married and receiving a jail sanction.

variables (see Table 3). The behavioral health measures that are unrelated to receiving a jail sanction include BL and 6M alcohol use in past 30 days; BL and 6M alcohol use to intoxication in past 30 days; perceived coercion in the MHC; and change from BL to 6M in ITAQ, CSI, treatment motivation, treatment confidence, and percent days homeless.

Criminal justice variables do distinguish between MHC enrollees who receive a jail sanction from those who do not, as shown in Table 4. Individuals whose target charge is either a drug (36.3%) or minor crime (24.1%) are more likely to receive a jail sanction compared with those charged with either person (16.1%)

or property (16.3%) offenses ($\chi^2=18.7, 3, p<.001$, Cramer's V = 0.21). Consistent with that finding is that individuals with more total arrests, especially more drug and nonviolent arrests, are more likely to be sanctioned (see Table 4). When controlling for sex, race, age, education, diagnosis, and diagnosis of a substance use disorder, all of the post-MHC enrollment relationships remain significant; two preenrollment arrest measures lose significance (see Table 4). Persons receiving a jail sanction are also more likely to have more jail/prison days and stays before and after MHC entry, and they are less likely to see an improvement in jail days and stays. We find that that individuals charged with person crimes

Table 3
Behavioral Health Factors Associated With Receiving Validated Jail Sanction

	Jail sanction	No jail sanction	Significance/ Effect size
	% (n)	% (n)	
Dx of alcohol and/or drug ^a			
Yes	24.8 (81)	75.2 (246)	$\chi^2 = 4.4, .035$
No	15.2 (17)	84.8 (95)	Cramer's $V = 0.1$
	Mean (95% CI)	Mean (95% CI)	
Behavioral Health Variables ^b			
BL - #days illegal drugs in past 30 days	9.3 (6.8–11.8)	6.3 (5.2–7.5)	$t = -2.14, .034^{c}$
			Cohen's $d = 0.26$
6M - #days illegal drugs in past 30 days	7.3 (4.6–10.1)	2.7 (1.8–3.6)	t = -3.12, .002 Cohen's $d = 0.48$
			Colleil s $u = 0.40$

^a There is no relationship between primary diagnosis and receiving a jail sanction. ^b *NS*: BL & 6M # days alcohol in past 30 days; BL & 6M # days alcohol intoxication in past 30; change from BL to 6M in ITAQ, CSI, internal or external treatment motivation, and confidence in treatment, % days homeless; and perceived coercion in MHC at 6M. ^c *NS* when controlling for sex, race, age, education, diagnosis, and substance use diagnosis.

Table 4
Criminal Justice Factors Associated With Receiving Validated Jail Sanction

	Jail sanction	No jail sanction	Significance	Effect size
	% (n)	% (n)		Cramer's V
Target arrest				-
Person crimes	16.1 (22)	83.9 (115)	$\chi^2 = 18.7, <.001$	0.21
Property crimes	16.3 (22)	83.7 (113)		
Drug crimes	36.3 (41)	63.7 (72)		
Other crimes	24.1 (13)	85.9 (41)		
Criminal justice variables	Mean (95% CI)	Mean (95% CI)		Cohen's d
Arrestsa				
Total number arrests	4.49 (3.8–5.1)	2.90 (2.6–3.2)	t = -4.29, <.001	0.51
# pre-18 month arrests	2.66 (2.3–3.0)	2.12 (1.9–2.3)	$t = -2.42, .017^{b}$	0.27
# post-18 month arrests	1.83 (1.4–2.2)	.78 (0.7–0.9)	t = -4.84, < .001	0.62
# pre-18 month drug arrests	1.19 (0.9–1.5)	.59 (0.4–0.7)	t = -3.27, .002	0.40
# post-18 month drug arrests	.91 (0.6–1.2)	.22 (0.1–0.3)	t = -4.48, < .001	0.60
# pre-18 month non-viol arrests	2.30 (1.9–2.7)	1.70 (1.5–1.9)	$t = -2.85, .005^{b}$	0.32
# post-18month non-violarrests	1.64 (1.3–2.0)	.65 (0.5–0.8)	t = -4.82, < .001	0.61
# pre-18 month property arrests	.66 (0.5-0.9)	.74 (0.6–0.9)	t = 0.62, .536	0.07
# post-18 month property arrests	.57 (0.3–0.8)	.22 (0.16-0.29)	t = -2.49, .013	0.33
Incarceration				
Pre-18 month prison/jail days	63.9 (46.2–81.7)	38.8 (30.8-46.8)	t = -2.56, .011	0.31
Pre-18 month prison/jail stays	2.78 (2.3–3.2)	2.13 (1.9–2.3)	t = -2.63, .009	0.27
BL->6M change in jail/pr	13.3 (-13.9-40.5)	-35.7(-49.0-22.4)	t = -3.22, .002	0.45
BL->6M change in jail/pri	-0.45(-1.0-0.1)	-1.58(-1.81.3)	t = -3.65, <.001	0.51

^a Based on each subject's FBI reports; *NS* = pre or post violent arrests, pre or post minor arrests, pre property arrests. ^b *NS* when controlling for sex, race, age, education, diagnosis, and substance use diagnosis.

are also the least likely to receive a sanction of more MHC hearings ($\chi^2=10.3$, 3, p=.016, Cramer's V = 0.17); more reporting to probation officer or clinician ($\chi^2=10.8$, 3, p=.013, Cramer's V = 0.18); a lecture from the judge ($\chi^2=12.1$, 3, p=.007, Cramer's V = 0.19); or lost privileges ($\chi^2=13.6$, 3, p=.003, Cramer's V = 0.2). It is also worth noting that MHC participants whose target offense is a person crime have a lower average number of arrests in the 18 months before MHC entry than property offenders and drug offenders and nearly identical

to those with minor charges (F = 5.38, p = .001, Eta squared = 0.035).

Experiences in the MHC also are related to the likelihood of a jail sanction (see Table 5). As expected, all three compliance measures reported by the mental health court supervisor indicate that persons who receive a jail sanction are rated as less compliant judicial orders (t = 7.19, p < .001, Cohen's d = 0.76), appointments (t = 6.66, p < .001, Cohen's d = 0.75), and medications (t = 7.14, p < .001, Cohen's d = 0.77). MHC participants who

Table 5
Mental Health Court Factors Associated With Receiving Validated Jail Sanction

	Jail sanction	No jail sanction	Significance	Effect size
	Mean (95% CI)	Mean (95% CI)		Cohen's d
Mental health court variables				
Compliance with judicial orders	2.59 (2.4–2.8)	3.41 (3.3–3.5)	t = 7.19, <.001	0.76
Compliance with appointments	2.63 (2.4–2.8)	3.40 (3.3–3.5)	t = 6.66, <.001	0.75
Compliance with medications	2.67 (2.5–2.9)	3.52 (3.4–3.7)	t = 7.14, <.001	0.77
Total bench warrants	1.82 (1.4–2,3)	.55 (0.4–0.7)	t = -5.46, < .001	0.75
Total MHC hearings	14.74 (12.9–16.6)	12.0 (11.0–12.9)	t = -2.66, .009	0.31
Ratio of hearings in custody	.44 (0.38–0.5)	.17 (0.14–0.2)	t = -7.86, < .001	0.94
	% (n)	% (n)		Cramer's V
MHC outcome ^a				
Graduated	8.9 (18)	91.1 (184)	$\chi^2 = 42.85, < .001$	0.32
Terminated	37.9 (47)	62.1 (77)		
Still in	31.7 (32)	68.3 (69)		

^a Relationship remains significant separately for each site.

receive a jail sanction have more bench warrants (t = -5.46, p <.001, Cohen's d = 0.75) and more MHC hearings (t = -2.66, p =.009, Cohen's d = 0.31), and are more likely to have their court appearances while in custody (t = -7.86, < .001, Cohen's d =0.94). MHC participants charged with person crimes are rated by MHC officials as being the most compliant, whereas drug offenders are rated as least compliant with judicial orders (F = 4.2, p =.006, Eta squared = 0.028); appointments (F = 3.3, p = .02, Eta squared = 0.022); medications (F = 4.5, p = .004, Eta squared = 0.03). The intensity of court supervision (Total Time in MHC/ Total # Court Hearings) did not significantly vary among the four crime categories (F = 2.4, p = .065, Eta squared = 0.018). Finally, in the three sites that use jail as a sanction, persons who never go to jail as a sanction are significantly more likely to graduate compared with those who are still under court supervision or are terminated by 12 months ($\chi^2 = 42.8, 2, <.001$, Cramer's V = 0.32).

Discussion

The major focus of this analysis is on the extent to which jail is used as a sanction in mental health courts. Jail is used by MHC judges in three of four courts studied in 21–34% of their cases and in no cases in the fourth court. While one court, San Francisco, reported in an earlier phase of the study that they use jail as a sanction with less than 5% of participants, we find that 24% of the study participants were likely sent to jail as a sanction. After discussing this discrepancy with one of the long-tenured court officials in San Francisco, it appears that their earlier response is based on a strict legal definition of jail as a sanction—namely, that unless the participant is standing before the judge and remanded to the jail explicitly for failure to comply with court conditions, they do not consider a jail stay as a sanction. Our study definition is to expand the definition to include documented bench warrants for failure to appear in court, pick up orders, or when there is no other possible explanation for a jail stay such as a new arrest or a new warrant from another jurisdiction or a new offense. In San Francisco and Indianapolis, we are able to validate our data with local-level arrests that were not reported to the FBI, our main source of arrest and warrant data. This broader definition of jail as a sanction is applied uniformly across the four sites. It is also notable that in Marion County, their self-reported use of jail as a sanction and our objectives analysis show no incidences of the MHC judge remanding a participant to jail. One explanation for that finding is that in this court, MHC participants are selected from individuals already engaged in and complying with treatment through their PAIR (Psychiatric Assertive Identification and Referral) program.

Factors that consistently emerge as related to program adherence generally and receiving a jail sanction are specifically illegal drug use and a history of drug arrests. MHC participants who have a drug-related target charge, who report using illegal drugs after MHC entry, and have a co-occurring diagnosis are more likely to receive a jail sanction. Finding persons with more serious charges faring better in MHCs is consistent with prior research that found no differences in outcomes between violent and nonviolent jail diversion participants (Naples & Steadman, 2003). Marlowe, Festinger, Lee, Dugosh, and Benagutti (2006) found that level of court supervision improves "high risk" drug court participants outcomes

while under court supervision whereas it has no effect for "low risk" participants.

It is important to emphasize that participation in most treatment courts requires the defendant to voluntarily enter a guilty plea in lieu of the criminal sentence (Redlich, Hoover, Summers, & Steadman, 2010). Consequently, the gatekeepers, typically the judge, district attorney, and program director, estimate who is most likely to benefit from the treatment court program—including enhanced supervision, accountability, and treatment services—and achieve reduced criminal recidivism. It should not be assumed that "high risk" treatment court clients are those who commit "person crimes." Instead, high risk participants are those at greater risk of relapse and recidivism, which in this study are persons with a co-occurring mental health and substance use disorder, drug arrest history, self-reported drug use, and low compliance with court conditions. Persons arrested for more serious charges are the least likely to receive a jail sanction, perhaps for reasons we observed such as lower preentry rearrest rate, higher compliance with court conditions, and though unmeasured, because they have more to lose for noncompliance, that is, potentially state prison time. As would be expected, participants viewed as all around less compliant are more likely to go to jail for failing to adhere to the court's conditions. Receiving a jail sanction is also related to a greater likelihood of being terminated from MHC. Further, it is worth noting that we found no gender differences in the use of sanctions for noncompliance, including a jail sentence.

While there is general consistency across the three sites that use jail as a sanction, there is no uniformity in the proportion of incentives used. However, most MHC clients recall receiving some incentive during their tenure in the treatment court. Further, it is clear that in terms of the incentives and sanctions recalled by participants, they are most likely to report what the judge says to them whether it be in a good report or as an admonishment, underscoring the important role MHC judges have in this type of diversion process.

Continued illegal drugs once again prove to be related to "not doing well" in MHC if receiving a jail sanction for noncompliance is a measure of that outcome. What this analysis adds to the larger picture of understanding treatment court processes and outcomes is that participants in MHC with a substance use history have more difficulty adhering to the program requirements as evidenced by their greater likelihood of receiving the sanction "of last resort."

Limitations

The primary limitation of this study is that we are imputing a jail sanction on observations that are not specifically defined by the court as such. While we use multiple measures to define a jail stay as a sanction and have complete records, there may be an over- or underidentification of the outcome variable because MHCs do not always note the purpose of a jail stay. Both scenarios are possible.

Implications

The use of sanctions and incentives is a core judicial tool to achieve program compliance in any diversion program, and MHCs are no exception. We show that a quarter to a third of MHC participants across three MHCs have in all likelihood been sent to jail by the judge, not for a new crime or for a prior warrant, but for

failing to adhere to program requirements. A brief jail stay may, in fact, be an effective deterrence strategy. However, placing an individual in jail has financial costs (e.g., arrest, booking, transportation, per diem, treatment), and a jail stay can potentially disrupt community treatment and recovery, entitlement program eligibility, housing, and employment, to name just a few which may, in turn, make program adherence more challenging. In the case of misdemeanor charges, especially in jurisdictions with limited jail space, it is less likely that the threat of jail is truly an optional sanction. There is no yardstick as to what is an appropriate usage of jail as a sanction. Its use is purely discretionary and likely aligns with the philosophy of the presiding judge, perhaps with the recommendations from the MHC team.

Our findings that persons with co-occurring disorder and a history drug-related arrests and incarcerations fare less well in mental health courts does not imply that persons with co-occurring disorder are not appropriate for treatment courts. Instead, this underscores the need for screening and assessment for mental health *and* substance use disorder, the importance of integrated treatment, and the appropriate intensity of supervision along with a full range of social services including housing. Our finding that the "most serious" offenders are not necessarily high risk clients in MHCs can guide courts in allocating scare resources such as case manager time and court hearings.

The criminal justice system emphasizes punishment, thus sanctions take priority over incentives in implementing treatment court programs and avoids the charge of coddling offenders. Yet unexamined is the role incentives play in gaining compliance with court conditions. Rudes, Taxman, Portillo, Murphy, Rhodes, Stitzer, and Luongo (2011) are currently examining whether structured incentives, along with sanctions, can enhance compliance with conditions in five justice settings. Originally developed for drug treatment programs, the JTEP Contingency Management (CM) protocol requires a multidisciplinary stakeholder team to develop and implement a policy for graduated incentives and sanctions. This and future research on the effectiveness of CM in justice settings, including treatment courts, might provide empirical guidance on the most effective way to apply incentives and sanctions for the best outcomes.

As research on mental health courts matures, evidence mounts that mental health courts are successful diversion programs, even for challenging populations. Knowing which mental health court participants have greater difficulty adhering to court conditions, at times resulting in a costly and disruptive jail stay, can better inform mental health court officials and policymakers on how to adjust their programs. Further, these findings can aid treatment and justice policymakers on allocating resources while continuing to meet the goals of reducing criminal recidivism and providing effective community-based treatment for justice-involved persons with mental health and substance use disorder.

References

- Broner, N., Mayrl, D. W., & Landsberg, G. (2005). Outcomes of mandated and nonmandated New York City jail diversion for offenders with alcohol, drug, and mental disorders. *The Prison Journal*, 85, 18–49. doi:10.1177/0032885504274289
- Conrad, K. J., Yagelka, J. R., Matters, M. D., Rich, A. R., Williams, V., & Buchanan, M. (2001). Reliability and validity of a modified Colorado

- Symptom Index in a national homeless sample. *Mental Health Services Research*, *3*, 141–153. doi:10.1023/A:1011571531303
- Council of State Governments. (2002). Criminal Justice/Mental Health Consensus Project. Lexington, KY: CSG.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and selfdetermination in human behavior. New York, NY: Plenum Press.
- Erickson, S. K., Campbell, A., & Lamberti, J. S. (2006). Variations in mental health courts: Challenges, opportunities, and a call for caution. *Community Mental Health Journal*, 42, 335–344. doi:10.1007/s10597-006-9046-7
- Ferguson, A., Hornby, H., & Zeller, D. (2008). Outcomes from the last frontier: An evaluation of the Anchorage Mental Health Court. The Alaska Mental Health Trust Authority.
- Fisler, C. (2005). Building trust and managing risk: A look at a felony mental health court. *Psychology, Public Policy, and Law, 11*, 587–604. doi:10.1037/1076-8971.11.4.587
- Gardner, W., Hoge, S., Bennett, N., Roth, L., Lidz, C., Monahan, J., & Mulvey, E. (1993). Two scales for measuring patients' perceptions of coercion during mental hospital admission. *Behavioral Sciences and the Law*, 11, 307–321.
- Griffin, P. A., Steadman, H. J., & Petrila, J. (2002). The use of criminal charges and sanctions in mental health courts. *Psychiatric Services*, 53, 1285–1289. doi:10.1176/appi.ps.53.10.1285
- Hepburn, J. R., & Harvey, A. N. (2007). The effect of the threat of legal sanction on program retention and completion: Is that why they stay in drug court? *Crime & Delinquency*, 53, 255–280. doi:10.1177/ 0011128705283298
- Herinckx, H. A., Swart, S. C., Ama, S. M., Dolezal, C. D., & King, S. (2005). Rearrest and linkage to mental health services among clients of the Clark County Mental Health Court program. *Psychiatric Services*, 56, 853–857. doi:10.1176/appi.ps.56.7.853
- Huddleston, C. W., III. (2005). Drug courts: An effective strategy for communities facing methamphetamine. USDOJ OJP BJA.
- Marlowe, D. B., Festinger, D. S., Lee, P. A., Dugosh, K. L., & Benasutti, K. M. (2006). Matching judicial supervision to clients' risk status in drug court. *Crime & Delinquency*, 52, 52–76. doi:10.1177/0011128705281746
- Maxwell, S. R. (2000). Sanction threats in court-ordered programs: Examining their effects on offenders mandated into drug treatment. *Crime and Delinquency*, 46, 542–563. doi:10.1177/0011128700046004007
- McEvoy, J., Apperson, L. J., Appelbaum, P., Ortlip, P., Brecosky, J., Hammill, K. . . . Roth, L. (1989). Insight into schizophrenia: Its relationship to acute psychopathology. *Journal of Nervous and Mental Disease*, 177, 43–47.
- McNiel, D. E., & Binder, R. L. (2007). Effectiveness of a mental health court in reducing criminal recidivism and violence. *American Journal of Psychiatry*, 164, 1395–1403. doi:10.1176/appi.ajp.2007.06101664
- Moore, M. E., & Aldige Hiday, V. (2006). Mental health court outcomes: A comparison of re-arrest and re-arrest severity between mental health court and traditional court participants. *Law and Human Behavior*, *30*, 659–674. doi:10.1007/s10979-006-9061-9
- Naples, M., & Steadman, H. J.. (2003). Can persons with co-occurring disorders and violent charges be successfully diverted? *International Journal of Forensic Mental Health*, 2, 137–143.
- National Association of Drug Court Professionals. (11/07/2011). Types of drug courts. Retrieved from http://www.nadcp.org/learn/what-are-drug-courts/types-drug-courts
- National Association of Drug Court Professionals. (1997). Defining drug courts: The key components. Washington, DC: NCJ 205621.
- Redlich, A. D., Hoover, S., Summers, A., & Steadman, H. J. (2010). Enrollment in mental health courts: Voluntariness, knowingness, and adjudicative competence. *Law & Human Behavior*, 34, 91–104. doi: 10.1007/s10979-008-9170-8
- Redlich, A. D., Steadman, H. J., Monahan, J., & Griffin, P. (2005). The

- second generation of mental health courts. Psychology, Public Policy, and Law, 11, 527–538. doi:10.1037/1076-8971.11.4.527
- Redlich, A. D., Steadman, H. J., Monahan, J., Robbins, P. R., & Petrila, J. (2006). Patterns of practice in mental health courts: A national survey. Law & Human Behavior, 30, 347–362. doi:10.1007/s10979-006-9036-x
- Rudes, D. S., Taxman, F. S., Portillo, S., Murphy, A., Rhodes, A., Stitzer, M., Luongo, P. F., . . . Friedmann, P. D. (2011). Adding positive reinforcement in justice settings: Acceptability and feasibility. *Journal of Substance Abuse Treatment*, in press. doi:10.1016/j.sat.2011.08.002
- Steadman, H. J., Davidson, S., & Brown, C. (2001). Mental health courts: Their promise and unanswered questions. *Psychiatric Services*, *52*, 457–458. doi:10.1176/appi.ps.52.4.457
- Steadman, H. J., Redlich, A. D., Callahan, L., Robbins, P. C., & Vesselinov, R. (2010). Effect of mental health courts on arrests and jail days: A multi site study. Archives of General Psychiatry. Published online October, 4, 2010. doi:10.1001/archgenpsychiatry.2010.134

- Steadman, H. J., & Redlich, A. D. (2005). An evaluation of the Bureau of Justice Assistance Mental Health Court Initiative. USDOJ, NCJRS # 213126
- Thompson, M., Osher, F., & Tomasini-Joshi, D. (2008). Improving responses to people with mental illness: The essential elements of a mental health court. CSG & BJS.
- Young, D. (2002). Impacts of perceived legal pressure on retention in drug treatment. *Criminal Justice & Behavior*, 29, 27–55. doi:10.1177/ 0093854802029001003

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