

# BEYOND THE “REVOLVING DOOR?”

## Incentives and Criminal Recidivism in a Mental Health Court

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Specialized mental health courts (MHCs) address the growing problem of defendants with mental illness cycling through the criminal justice system. Employing a mixed-methods approach, this article explores if MHCs can slow the “revolving door” of criminal justice involvement. We use quantitative data to evaluate the effectiveness of one MHC on different measures of criminal recidivism with logistic regression, event history analysis, and negative binomial regression. Modeling strategies report that graduates of MHC, defendants offered a dismissal of criminal charges, and defendants who maintained the same noncrisis mental health treatment while in court as they had prior to court had lower odds of new criminal charges, a longer time to a new criminal charge, and fewer new criminal charges. Qualitative data—court observations and interviews—suggest that providing incentives for program compliance, connecting defendants to planned mental health treatment services, and court completion are central to reducing recidivism.

**Keywords:** mental health courts; criminal recidivism

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### INTRODUCTION

Mental health courts (MHCs) arose in response to a growing number of individuals with mental health problems under the supervision of the criminal justice system (James & Glaze, 2006). The number of MHCs has increased dramatically to several hundred nationwide (Goodale, Callahan, & Steadman, 2013) as a part of a broader movement of problem-solving courts committed to rehabilitative and therapeutic ends (Berman & Feinblatt, 2005; Miller & Johnson, 2009; Schneider, Bloom, & Heerema, 2007). MHCs process defendants with serious mental illnesses using a holistic and supportive approach linking defendants to

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housing, mental health and chemical dependency, and social services. MHCs focus on therapeutic jurisprudence (Wexler, 1990) is intended to balance rehabilitative ideals with a public safety model, often confronting the tension between serving society by ameliorating crime as well as protecting and treating vulnerable defendants (Rottman & Casey, 1999). Unlike traditional courts, MHCs are founded on a less-adversarial team model (Goldcamk & Irons-Guynn, 2000; Watson, Hanrahan, Luchins, & Lurigio, 2001).

Organizational structures and case processing within MHCs are complex and heterogeneous, varying on several dimensions (Fisler, 2015; Steadman, Redlich, Griffin, Petrila, & Monahan, 2005). The eligibility criteria for MHC acceptance differ at both the prescreening phase and initial entrance. Eligibility decisions may depend on defendant amenability to treatment, the centrality of a defendant's mental health status to his or her criminal behavior, the type(s) of offenses adjudicated by the court (felony, misdemeanor, or both), and at which stage cases are accepted by the court (pre- or postplea, pre- or postsentence). MHCs also vary in the length of time defendants are required to be under court supervision (spanning from a few months to 2 years), sanctioning of noncompliance, and charge outcome of a guilty plea or dismissal of charge. Redlich, Steadman, Monahan, Petrila, and Griffin (2005) suggest that many of the differences in MHC organization and process are related to the longevity of the court, with first-generation courts focusing primarily on misdemeanor charges and second-generation courts accepting defendants with felony charges.

Despite the significant variation in structure and organization, MHCs have several features in common, most notably that defendants have a diagnosis of mental illness (Almquist & Dodd, 2009; Goldcamk & Irons-Guynn, 2000). Other common features are separate dockets for defendants in MHCs and designated, multidisciplinary teams of judges, prosecutors, defense attorneys, court social workers, and court clinicians. These court actors work collaboratively to coordinate defendant treatment, monitoring, and sanctioning (Fisler, 2015; McNiel & Binder, 2007; Redlich, Steadman, Monahan, Robbins, & Petrila, 2006). Participation in MHCs is voluntary. Many MHCs incentivize defendants to participate in court by offering to dismiss their charges after successful court completion (Griffin, Steadman, & Petrila, 2002; Luskin & Ray, 2015). Defendants must choose to "opt-in" to the court and consent to its conditions, which includes following an individualized treatment plan and additional court monitoring (Miller & Perelman, 2009; Redlich et al., 2005).

### **MHCS AND EFFECTIVENESS: CRIMINAL RECIDIVISM**

Criminal recidivism is a metric frequently used to evaluate MHC effectiveness. Recidivism commonly refers to whether and to what extent defendants are arrested or charged with a new crime after being released from the criminal justice system. A recent meta-analysis of MHC efficacy finds lower rates of criminal reoffending among defendants who participated in MHCs than similarly situated defendants who did not participate in MHC; the authors conclude that MHCs "may be a moderately effective treatment for reducing recidivism" (Sarteschi, Vaughn, & Kim, 2011, p. 18). Specifically, research reports that MHC participation is associated with fewer arrests (Anestis & Carbonell, 2014; Burns, Hiday, & Ray, 2013; Cosden, Ellens, & Yamini-Diouf, 2005; Hiday & Ray, 2010; Moore & Hiday, 2006; Ray, 2014; Steadman, Redlich, Callahan, Robbins, & Vesselinov, 2011) and increased time to first arrest after court exit (Anestis & Carbonell, 2014; Hiday & Ray, 2010; McNiel & Binder, 2007; Ray, 2014). Further studies assess the severity of new

charges (especially violent offenses), finding that MHC participation leads to fewer serious charges (McNeil & Binder, 2007; Moore & Hiday, 2006) and decreases the risk of violence (McNeil, Sadeh, Delucchi, & Binder, 2015). On average, MHC defendants spent fewer days in jail after leaving the court compared with similar defendants who did not participate in MHC (Burns et al., 2013; Cosden, Ellens, & Yamini-Diouf, 2005). Scholars studying MHC efficacy also measure this outcome by comparing pre- and postcourt recidivism rates and adherence with mental health treatment for program participants (Christy, Poythress, Boothroyd, Pettila, & Mehra, 2005; Cosden, Ellens, Schnell, Yamini-Diouf, & Wolfe, 2003; Herinckx, Swart, Ama, Dolezal, & King, 2005; Hiday & Ray, 2010; Trupin & Richard, 2003).

Studies on problem-solving courts, and MHCs specifically, are increasing; however, researchers highlight a multitude of methodological shortcomings in MHC research, such as the difficulties of correcting for selection bias, nonrandom assignment to treatment conditions, lack of comparison groups, inadequate outcome measures, and limited longitudinal data (Griffin & DeMatteo, 2009; Lurigio & Snowden, 2009). Empirical studies of MHCs suggest that legal and treatment-related variables significantly influence the referral and selection process of defendants into MHCs (Luskin & Ray, 2015). As a result, MHCs may select the least risky defendants—a process referred to as “preferred selection” or “cream skimming” (Wolff, 2002). From this viewpoint, court staff take good risks by only offering participation in the court to defendants who experience less intense symptoms of their mental illness(es) and those who have minimal criminal history. This results in courts that do not serve the most vulnerable defendants and empirical evaluations that may overestimate the courts’ efficacy in reducing criminal recidivism. In addition to issues around selection bias, there is a dearth of mixed-methods research on MHCs (see Ray & Dollar, 2013 for an exception). To address some of these weaknesses, this article evaluates the effectiveness of an MHC on criminal recidivism using multiple data sources.

In this article, we build upon key studies of criminal recidivism and MHCs in three ways: (a) by exploring multiple model estimations to capture various aspects of criminal recidivism, (b) by evaluating the influence of court program incentives on postcourt recidivism, and (c) by getting underneath the process of how MHCs influence participant recidivism. We focus not only on whether MHCs reduce criminal recidivism, but further detail the process whereby key variables might reduce reoffending. In this way, our article moves beyond prior studies to gain a more complete picture of various forms of MHC participation and how court processing and involvement influence a defendant’s likelihood of being charged with a new crime after court exit.

To explain the recidivism patterns of MHC defendants in the 2 years postcourt exit, we propose that court participation has a lasting effect on postcourt behavior. We focus on the importance of incentivized compliance in understanding criminal recidivism. This perspective assumes that the greater the benefits and rewards offered to defendants at program entry, the greater their compliance with court requirements, and that increased program compliance is protective against later criminal recidivism. We specifically investigate if the court program incentive to opt-in to MHC shapes criminal reoffending patterns.

Our analysis compares two groups, MHC participants and non-MHC defendants who were mandated to mental health assessment and possible treatment. We analyze three aspects of criminal recidivism through quantitative models: (a) the likelihood of receiving a new criminal charge, using logistic regression; (b) the duration of time until a new

criminal charge, using event history analysis; and (c) the number of new criminal charges, using negative binomial regression. We supplement the statistical analysis with court observations and interview data with team members and participants (or “clients,” the preferred term used by MHC team members) to contextualize the relationship between MHCs and criminal recidivism. We hypothesize that defendants who were fully committed to the court (indicated by voluntarily opting-in and later graduating from the court) and who were offered the best rewards for compliance (indicated by court program incentives) will have lower rates of criminal recidivism.

Although this approach does not address all of the recommendations suggested by scholars in this area, it does directly address some key concerns surrounding sorting and selection bias and efficacy measures over an extended period of time. In this way, our multimethodological approach provides unique insights to guide policy makers and practitioners into the next generation of MHC reforms.

## METHOD

### DATA

The data for this article come from a municipal MHC located in a West coast city and are part of a larger mixed-methods study of MHCs by the lead author.<sup>1</sup> Typical of many first-generation courts, the MHC studied here only processes defendants with misdemeanor cases (McNiel & Binder, 2007; Redlich et al., 2005), while other MHCs accept defendants with felony charges.

Data used for this study are quantitative administrative information on 136 MHC defendants who exited the court in 2008. The first portion of the data come from local government records and the court’s public information website. The second portion comes from the county’s public agency that provides mental health and chemical dependency services to defendants involved in the MHC. These data provide information on the frequency of a defendant’s participation in noncrisis mental health treatment, defined as routine outpatient services that are part of a defendant’s structured treatment plan. The final portion of data were obtained from criminal justice organizations, such as the local police department, local county jail, and the state court system. This segment of the data includes information on defendants’ arrests in the state, which is used to measure criminal recidivism in this analysis. The complete data set combines information from various sources together through individual defendant identification numbers.

We supplement our quantitative analyses with qualitative data from the same MHC as well as an additional MHC in the same region.<sup>2</sup> These qualitative data help to characterize and describe the court process and provide perspectives of both MHC team members and participants in the interpretation of key quantitative findings. The lead author collected observational data of court proceedings and conducted in-depth interviews with MHC team members<sup>3</sup> and MHC participants<sup>4</sup> as part of a larger study of MHCs.

To voluntarily participate in the MHC studied here, defendants must first be referred to the court and then be found eligible by the court staff. In general, referrals to MHCs come from a variety of different sources, such as attorneys, judges, police officers, family members, court liaisons, or flagged case files; referrals to this MHC came most commonly from public defense attorneys, which is consistent with prior research (Steadman et al., 2005). According to a study of seven MHCs, the referral stage is the point at which certain groups

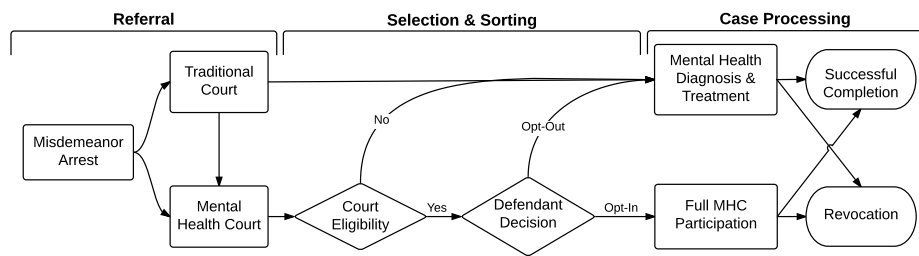
become over- or underrepresented in the court (Steadman et al., 2005). Multiple referral pathways reduce the concern that any category of offender would be completely overlooked in the referral process.

Once referred to the court, MHC staff determine court eligibility by evaluating two key components: (a) a defendant's qualifying mental health diagnosis (usually former Axis-I illnesses such as schizophrenia, bipolar disorder, major depression, or related illnesses), and (b) a defendant's amenability to mental health treatment. If defendants are found eligible, they have the option to voluntarily agree to the conditions of the MHC (or, opt-in).<sup>5</sup> There are two major points of sorting: (a) MHC staff must determine whether or not to offer an invitation to the court and (b) defendants must decide to opt-in or opt-out. The judge must also accept the opt-in recommendation. According to Wolff, Fabrikant, and Belenko (2011), there are three stages of selection process: the initial screening (eligibility of charges and evidence of mental illness are assessed), assessment eligibility (more in-depth review of other key factors), and then eligibility screening (judicial and participant approval). This multilevel sorting process produces two categories of defendants who vary in their degree of court participation.

The first group of defendants (MHC participants) are those found eligible by the MHC and who choose to opt-in to the full MHC process. As a condition of opting into the court studied here, these defendants agree to abstain from drugs and alcohol, participate in chemical dependency treatment (if required), and adhere to their individualized mental health treatment plans. These defendants receive additional resources from the court, such as access to housing and access to social workers. Participants are more frequently monitored by probation officers.<sup>6</sup> Those who fully participate in the MHC program receive individually tailored treatment plans with an expected probationary period of 2 years.

The second group of defendants (non-MHC participants) consists of two groups: those found eligible for MHC but who chose not to opt-in and those found ineligible by the court. In the court studied here, defendants within this group were all required to have a mental health evaluation and receive mental health treatment, if necessary. The court refers to this pathway as "mental health diagnosis and possible treatment" (MHDT), which is a sentencing condition for individuals who are referred to MHC but do not participate. Like MHC participants, MHDT defendants are assigned probation officers (many are MHC probation officers), may have court hearings in the MHC, and receive mental health treatment (if needed, based on assessment). However, these defendants have fewer court-ordered requirements, have reduced access to court resources, and have less frequent contact with probation and MHC team members. The pathway through the MHC studied here is provided in Figure 1 below.

While Steadman and colleagues (2005) argue that defendants' acceptance or rejection of MHC offers is not a significant source of selection bias—except for mental health status (the courts they studied accepted more individuals with serious mental diagnoses)—this finding may not apply to the MHC evaluated here. In the seven MHCs that Steadman and colleagues (2005) studied, approximately, one third of referred defendants were determined to be ineligible for MHC due to their mental health status and almost all defendants found eligible for MHC accepted the offer to participate as an alternative to remaining in a traditional court. In the MHC studied here, 64% defendants who were offered the chance to participate in the court did choose to opt-in; however, this percentage is not as high as the opt-in rate found in other studies. Therefore, in this particular MHC, selection bias may be higher in the second stage of sorting than in MHCs studied elsewhere.



**Figure 1: Defendant Selection Process in a Municipal Mental Health Court**

Defendants who choose to opt-in are offered three possible conditions of sentence: (a) dismissal of charge(s) if the defendant successfully completes the MHC requirements, also referred to as a dispositional continuance or stipulated order of continuance; (b) a deferred sentence, whereby a guilty plea is required with the opportunity for dismissal if all conditions are satisfied; or (c) a suspended sentence, which requires a guilty plea and charges will remain on the defendant's record even if all MHC conditions are satisfied. The majority of defendants fall under the third category. Categorizing defendants into these participation groups allows us to compare those who received the full MHC experience with defendants who were mandated to mental health assessment and possible treatment and subsequently received only some aspects of the MHC process.

## PARTICIPANTS

The population used for this analysis consists of 129 adults,<sup>7</sup> all of whom participated in the MHC to varying degrees and exited the court in 2008.<sup>8</sup> The total cohort is predominantly male ( $n = 94$ ; females,  $n = 35$ ), White ( $n = 80$ , non-White,  $n = 49$ ), and, on average, 38 years of age at court entry. Individuals participated in the MHC program for an average of 1.83 years (2 years is the standard probationary period in this MHC), with participation length ranging from 22 days to 7.36 years. The most frequent crime types that originally routed defendants to the MHC were assault and harassment ( $n = 57$ ), theft ( $n = 17$ ), being under the influence of intoxicants or drugs ( $n = 13$ ), and property destruction ( $n = 11$ ); 31 defendants had charges outside of these categories. This population of defendants is comprised of individuals who voluntarily participated in the MHC ( $n = 61$ ), as well as MHDT defendants with limited court and probation monitoring that focuses on mandated mental health treatment ( $n = 68$ ). Of the 61 full MHC participants, 33 individuals successfully graduated after completing all court requirements and 28 failed to fulfill these requirements. Similarly, of the 68 MHDT individuals, 32 successfully completed the less comprehensive, court-ordered mental health treatment and 36 defendants did not. Detailed descriptive statistics of the defendants in our data are reported in Table 1.

## MEASURES

### Dependent variables

The outcome of interest for this analysis is defendant recidivism postcourt exit. We use dichotomous, duration, and count measures to operationalize several aspects of recidivism in the 2 years after a defendant leaves MHC. The first dependent variable is a dichotomous measure of whether or not an individual is charged with a new crime within 2 years of exiting the court.

**TABLE 1: Descriptive Statistics for MHC and MHDT Defendants**

Variable	MHC participants	MHDT participants	All participants
Sex <i>n</i> (%)			
Male	44 (72%)	50 (74%)	94 (73%)
Female	17 (28%)	18 (26%)	35 (27%)
Race <i>n</i> (%)			
White	40 (66%)	40 (59%)	80 (62%)
Non-White	21 (34%)	28 (41%)	49 (38%)
Noncrisis MH treatment <i>n</i> (%)			
Increased during court	33 (54%)	23 (34%)	56 (43%)
Decreased during court	18 (30%)	20 (29%)	38 (30%)
Stable during court	10 (16%)	25 (37%)	35 (27%)
Dismissal of charges <i>n</i> (%)			
Offered	26 (43%)	15 (22%)	41 (32%)
Not offered	35 (75%)	53 (78%)	88 (68%)
Court completion <i>n</i> (%)			
Successful	33 (54%)	32 (47%)	65 (50%)
Unsuccessful	28 (46%)	56 (53%)	64 (50%)
Age			
<i>M</i> ( <i>SD</i> )	38 (11.23)	38 (11.77)	37.96 (11.48)
Range	18-60	19-76	18.5-75.5
Prior criminal charges			
<i>M</i> ( <i>SD</i> )	3.72 (3.09)	5.41 (6.04)	4.61 (4.93)
Range	0-18	0-26	0-26
Dependent variables			
Any criminal charge (2 years) <i>n</i> (%)	26 (43%)	37 (54%)	63 (49%)
Days until first criminal charge			
<i>M</i> ( <i>SD</i> )	513 (275)	439 (288)	474 (283)
Range	1-731	18-731	1-731
Total criminal charges (2 years)			
<i>M</i> ( <i>SD</i> )	1.82 (3.24)	2.56 (3.76)	2.21 (3.53)
Range	0-15	0-14	0-15
Sample size	61	68	129

Note. MHC = mental health court; MHDT = mental health diagnosis and possible treatment.

Forty-nine percent of the MHC population had a new charge during this time period. The second recidivism variable is a measure of time to first offense (calculated as the duration of time between defendant court exit (Time 0) and their first criminal charge (Time *t*) within 2 years postcourt exit)<sup>9</sup>; on average, time to first offense was 474 days (roughly 1 year, 3.5 months), with a standard deviation of 283 days. The final dependent variable is a count measure of the total number of criminal charges against a defendant. The average number of charges postexit after 2 years was 2.21, with a standard deviation of 3.53 charges. Consistent with prior MHC research, we evaluate patterns of recidivism in the 2 years after defendants have exited the court (Burns et al., 2013; Hiday & Ray, 2010; McNiel & Binder, 2007).

#### Independent and control variables

Our independent variable captures the incentivized structure of the MHC. This variable operationalizes the carrot and stick approach of MHCs, which commonly incentivize participation by offering defendants exclusive resources and offers of dropped charges. One

incentive offered to select defendants of the MHC studied here is the dismissal of charge(s) if they successfully complete the court. In this analysis, we are able to compare the effect of incentivized participation by comparing defendants who were offered a court program incentive with those who were not.<sup>10</sup>

In addition to operationalizing the incentivized aspects of the court, our analysis controls for individual-level factors related to selection bias and explores how these factors might influence criminal recidivism among defendants (MHC and MHDT). Many studies do not adequately model selection into MHC, making it unclear if the proposed reductions in criminal recidivism are due to ameliorative effects of court participation, selection bias that sorts individuals into particular forms of MHC participation, or both. Under a “preferred selection model” individual-level characteristics associated with selection into MHC could also be driving the reduction in criminal recidivism. As we compare MHC participants with non-MHC defendants with mandated mental health assessment and not with a matched sample from a traditional court, we focus on controlling for variables that might affect selection into different participation types and may affect offers of incentives.

Defendants who have increased their participation in preventive mental health treatment may experience the greatest reduction in recidivism. We create a categorical change variable to measure defendant participation in noncrisis mental health treatment. The raw noncrisis data were defined and constructed by the data granting agency and capture the number of noncrisis mental health service contacts a defendant received in both the 2 years prior to court as well as during court. We subtract the number of noncrisis mental health treatments received prior to entering the court from the number received during court. We then categorize this change score into increasing, stable, or decreasing trajectories (1 = *increasing*, 2 = *stable*, 3 = *decreasing* [reference category]).<sup>11</sup> This referent category (decreased noncrisis treatment) reflects the pattern of mental health treatment participation we hypothesize as the most likely to increase recidivism.

Furthermore, we include variables to control for the dosage effect of participating in MHC. This is based on the argument that it is the full “dosage” of the court that leads to better outcomes, as defendants are fully supported and monitored by the MHC team (Moore & Hiday, 2006). These variables capture whether prolonged exposure to the therapeutic environment of the MHC and successful completion reduce criminal recidivism. The first comparison is between defendants who fully participate in the court (after being found eligible and opting-in) and MHDT defendants who had less contact with the MHC. The second comparison is between defendants who successfully completed the court program and those who unsuccessfully exited the court through negative termination.

We also control for the effect of criminal history by including a variable measuring the number of criminal charges in the 2 years prior to court participation. This variable may increase a participant’s likelihood of committing crimes after court exit or decrease the likelihood of the court finding the defendant eligible for MHC participation. In addition, we also include linear and squared measures of age at court entry,<sup>12</sup> defendant sex, and race (White and non-White).<sup>13</sup>

## PROCEDURES

The quantitative data include a cohort of exiters from MHC in 1 calendar year compiled from various city and county agencies. The first author gained permission to access and use



the quantitative data from the MHC and the county's treatment agency and received institutional review board (IRB) approval from the appropriate universities for all aspects of this research study (IRB application 45219). The qualitative data include observations of public court proceedings and interviews with MHC team members and MHC participants. Interviews with court personnel took place in a court office or conference room and interviews with participants were conducted in a local coffee shop. All participants were informed about the nature of the study and completed an informed consent.<sup>14</sup> During the interviews, the lead author asked questions on many aspects of the court process.<sup>15</sup> The qualitative data presented here focus on the role of court program incentives at opt-in (offer to dismiss charge[s]) on subsequent criminal activity. Several MHC team members (from defense, prosecution, and probation) were also contacted for follow-up questions based on the quantitative results of this study. Interviews lasted approximately 1 hr, were audio-recorded, and transcribed.

### ANALYTICAL STRATEGY

We model the effects of individual characteristics, court participation, and program incentives on criminal recidivism. Here, we employ three separate analytical procedures to answer three distinct, but related, questions about criminal recidivism:

1. What factors increase the likelihood of a new criminal charge?
2. What factors are associated with a longer time to first new criminal charge?
3. What factors are associated with a greater number of criminal charges?

To address the first question, we use a logistic regression model to estimate the odds of being charged with a criminal offense within 2 years postexit. To assess the second question, we use event history analysis, which estimates the time to first criminal charge in the first 2 years after court exit. This approach is similar to other studies that use survival analysis to determine how long MHC effects are sustained after exit from the court (Hiday & Ray, 2010; McNeil & Binder, 2007). As we do not make predictions regarding time dependence (i.e., that the hazard rate changes over time), we use the Cox proportional hazard model, which allows us to avoid specifying the baseline hazard rate.<sup>16</sup> The third model, addressing the third question, is a negative binomial regression, used to explore the number of charges defendants accumulate during the 2 years postexit.<sup>17</sup> Together, these models explore the influence of one MHC by exploring the effect court program incentives, mental health treatment, and participation type have on defendant recidivism.

We supplement our quantitative analyses with qualitative data from MHC team members and MHC participants. Each transcribed interview was carefully coded by the lead author and sorted based on themes derived from previous studies, the project's theoretical framework, and emergent themes from the interviews themselves. This procedure is common in qualitative sociological research and seen specifically in the area of criminal justice (Ewick & Silbey, 1998). All statements are confidential and statements from professional staff are referred to in all published work by their professional role (e.g., defense attorney, probation officer, judge, etc.)

### RESULTS

Table 2 presents regression results for all estimation procedures.

**TABLE 2: Logistic Regression, Cox Proportional Hazard, and Negative Binomial Regression (NB) Models Predicting First Arrest, Time Until First Arrest, and Number of Arrests, Respectively, Unstandardized Coefficients Displayed (N = 129).<sup>a</sup>**

Variable	Model 1			Model 2			Model 3		
	Logit	Cox	NB	Logit	Cox	NB	Logit	Cox	NB
Female	0.68 (0.44)	0.62* (0.28)	-0.02 (0.35)	0.82 (0.50)	0.57* (0.29)	0.25 (0.35)	0.99 (0.55)	0.58* (0.29)	0.26 (0.36)
White	-0.32 (0.41)	-0.08 (0.27)	-0.46 (0.31)	-0.01 (0.43)	0.20 (0.28)	-0.20 (0.30)	-0.04 (0.45)	0.14 (0.28)	-0.19 (0.30)
Age	-0.04 (0.10)	-0.02 (0.06)	0.03 (0.08)	-0.09 (0.11)	-0.07 (0.07)	-0.02 (0.08)	-0.17 (0.11)	-0.10 (0.06)	-0.05 (0.08)
Age <sup>b</sup>	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Prior charges	0.16** (0.05)	0.01*** (0.02)	0.12** (0.03)	0.10 (0.05)	0.08** (0.03)	0.06 (0.03)	0.07 (0.05)	0.07* (0.03)	0.04 (0.03)
Noncrisis <sup>b</sup>									
More during	—	—	—	-0.83 (0.52)	-0.59 (0.32)	-0.57 (0.33)	-0.96 (0.55)	-0.62 (0.32)	-0.70* (0.33)
Same	—	—	—	-1.19* (0.59)	-0.86* (0.39)	-1.01* (0.41)	-1.25* (0.61)	-0.90* (0.38)	-1.07** (0.41)
Eligible/opt-in	—	—	—	-0.50 (0.42)	-0.23 (0.27)	-0.37 (0.32)	-0.31 (0.44)	-0.15 (0.27)	-0.19 (0.32)
Completed MHC	—	—	—	-1.18* (0.46)	-0.74* (0.31)	-1.15** (0.35)	-1.07* (0.48)	-0.64* (0.31)	-1.19** (0.35)
Dismissal of charges	—	—	—	—	—	—	-1.48** (0.54)	-0.74* (0.35)	-0.95* (0.38)
Constant	0.48 (1.90)	—	-0.27 (1.55)	3.12 (2.20)	—	1.79 (1.54)	5.37* (2.40)	—	3.04 (1.61)
Pseudo R <sup>2</sup>	.12	—	.04	.19	—	.08	.24	—	.09
Alpha	—	—	2.24 (.46)	—	—	1.65 (.37)	—	—	1.56 (.35)

Note. MHC = mental health court.

<sup>a</sup>All dependent variables are based on arrests within 2 years of exit from the court. <sup>b</sup>Less during is the referent category.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## LOGIT MODELS

To address our first question, “What factors increase the likelihood of a new criminal charge?” we estimate logistic regression models. Logit models predict the likelihood that a defendant receives a criminal charge within 2 years after court exit. Model 1 includes variables that may contribute to selection bias as well as sociodemographic controls. Prior criminal charges is a statistically significant predictor of recidivism ( $b = 0.16, p = .003$ ); for each additional prior charge, the odds of receiving a charge 2 years postcourt increases by 17% (odds ratio [ $OR$ ] = 1.17). Model 2 adds variables for noncrisis treatment, MHC completion, and participation type to the model. Receiving the same noncrisis treatment before and during MHC is significantly associated with decreased odds of being charged with a new crime ( $b = -1.19, p = .043$ ). Having completed MHC also has a strong negative effect on the odds of a participant being charged with a crime ( $b = -1.18, p = .011$ )—Defendants who completed MHC have a 69% lower odds of being charged compared with those who did not ( $OR = .31$ ). In Model 3, we add the incentive variable—being offered a dismissal of charges—which also has a strong negative effect ( $b = -1.48, p = .006$ ). Those who were offered a dismissal of charges have a 77% lower odds of being charged compared with those who do not receive an offer to dismiss charges ( $OR = .23$ ). Net of this court program incentive, defendants who maintain the same level of noncrisis treatment before and during court have significantly lower odds of being charged than those defendants who decreased their noncrisis treatment during court ( $b = -1.25, p = .042$ ).

## COX PROPORTIONAL HAZARD MODELS

To address our second question, “What factors are associated with a longer time to first new criminal charge?” we estimate Cox proportional hazard models (identified as “Cox” in Table 2). These models predict the hazard of receiving a charge within the 2 years after exiting MHC. Looking at Model 1, we see that prior charges ( $b = 0.10, p < .001$ ) and being female ( $b = 0.62, p = .026$ ) significantly and positively affect the hazard of receiving a charge. Female defendants have an 86% higher hazard of receiving a charge compared with male defendants (hazard ratio [ $HR$ ] = 1.86). Model 2 shows that those who received the same amount of noncrisis treatment during court than prior to entering court have significantly lower hazard rates compared with those who received less noncrisis treatment during court ( $b = -0.86, p = .024$ ).

Like the logistic regression models, participation type does not have a statistically significant effect on the hazard of receiving a charge although having completed MHC does have a significant negative effect ( $b = -0.74, p = .018$ ). Those who completed MHC have a 52% lower risk of receiving a charge compared with those who did not complete it ( $HR = .48$ ). Consistent with the logistic models, an offer to dismiss charges also has a significant negative effect (Model 3). In Model 3, we see that being offered a dismissal of charges lowers one’s hazard of receiving a charge by approximately 52% ( $HR = .48$ ), while controlling for demographic and participation variables.

## NEGATIVE BINOMIAL REGRESSION MODELS

To address our third question, “What factors are associated with a greater number of charges?” we use negative binomial regression models (identified as “NB” in Table 2), which produce similar results as the previous two models. Prior charges initially has a

significant positive effect on the log count of charges received after court exit (Model 1,  $b = 0.12$ ,  $p = .001$ ), but this effect is attenuated as the MHC participation and dismissal of charges variables are added to the model (Model 3). Looking at Model 2, those who received the same amount of noncrisis treatment have a significantly lower log count of charges received after court exit compared with those who received less noncrisis treatment during court ( $b = -1.01$ ,  $p = .014$ ). Individuals who completed MHC have an approximately 68% lower incident rate compared with those who failed to complete the court (incident rate ratio [IRR] = .32). Model 3 indicates that the offer to dismiss charges continues to have a strong negative effect ( $b = -0.95$ ,  $p = .013$ ); those who were offered this court program incentive have a 61% lower incident rate compared with individuals who were not (IRR = .39). The finding in Model 2 that stable noncrisis mental health treatment before and during court decreases the count of new charges postcourt continues to be statistically significant in Model 3. In addition, individuals who increased their noncrisis treatment during court participation have a significantly lower log count of charges received after court exit compared with those who received less noncrisis treatment during court ( $b = -0.70$ ,  $p = .035$ ).

A novel finding from this quantitative analysis is the strong effect of court incentives through the dismissal offer. To understand the influence of this variable, we first explored some basic descriptive statistics of these data. Of those that were offered charge dismissal, recipients were more likely to be men (66%), White (63%), and younger, with an average mean age of 34 compared with 38 of the MHC cohort. The overrepresentation of White men in this recipient group mirrors participants in the court more generally. Those offered this program incentive also had fewer average charges in the 2 years prior to entering the court (three prior charges vs. five prior charge for those in the whole cohort), yet were more likely to be charged with a personal crime than another type of crime. Not unexpectedly, a greater percentage of those offered this court program incentive successfully completed the court program (68% vs. 50% in the whole cohort).

#### QUALITATIVE DATA

The importance of court program incentives through the offer to dismiss charges is also illustrated in interview data with MHC participants and team members. Based on these data, there is some evidence that the offer itself shapes long-term behaviors in several key ways. First, the offer represents a strong incentive for behavioral compliance, motivating defendants to fulfill court obligations. For example, in response to a question about why she opted-in to MHC, a defendant stated that she chose to opt-in because the charges would be dropped. She also indicated that there was a clear incentive to staying in court: "I did not want those charges on my record . . . I do not know how I got [the dismissal offer] but I am sure glad I did." She went on to discuss how this altered her substance use by saying, "I turned down a drink or a drug and I knew I had to do a UA [urine analysis] and did not want to go to jail." In the interview, she also explained that she tried hard not to do anything to jeopardize her offer: "I never missed a court date and faced whatever they were going to give." This was even true when she was using drugs and alcohol; she was afraid of the sanctions that might be administered for her noncompliance. She was less worried given that her case was in MHC, as opposed to traditional court, and she characterized the court as "better for me because they were more lenient." This participant's experience was similar to others, albeit she was more candid about the role the dismissal offer played in her compliance and

experience with the court. Consistent with participant accounts, a probation officer stated that “there’s obviously an incentive for the defendants to [opt-in to MHC] so that they can get the charges dismissed at the end of two years and successful completion.”

A second way a dismissal offer (often referred to as a dispositional continuance by MHC team members) may influence a participant’s experience in the MHC is through perceptual changes for both MHC team members and participants. Both of these changes are captured in the remarks of an MHC probation officer:

But there’s another thing that we might be tapping into here with the [dispositional] continuances and that’s how the client perceives the fact that the city is offering a dispositional continuance and what that might say about the way the city is viewing the case, the way the court’s viewing the case, and more specifically how they are viewing the client.

This MHC team member further explains how the dismissal offer is qualitatively different from other court program incentives and how these differences may play a role in its effect on recidivism:

And I think when someone walks in [MHC] and the city says, “Well, a suspended sentence, and it’s just sort of ‘business as usual’” but when the city recommends a dispositional continuance, there’s an underlying message there that says we believe in this person, we believe in this client, we believe in this client’s likelihood to succeed and our reflection of our belief in the client is the offering a dispositional continuance.

On one hand, MHC team members might approach a case or a defendant differently if the defendant is offered a dismissal of charges, and on the other hand, defendants might be more motivated to alter their behavior because of court staffs’ support and belief in their success. It is also very possible that both these influences occur simultaneously. The same probation officer concluded by saying that this “may create an additional incentive, besides just trying to keep [the charge] off the record. That is, someone believes in me and I want to do good by them, whether it’s the court or the city.” This sentiment was echoed by MHC participants who were offered charge dismissals. Several participants stated that the MHC team “believed in them” and that they wanted the court to be “proud of them” and “did not want to disappoint them.” Relationships developed between MHC team members and MHC participants with clear expectations. For example, one MHC participant commented that the MHC team “took the time to care about me,” that they were “in it together,” and that “the court and all the lawyers contributed to [graduation from MHC]. I did not do this by myself.”

Other MHC team members did not believe that an offer to dismiss charges changed how attorneys or judges dealt with cases or defendants. However, even one skeptical team member suggested that during court reviews “clients were reminded of their dispositional continuance” to encourage compliance and motivate the participant. The offer itself can influence a defendant’s relationship to behavioral compliance and how defendants are perceived in the court.

A common explanation for the significant impact of the dismissal offer suggested by all MHC team members was that it was “a spurious conclusion.” These team members connected the offer to selection bias arguments. One MHC team member stated, “People who get a dispositional continuance are much more likely to have little or no [criminal] history and already come into the court with a lower likelihood of recidivism.” In contrast, our

quantitative analysis finds the effect of dismissal of charges on criminal recidivism remains statistically significant even after controlling for key characteristics commonly associated with selection bias. More directly, we find the explanatory power of prior criminal charges is largely attenuated when dismissal offers are introduced to the models.

MHC staff also offered other selection-based explanations for the relationship between offers of dismissal and subsequent criminal charges. A defense attorney suggested that there may be a difference by charge—that defendants with specific offenses may be less likely to be offered a dismissal of charges than defendants with other offense types, which may influence recidivism outcomes. For example, one defense attorney suggested that those defendants with domestic violence charges may be offered fewer dismissal offers as there are usually additional prosecutorial agreements required (from the domestic violence prosecutor), “creating one more barrier to getting a dispositional continuance.” A prosecuting attorney added some nuance to this interpretation by arguing that domestic violence cases among nonintimates (e.g., parent and child) are more likely to garner support from family members for an offer to dismiss charges; defendants in these types of cases might also benefit from higher levels of family support, which might increase prosecutorial willingness to offer a dismissal. As opposed to particular charges, a prosecuting attorney argued that the main factors that enter into the decision-making process of offering a dismissal were (a) if the defendant was charged with a property crime (as opposed to a personal crime), and (b) “how much control he/she had in the situation,” which can be seen as a proxy for the centrality of mental health illness in the commission of the crime. We reestimated Model 3 with a binary variable for whether the defendant was brought into the court for a personal crime<sup>18</sup> or other type of crime (results not shown). The effect of offering a dismissal of charges remained significant in all models and thus cannot be entirely explained by selection bias based on the type of offense.

MHC team members consistently claimed that the same factors that may influence referral to and selection into the MHC may explain the effect of court program incentives we report. This reintroduces the possibility that MHCs select the “best” defendants to participate in the court and then incentive their adherence to the program. A defense attorney offered this account in response to a question about “skimming”:

As for [MHCs] taking more low-risk offenders, that may be partly true but I think that may be because we cannot engage with some of our most mentally ill clients in the program because they tend to be the ones whose cases are dismissed due to not being competent.<sup>19</sup>

This comment reflects the fact that defendants who are not found to be legally competent are unable to opt-in to MHC. This legal standard sorts defendants based on their competency and prevents the MHC from accepting individuals with the most serious forms of mental illness. However, legal competency is a status that can change throughout a defendant’s time in court. In additional quantitative analyses (not shown here), we control for whether the issue of competency was raised during a defendant’s time in court. In models where this competency measure is included, a dismissal offer remains a statistically significant predictor in reducing criminal recidivism. This finding suggests that possible selection bias from legal noncompetence cannot entirely explain the effect of being offered a dismissal of charges.

In addition, sociodemographic factors are associated with MHC participation (Steadman et al., 2005) and may influence an offer to dismiss charges. Insights from studies on case processing in MHCs can be applied to the decision-making process of opt-in offers. Researchers report that at the point of referral into MHC, women, older defendants, and Whites receive referrals at higher rates (Steadman et al., 2005). The MHC studied here has a higher proportion of White men than other demographic groups. Our descriptive analysis indicates that women are offered more dismissals of charges than men. This is consistent with an MHC team member's assessment of how sociodemographic characteristics, such as sex, race, and age, are factors that influence selection into the court as well as offers: "Young White women are more likely to be offered charges dismissals and that, in general, the court is 'tougher' on men."

This impression is consistent with recent research on termination from one MHC. Relying on mixed methodology, Ray and Dollar (2013) found a race and sex/gender interaction whereby White women were less likely to be terminated and hence more likely to complete MHC than other demographic groups. Others report interaction effects between age and sex/gender so that young male defendants and older female defendants are disadvantaged in the selection process (Luskin, 2001). Beyond sociodemographic characteristics, researchers have identified the presence of warrants, diagnosis of depression, and reported use of illegal drugs around the time of admission reduce the likelihood of being accepted into MHC (Luskin & Ray, 2015). Others find that prior criminal history, felony conviction, and crimes against persons also decrease the chance of diversion (Luskin, 2001). The qualitative data provided here suggest that there is some evidence of bias in the processing of MHC defendants. While there is likely some selection effects of the offer to dismiss charges that are not captured in this analysis, the statistical significance of the court program incentive variable in all models—including those that control for variables like sex, race, age, mental health treatment, criminal history, participation and completion type, charge type, and competency issues—suggests alternative explanations. Although it is impossible with these qualitative and quantitative data to tease apart how important court program incentives are for behavioral compliance, they are suggestive that there might be differential court experiences for those offered greater court program incentives that ultimately influence criminal recidivism.

## DISCUSSION

We find partial support for reduction in criminal recidivism up to 2 years after exiting MHC. Multiple statistical models show that graduating from MHC, maintaining noncrisis treatment, and being offered court program incentives are all associated with lower odds of criminal reoffending, an increased time to reoffense, and fewer charges.

Our analysis across models yields some evidence for the role of mental health services in reducing recidivism. Our results indicate that maintaining the same level of noncrisis mental health treatment before and during court was significant in predicting reduced recidivism in all models. These findings are somewhat consistent with a growing area of research on MHCs; however, we expected to see a stronger relationship between an increase in during-court noncrisis treatment and a decreased likelihood of criminal recidivism after court exit. Research indicates that MHCs may have clinical implications for the treatment of defendant's mental illnesses by improving access to treatment in the community (Keator, Callahan, Steadman, & Vesselinov, 2013). Other researchers show that MHCs can help

improve psychosocial functioning (Cosden et al., 2005). However, research finds that treatment needs to target impulsivity and other common criminogenic needs to further reduce recidivism (Peterson, Skeem, Hart, Vidal, & Keith, 2010).

Exit reason (i.e., successful completion/graduation or unsuccessful completion) significantly influences criminal recidivism. Other researchers also highlight the importance of completing and graduating from MHC (Burns et al., 2013; Herinckx et al., 2005; Hiday & Ray, 2010; Hiday, Wales, & Ray, 2013; McNiel & Binder, 2007; Moore & Hiday, 2006; Ray, 2014). Research suggests that graduating from MHC is related to the positive ritual process or ceremonialism (Ray, Dollar, & Thames, 2011; Snedker, 2016).

Surprisingly, we did not find an effect of participation type (voluntary MHC participation nor mandatory mental health treatment) on criminal reoffending, either in terms of the odds of being charged, the time to charge, or the number of charges. On its face, this is a perplexing finding given the mounting research on MHC participation and improving criminal justice outcomes. Furthermore, previous studies highlight the importance of receiving a “full dose” of MHC treatment, which only occurs in MHCs as compared with traditional courts or treatment as usual (Moore & Hiday, 2006). However, the lack of statistical significance of full MHC participation here needs to be understood in the context of this study’s population. We are not comparing a cohort of full MHC defendants with a matched sample from a traditional court as other studies have done (Anestis & Carbonell, 2014; Keator et al., 2013; McNiel & Binder, 2007; Moore & Hiday, 2006; Steadman et al., 2011). Instead, this analysis compares defendants who participate fully in MHC with defendants who receive some mental health treatment. In theory, MHDT clients have fewer court hearings, particularly if they are in compliance, but in practice they can be treated similarly to MHC participants. While some MHC team members treat these groups as distinct, others “do not feel bound by their sentence structure nor their MHC program enrollment.” For these MHC team members, just because some MHDT defendants were not offered MHC “doesn’t mean they won’t benefit from MHC style supervision.”

While these findings raise some questions about the influence of full MHC participation, the generalizability of this conclusion should be balanced with the fact that this analysis uses a small sample from one cohort. Even so, it does raise questions about the intense level of supervision for misdemeanor offenses. Recent studies suggest that the level of supervision seen in MHCs might be most appropriate for defendants with felony charges, as evidenced by reduced recidivism among completers (Ray, Hood, & Canada, 2015), reduced risk of violence from participants (McNiel et al., 2015), and the greatest reductions in criminal justice costs (Steadman et al., 2014).

A central finding and unique contribution of this article is the strong results of the offer to dismiss charges on reducing criminal recidivism. This form of court program incentive may be linked to a defendant’s perception of fairness or procedural justice in the court process. Scholars have proposed procedural justice as a possible mechanism to explain success and positive experiences in MHC (Canada & Watson, 2013; Kopelovich, Yanos, Pratt, & Koerner, 2013; Poythress, Petrila, McGaha, & Boothroyd, 2002; Ray & Dollar, 2013). Moreover, perceptions of coercion among MHC participants were negatively associated with perceptions of recovery and predictive of higher levels of criminal justice involvement (Pratt, Koerner, Alexander, Yanos, & Kopelovich, 2013). Similarly, MHC participants who perceived the MHC as fair—a component of procedural justice—associated it with perceptions of recovery (Kopelovich et al., 2013). In a comparison between MHC and Assisted



Outpatient Treatment (AOT), MHC participants reported lower levels of perceived coercion and more procedural justice; they also felt more respected, were more positive about the program, and overall were more hopeful (Munetz, Ritter, Teller, & Bonfine, 2014). Clearly, there are both clinical and criminal implications of perceptions of fairness in MHCs related to lower levels of criminal reoffending and it may be connected to greater incentives offered to MHC participants.

Although this study is based on a municipal court that only processes misdemeanor charges, our findings raise questions about applicability of this incentive structure to a felony court context. Given that second-generation MHCs are increasingly taking felony charges (Redlich et al., 2005), exploring the effect of court program incentives in these MHCs is a fruitful area for future research. Current research suggests that participants with felony charges who completed MHC were no more likely to recidivate than those with misdemeanor charges (Ray, Kubiak, Comartin, & Tillander, 2015). The seriousness of felony charges and concerns about community safety suggests that a modified incentive structure might be more feasible to this context.

One example of increasing court program incentives that may be beneficial to participants can be seen in another MHC in the same city this study was conducted in. It operates under a “hybrid approach,” whereby it allows a felony charge to be lowered to a misdemeanor charge, a process called “felony drop-downs” by the court. This is similar to the offer to dismiss charges in municipal court as it is, in effect, dismissing the felony charge. In an interview, a probation officer explained the incentives:

So the benefit of coming into our court [MHC] is you lose the felony, you don't have the felony conviction, you don't get points, you don't risk going to prison, and the most [prison time] you can get is one year, maybe two if they do two misdemeanors consecutive.

Several probation officers expressed concerns about this trend regarding dangerousness and “fit” in MHC. This sentiment was echoed by a judge who stated that offering dismissals makes sense in many misdemeanor cases but “the debate really happens on the felony side” as the “the public demands that we do something” to punish the defendant. Or as another MHC team member put it, “In many cases you cannot justify [a charge dismissal] to the community” in terms of the severity of the offense or the threat to public safety. These concerns might limit dismissals or charge reductions in felony cases.<sup>20</sup>

In addition to other MHC types (e.g., felony MHC), the findings about the role of court program incentives suggest a possible application to traditional court. In a study of MHC noncompleters, dismissing charges once defendants returned to traditional court was associated with reduced criminal recidivism (Ray et al., 2015). This finding reinforces the notion that dismissing charges even outside the MHC context can have a suppressive effect on new criminal charges after court exit. Although our study cannot parse out how a defendant is processed after his or her case has been revoked from MHC, taken together, our study and others suggest there is an effect of the offer to dismiss charges and/or the actual dismissing of charges on criminal desistance in both court systems.

Court program incentives might need to be modified by the context of the MHC (e.g., felony vs. misdemeanor cases) and responsive to court (fiscal) constraints. One defense attorney talked about MHC “being a hard sell” for participants not facing long jail sentence or who have pled guilty to the charges(s). The same attorney insinuated that incentives are

a large part of the decision-making process, “We are not getting the things we need to make people’s success more possible. I think it all goes back to the carrot or the stick.” Without more “carrots” for participation—court program incentives such as dismissal of charges—and supportive resources (especially housing) throughout the court program, fewer dependents will opt-in and be successful in MHC.

### LIMITATIONS

The scope of our data—a single MHC and one cohort of court defendants—is a limitation of our analysis as we may not be able to identify additional effects due to inadequate statistical power. However, our approach is similar to strategies used by others, with several other studies relying on data from one court with similar sample sizes (Burns et al., 2013; Christy et al., 2005; Hiday & Ray, 2010; McNiel et al., 2015; Moore & Hiday, 2006; Ray, 2014; Ray et al., 2015). Similarly, our study relies on administrative data from one well-established court, an approach taken by other authors (Christy et al., 2005; Hiday & Ray, 2010). This stability ensures that the MHC team and court practices do not change significantly during the period examined. The analyses were also limited by the operationalization of constructs by the data granting agencies. Specifically, this population is limited in that the cohort is based on those defendants who exited as opposed to those who entered to the program; the latter approach would be comprehensive and allow for tracking cases prospectively. However, given the difficulty in gaining access to court data of this kind, our data do offer insights into the associations between court factors and criminal recidivism among a specific population. Also, our data only allow for analysis based on a nontraditional comparison group of court participants—those who receive mental health treatment and those who have contact with trained staff, but who do not fully participate in the MHC. Although our population is not based on matching and randomization, we make great efforts to control for selection bias. Despite these efforts, unobserved selection bias remains. Our analysis cannot address possible racial and gender bias in the selection process of MHCs. Although we cannot overcome all of the complex dynamics of selection bias, this article takes a more comprehensive approach to selection into the court while examining court participants’ postexit criminal recidivism for one specific MHC program using mixed methods. Despite some of the noted limitations, this study is innovative in its analytical modeling strategy and operationalization of measures from key conceptual frameworks.

### CONCLUSION

Understanding the extent to which MHCs influence criminal recidivism among defendants with mental illness is an important policy issue. This article finds that some elements of MHC court processing influence criminal recidivism patterns. Future research should build on our finding that court program incentives matter for defendants’ reduction in criminal recidivism. In sum, these findings speak to the importance of both direct and indirect incentives in MHCs. Furthermore, future work is needed to explore other court program incentives and include additional measures of noncompliance and the sanctioning process, with an eye toward the possible effects of sociodemographic characteristics. Recent research highlights the role of race and gender on court actors’ decision-making process around noncompliance and its implications for court termination (Ray & Dollar, 2013).

These findings from one MHC help identify key areas for future reforms in MHC operations and practices, especially regarding the decision-making process around offer types, particularly offers to dismiss charges. From a policy perspective, these results suggest that MHCs might consider a greater usage of court program incentives, while also remaining sensitive to balancing the perceived procedural justice of the court. This study adds to the growing literature on MHCs, but more research needs to be done in this area to allow “best practices” based on scientific evidence to guide MHC reforms.

## NOTES

1. Due to the inclusion of qualitative data in this analysis and to maintain confidentiality of the mental health court (MHC) team members, the specific details of the MHC have been removed.

2. The MHC in this study, as well as the other MHC, is open to the public Monday through Thursday from 1:30 p.m. to 5:00 p.m. and, when necessary, on Fridays at 10:30 a.m. The lead author observed MHC proceedings periodically (weekly or monthly) between 2010 and 2016.

3. Interviews include past and current MHCs staff from two MHCs including defense attorneys ( $n = 6$ ), prosecuting attorneys ( $n = 6$ ), court liaisons/court monitors ( $n = 5$ ), probation officers/counselors ( $n = 7$ ), social workers ( $n = 3$ ), and judges ( $n = 4$ ). Fifteen interviews are from the MHC used in the quantitative analysis and 16 interviews come from MHC team members from a different MHC in the same region. All interview participants signed an Informed Consent form.

4. A total of seven MHC participants were interviewed from the same MHC used in the quantitative analysis.

5. During this time, before opt-in or opt-out (i.e., the preadjudication phase), defendants are followed by the court monitor and seen frequently while they stabilize and are connected with services.

6. The duration and frequency of probation meetings vary according to participant needs but often begin with meeting several times a week, decreasing to weekly, and possibly ending with monthly meetings based on a defendant's compliance with court conditions. If out of compliance, participants may meet with probation weekly or every other week until issues are resolved. According to interviews, while probation officers do not have mandated training to work in this MHC, they all had prior experience with this population and were interested in working with defendants with mental illness. Many probation officers in this court have been with the court since its inception, before any training was developed.

7. Six defendants in the 2008 exit cohort were omitted due to missing mental health treatment data and one due to death.

8. These were the only form of data that were available for analysis.

9. Defendants who do not receive a charge within 2 years postcourt exit are right censored. Two participants are right censored at 710 days (23.34 months).

10. Due to the size of the population, this analysis only compares defendants offered and not offered dismissal of charges, not the effect of receiving a charge dismissal.

11. We also created the same measure using crisis mental health treatments. This measure did not reach statistical significance in any model, so it was excluded from the analyses. Results remain the same regardless.

12. Age squared is often used in studies of criminal behavior to address the desistance from crime as people age. In addition, this squared measure is included in the survival analysis to avoid violating the proportional hazard assumption of Cox proportional hazard models. For substantive and consistency reasons, we include age squared in all models.

13. We also investigated whether competency was raised ( $1 = \text{yes}$ ,  $0 = \text{no}$ ) and whether the charge that brought the defendant into the court ( $1 = \text{person crime}$ ,  $0 = \text{other}$ ) mattered for the analyses. However, as both failed to reach statistical significance in any model, they were excluded to maximize power.

14. MHC participants were given US\$20 gift cards for being interviewed.

15. The interview protocol for MHC professional staff included questions across eight main domains: (a) professional role, (b) comparison with traditional courts and other problem-solving courts, (c) court process, (d) relationships between MHC professionals, (e) role of the judge, (f) MHC effectiveness, (g) future of MHCs, and (h) public perceptions. The interview protocol for MHC clients included questions across six main domains: (a) background and prior life experiences, (b) experiences in MHC, (c) review process and court appearances, (d) relationships to the MHC team, (e) impact of the court on daily life, and (f) court improvement.

16. We tested the proportional hazards assumption and it was satisfied in all of the event history models.

17. We compared Poisson models with negative binomial regression models to determine the most appropriate modeling strategy. For all count models, the likelihood-ratio tests for  $\alpha = 0$  were statistically significant, which suggests that alpha is overdispersed and thus requires negative binomial models. In addition, two defendants only have data through 23.34 months, rather than the full 24 months.

18. Crimes against persons include, but are not limited to, assault, threats to kill, harassment, domestic violence, violation of a no contact order, and reckless endangerment.

19. Competent, as used here, is in reference to the legal category of a defendant being competent to understand the charges brought against him or her and the ability to assist his or her defense.

20. Quantitative data are not yet available from this court to analyze if this incentive structure—offering misdemeanor charges for felony charges—has a similar reduction on recidivism.

## REFERENCES

- Almquist, L., & Dodd, E. (2009). *Mental health courts: A guide to research-informed policy and practice*. New York: Council of State Governments, Justice Center. Retrieved from [https://csgjusticecenter.org/wp-content/uploads/2012/12/Mental\\_Health\\_Court\\_Research\\_Guide.pdf](https://csgjusticecenter.org/wp-content/uploads/2012/12/Mental_Health_Court_Research_Guide.pdf)
- Anestis, J. C., & Carbonell, J. L. (2014). Stopping the revolving door: Effectiveness of MHCs in reducing recidivism by mentally ill defendants. *Psychiatric Services, 65*, 1105-1112. doi:10.1176/appi.ps.201300305
- Berman, G., & Feinblatt, J. (2005). *Good courts: The case for problem-solving justice*. New York, NY: The New Press.
- Burns, P. J., Hiday, V. A., & Ray, B. (2013). Effectiveness 2 years post-exit of a recently established mental health court. *American Behavioral Scientist, 57*, 189-208. doi:10.1177/0002764212465416
- Canada, K. E., & Watson, A. C. (2013). "Cause everybody likes to be treated good": Perceptions of procedural justice among mental health court participants. *American Behavioral Science, 57*, 209-230. doi:10.1177/0002764212465415
- Christy, A., Poythress, N. G., Boothroyd, R., Petrila, J. P., & Mehra, S. (2005). Evaluating the efficiency and community safety goals of the Broward County mental health court. *Behavioral Sciences & the Law, 23*, 227-243. doi:10.1002/bsl.647
- Cosden, M., Ellens, J. K., Schnell, J. L., Yamini-Diouf, Y., & Wolfe, M. M. (2003). Evaluation of a mental health treatment court with assertive community treatment. *Behavioral Sciences & the Law, 21*, 415-427. doi:10.1002/bsl.542
- Cosden, M., Ellens, J. K., & Yamini-Diouf, Y. (2005). Efficacy of a mental health treatment court with assertive community treatment. *Behavioral Sciences & the Law, 23*, 199-214. doi:10.1002/bsl.638
- Ewick, P., & Silbey, S. S. (1998). *The common place of law: Stories from everyday life*. Chicago, IL: The University of Chicago Press.
- Fisler, C. (2015). When research challenges policy and practice: Toward a new understanding of mental health courts. *The Judges' Journal, 54*(2), 8-13. Retrieved from [http://www.courtinnovation.org/sites/default/files/documents/JJ\\_SP15\\_54\\_2\\_Fisler.pdf](http://www.courtinnovation.org/sites/default/files/documents/JJ_SP15_54_2_Fisler.pdf)
- Goldkamp, J. S., & Irons-Guynn, C. (2000). *Emerging judicial strategies for the mentally ill in the criminal caseload: Mental health courts in Fort Lauderdale, Seattle, San Bernardino, and Anchorage* (Bureau of Justice Assistance, No. NCJ 182504). Washington, DC: U.S. Department of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/bja/182504.pdf>
- Goodale, G., Callahan, L., & Steadman, H. J. (2013). Law & psychiatry: What can we say about mental health courts today? *Psychiatric Services, 64*, 298-300. doi:10.1176/appi.ps.201300049
- Griffin, P. A., & DeMatteo, D. (2009). Mental health courts: Cautious optimism. In P. Higgins & M. B. Mackinam (Eds.), *Problem-solving courts: Justice for the twenty-first century* (pp. 91-113). Santa Barbara, CA: Praeger.
- 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
- Herinckx, H. A., Swart, S. M., 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
- Hiday, V. A., & Ray, B. (2010). Arrests two years after exiting a well-established mental health court. *Psychiatric Services, 61*, 463-468. doi:10.1176/ps.2010.61.5.463
- Hiday, V. A., Wales, H. W., & Ray, B. (2013). Effectiveness of a short-term mental health court: Criminal recidivism one year postexit. *Law and Human Behavior, 37*, 401-411. doi:10.1037/lhb0000030
- James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates* (Bureau of Justice Statistics, Special Report No. NCJ 213600). Washington, DC: U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/mhppji.pdf>
- Keator, K. J., Callahan, L., Steadman, H. J., & Vesselinov, R. (2013). The impact of treatment on the public safety outcomes of mental health court participants. *American Behavioral Scientist, 57*, 231-243. doi:10.1177/0002764212465617
- Kopelovich, S., Yanos, P., Pratt, C., & Koerner, J. (2013). Procedural justice in mental health courts: Judicial practices, participant perceptions, and outcomes related to mental health recovery. *International Journal of Law and Psychiatry, 36*, 113-120. doi:10.1016/j.ijlp.2013.01.004
- Lurigio, A. J., & Snowden, J. (2009). Putting therapeutic jurisprudence into practice: The growth, operations, and effectiveness of mental health courts. *The Justice System Journal, 30*, 196-218.
- Luskin, M. L. (2001). Who is diverted? Case selection for court-monitored mental health treatment. *Law & Policy, 23*, 217-236. doi:10.1111/1467-9930.00111
- Luskin, M. L., & Ray, B. (2015). Selection into mental health court: Distinguishing among eligible defendants. *Criminal Justice and Behavior, 42*, 1145-1158. doi:10.1177/0093854815601158
- McNiel, D. E., & Binder, R. L. (2007). Effectiveness of a mental health court in reducing criminal recidivism and violence. *The American Journal of Psychiatry, 164*, 1395-1403. doi:10.1176/appi.ajp.2007.06101664

- McNiel, D. E., Sadeh, N., Delucchi, K. L., & Binder, R. L. (2015). Prospective study of violence risk reduction by a mental health court. *Psychiatric Services, 66*, 598-603. doi:10.1176/appi.ps.201400203
- Miller, J., & Johnson, D. C. (2009). *Problem solving courts: A measure of justice*. Plymouth, UK: Rowman & Littlefield.
- Miller, S. L., & Perelman, A. M. (2009). Mental health courts: An overview and redefinition of tasks and goals. *Law & Psychology Review, 33*, 113-123.
- Moore, M. E., & Hiday, V. A. (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
- Munetz, M. R., Ritter, C., Teller, J. L., & Bonfine, N. (2014). Mental health court and assisted outpatient treatment: Perceived coercion, procedural justice, and program impact. *Psychiatric Services, 65*, 352-358. doi:10.1176/appi.ps.002642012
- Peterson, J., Skeem, J. L., Hart, E., Vidal, S., & Keith, F. (2010). Analyzing offense patterns as a function of mental illness to test the criminalization hypothesis. *Psychiatric Services, 61*, 1217-1222. doi:10.1176/ps.2010.61.12.1217
- Poythress, N. G., Petrla, J., McGaha, A., & Boothroyd, R. (2002). Perceived coercion and procedural justice in a Broward mental health court. *International Journal of Law and Psychiatry, 25*, 517-533. doi:10.1016/S0160-2527(01)00110-8
- Pratt, C., Koerner, J., Alexander, M. J., Yanos, P. T., & Kopelovich, S. L. (2013). Predictors of criminal justice outcomes among mental health courts participants: The role of perceived coercion and subjective mental health recovery. *International Journal of Forensic Mental Health, 12*, 116-125. doi:10.1080/14999013.2013.791351
- Ray, B. (2014). Long-term recidivism of mental health court defendants. *International Journal of Law and Psychiatry, 37*, 448-454. doi:10.1016/j.ijlp.2014.02.017
- Ray, B., & Dollar, C. B. (2013). Examining mental health court completion: A focal concerns perspective. *The Sociological Quarterly, 54*, 647-669. doi:10.1111/tsq.12032
- Ray, B., Dollar, C. B., & Thames, K. M. (2011). Observations of reintegrative shaming in a mental health court. *International Journal of Law and Psychiatry, 34*, 49-55. doi:10.1016/j.ijlp.2010.11.008
- Ray, B., Hood, B. J., & Canada, K. E. (2015). What happens to mental health court noncompleters? *Behavioral Sciences & the Law, 33*, 801-814. doi:10.1002/bsl.2163
- Ray, B., Kubiak, S. P., Comartin, E. B., & Tillander, E. (2015). Mental health court outcomes by offense type at admission. *Administration and Policy in Mental Health and Mental Health Services Research, 42*, 323-331. doi:10.1007/s10488-014-0572-2
- Redlich, A. D., Steadman, H. J., Monahan, J., Petrla, J., & Griffin, P. A. (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. C., & Petrla, J. (2006). Patterns of practice in mental health courts: A national survey. *Law and Human Behavior, 30*, 347-362. doi:10.1007/s10979-006-9036-x
- Rottman, D., & Casey, P. (1999). Therapeutic jurisprudence and the emergence of problem-solving courts. *National Institute of Justice Journal, 240*, 12-19. Retrieved from <https://www.ncjrs.gov/pdffiles1/jr000240.pdf>
- Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011). Assessing the effectiveness of mental health courts: A quantitative review. *Journal of Criminal Justice, 39*, 12-20. doi:10.1016/j.jcrimjus.2010.11.003
- Schneider, R. D., Bloom, H., & Heerema, M. (2007). *Mental health courts: Decriminalizing the mentally ill*. Toronto, Canada: Irwin Law.
- Snedker, K. A. (2016). Unburdening stigma: Identity repair through rituals in the mental health court. *Society and Mental Health, 6*, 36-55. doi:10.1177/2156869315598203
- Steadman, H. J., Callahan, L., Robbins, P. C., Vesselinov, R., McGuire, T. G., & Morrissey, J. P. (2014). Criminal justice and behavioral health care costs of mental health court participants: A six-year study. *Psychiatric Services, 65*, 1100-1104. doi:10.1176/appi.ps.201300375
- Steadman, H. J., Redlich, A. D., Callahan, L., Robbins, P. C., & Vesselinov, R. (2011). Effect of mental health courts on arrests and jail days: A multisite study. *Archives of General Psychiatry, 68*, 167-172. doi:10.1001/archgenpsychiatry.2010.134
- Steadman, H. J., Redlich, A. D., Griffin, P., Petrla, J., & Monahan, J. (2005). From referral to disposition: Case processing in seven mental health courts. *Behavioral Sciences & the Law, 23*, 215-226. doi:10.1002/bsl.641
- Trupin, E., & Richard, H. (2003). Seattle's mental health courts: Early indicators of effectiveness. *International Journal of Law and Psychiatry, 26*, 33-53. doi:10.1016/S0160-2527(02)00202-9
- Watson, A., Hanrahan, P., Luchins, D., & Lurigio, A. (2001). Mental health courts and the complex issue of mentally ill offenders. *Psychiatric Services, 52*, 477-482. doi:10.1176/appi.ps.52.4.477
- Wexler, D. (1990). *Therapeutic jurisprudence: The law as a therapeutic agent*. Durham, NC: Carolina Academic Press.
- Wolff, N. (2002). Courts as therapeutic agents: Thinking past the novelty of mental health courts. *Journal of the American Academy of Psychiatry and the Law, 30*, 431-437. Retrieved from <http://jaapl.org/content/jaapl/30/3/431.full.pdf>
- Wolff, N., Fabrikant, N., & Belenko, S. (2011). Mental health courts and their selection process: Modeling variation for consistency. *Law and Human Behavior, 35*, 402-412. doi:10.1007/s10979-010-9250-4

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