
Evaluating the Efficiency and Community Safety Goals of the Broward County Mental Health Court

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Mental health courts have developed as one response to persons with mental illness who are involved with the criminal justice system. This study investigated the efficiency and safety goals of one such court in Broward County, FL. Mental health court (MHC) clients spent significantly fewer days in jail for the index arrest associated with study enrollment than a comparison group. MHC clients had similar survival time to re-arrest up to one year after study enrollment. MHC clients did not significantly differ from the comparison group in self-reported aggressive acts over an 8 month follow-up period, while they did self-report significantly fewer acts of violence than the comparison group at the 8 month follow-up. These findings suggest that some of the benefits associated with the MHC reported in prior studies were not achieved at the expense of efficiency and safety. Copyright © 2005 John Wiley & Sons, Ltd.

INTRODUCTION

The substantial numbers of people with mental illness in prisons and jails has been the focus of attention of policy makers and social scientists for the past several decades. In their review of the literature, Lamb and Weinberger found that between 6 and 15% of individuals in city and county jails and 10–15% of those in prisons

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were diagnosed with a mental illness (Lamb & Weinberger, 1998). A report based on June 2000 data from slightly more than 1 million inmates from all 50 states indicated that almost 13% ($n = 137,385$) were receiving therapy or counseling and approximately 10% ($n = 105,336$) were receiving psychotropic medication (U.S. Department of Justice, Bureau of Justice Statistics, 2001). These and other studies provide ample evidence that persons with mental illness represent a meaningful percentage of persons who are incarcerated (Draine, Solomon, & Meyerson, 1994; McFarland et al., 1989; Steadman, McCarty, & Morrissey, 1989; Teplin, 1990).

Jails and prisons have also been described as “defacto—‘hospitals of last resort,’” with a “severe shortage” of adequate mental health care in these settings (Center for Court Innovation, 2001). Data regarding changes in state correctional systems from 1988 to 2000 indicated a 45% increase in the number of correctional facilities and a 115% increase in the prison population; however, there was not a commensurate increase in mental health services to meet this demand (Manderscheid, Gravesande, & Goldstrom, 2004). The complex multi-system issues related to the contact of persons with mental illness with the criminal justice system have been highlighted in recent reports from the Surgeon General (Department of Health and Human Services, 1999) and the New Freedom Commission on Mental Health (2003). These issues have been the impetus for the efforts of the Criminal Justice/Mental Health Consensus Project (Council of State Governments, 2002) to develop a body of knowledge and centralized information about criminal justice and mental health issues and of the *Mentally Ill Offender Treatment and Crime Reduction Act of 2003* (2003). This Act was signed into law by the President on October 30, 2004 (American Psychological Association, 2004).

Mental health courts are one recent judicial innovation designed to address some of the complex problems of persons with mental illnesses involved in the criminal justice system. Other methods of diversion include pre-booking diversion by law enforcement officials that avoids arrest, and post-booking diversion once charges are filed (Steadman, Deane, Borum, & Morrissey, 2000). There is evidence for positive criminal justice outcomes for such diversion, including reduced jail days and decreased likelihood of arrest (Hoff et al., 1999; Steadman et al., 2000).

Mental health courts have proliferated in recent years as one type of special jurisdiction court (Petrila, 2003), with approximately 98 courts currently in existence (National Alliance for the Mentally Ill, 2003). The concept of mental health courts developed from the implementation of drug courts starting in the 1990s. Federal legislation (*America's Law Enforcement and Mental Health Project Act*, 2002) and subsequent funding from the Department of Justice followed to further support the ongoing implementation of mental health courts. The *Mentally Ill Offender Treatment and Crime Reduction Act* (2003) has the goal of “increase[ing] public safety by facilitating collaboration among criminal justice, juvenile justice, mental health treatment, and substance abuse systems,” with some of the activities of this effort focusing on the implementation of mental health courts.

It is important to note that there is currently no consensus definition of what constitutes a mental health court (Slate, 2003; Steadman, Davidson, & Brown, 2001). There are several models for mental health courts, with “each court operat[ing] under its own, mostly unwritten rules and procedures,” with their “own way of addressing service issues” (Bazelon Center for Mental Health Law, 2003, p. 3). Some characteristics common to many mental health courts and

considered by Steadman, Davidson, and Brown (2001) to be essential features for a mental health court are (a) a separate docket for persons with mental illness, (b) a team approach within the courtroom used to arrive at solutions, (c) monitoring by the court with consequences for noncompliance and (d) "assurance of existing appropriate treatment slots" as being necessary before a mental health court judge rules. Further discussions of components of mental health courts are available elsewhere (Bazelon Center for Mental Health Law, 2003; Center for Court Innovation, 2001; Goldkamp & Irons-Guynn, 2000).

Several organizations have taken critical stances on mental health courts. For example, the Judge David L. Bazelon Center for Mental Health Law (2003, p. 3) expressed concern that mental health courts are not "part of any comprehensive plan to address the underlying failure of the service system to reach and address effectively the needs of people at risk of arrest." They expressed a concern that limited resources may be made unavailable for those *not* involved in the criminal justice system because interaction with the criminal justice system may become a gateway to services. They also advocated for felony level mental health courts, making the point that mental health courts should focus their resources on individuals not appropriate for other types of diversion (i.e., felony level offenders). The National Mental Health Association (2001) has expressed concern that mental health courts may further criminalize persons with mental illness and about the possible coercive nature of mental health courts.

Evaluation of the Broward Mental Health Court

Empirical research on mental health courts is important given the proliferation of courts, the emphasis on such courts in recent policy and legislative activity, and the current controversies about them. We have been conducting an evaluation of the Broward County (Ft. Lauderdale) Florida Mental Health Court since 1999. The evaluation consists of multiple components, including key informant interviews, qualitative data collection about the court process, a prospective study of a sample of clients, and analysis of data from multiple archival sources. Additional details about the design and methodology of the evaluation are available elsewhere (McGaha, Boothroyd, Poythress, Petrila, & Ort, 2002).

To date we have published several reports indicating that the Broward County Mental Health Court appears to be succeeding in achieving its core goals. Broward MHC clients report extremely low levels of perceived coercion; they also report much higher levels of procedural justice (e.g. perceived fairness) and satisfaction with court outcomes than do similarly situated defendants (i.e. facing similar charges; having similar levels of symptomatology) in a comparison sample from a county that does not have a mental health court (Poythress, Petrila, McGaha, & Boothroyd, 2002). Relative to the comparison sample, MHC clients are also much more active and involved in the disposition of their cases and are more likely to access mental health services subsequent to their hearings (Boothroyd, Poythress, McGaha, & Petrila, 2003).

In this article we report new findings related the efficiency and safety goals of the Broward County Mental Health Court. As articulated in the Judicial Order that created the court, these goals included the need to "... efficiently move people from

an overcrowded jail system into the mental health system, without compromising the safety of the public” (Administrative Order No. VI-97-I-1A, 1997; also see Lerner-Wren, 1999). Thus, we report here findings relevant to the efficiency and safety of the court.

These efficiency and safety objectives were evaluated by examining the time spent in jail for the index arrest associated with study recruitment, pre- and post-release arrest data, as well as self-reported aggressive and violent behavior of the defendants in our longitudinal study. Because the Broward MHC aspires to increase efficiency, against a null hypothesis of no difference in time spent in jail, we hypothesized that MHC clients would spend significantly fewer days in jail at the time of index arrest than would comparison court clients. In contrast, the safety objective of the mental health court is framed in terms of not compromising public safety, i.e. not placing the community at *greater* risk. Evidence *against* satisfying this objective would be indicated by a finding that, against a null hypothesis of no differences, rearrest and aggression/violence indicators were greater in the Broward sample than in the comparison sample. Because of the possibility that between-site or between-sample differences beyond our control might influence our data, we also conducted pre- and post-intervention comparisons on these key outcome variables (days in jail; recidivism) within the Broward sample to evaluate the effects of the mental health court against historical data.

METHOD

Participants

Participants were 116 Broward County Mental Health Court (MHC) defendants whose initial hearing dates were between December 7, 1999, and April 4, 2001, and a matched sample of 101 persons with mental illness whose first appearance hearing in Hillsborough County (Tampa), FL, court was between March 15, 2000, and May 2, 2001. The practicalities of the applied environment did not allow for random assignment of MHC-eligible defendants to MHC or regular misdemeanor court within a single jurisdiction; this necessitated that we employ a quasi-experimental design using a matched control group from a different jurisdiction. For example, the Broward County public defender made clear that he would not agree with random assignment based on his judgment that the mental health court was in many cases a better court for defendants who were eligible for the court than traditional misdemeanor court. These individuals were participants of the longitudinal, prospective interview portion of our evaluation. Multiple stakeholders may refer people to the MHC, including judges, family, mental health professionals, and jail or probation staff. However, in practice the majority of cases were referred to the MHC from the daily magistrate court, with people often seen in the MHC the same day as their magistrate hearing. Clinical psychology practicum students from a local university and assigned to the Broward County Public Defender Office screened possible MHC participants while at the jail (Rabasca, 2000). Additional description of the Broward Court is available elsewhere (Petrila *et al.*, 2001).

Informed consent was obtained using procedures approved by the University of South Florida Institutional Review Board. Participants first read or had read to them

a consent disclosure and they were encouraged to ask questions and to seek clarification if needed. Prospective participants were required to correctly answer four out of five multiple-choice questions that tested their comprehension of the consent disclosure in order to be eligible for study participation. Even then interviewers were required to judge independently that the individuals who passed this screening threshold were able to give informed consent.

Inclusion criteria for the study included the capacity to speak English (could be a second language). MHC and comparison site participants who had pending felony charges that would likely result in extended jail or prison time were excluded from the study, as following the impact of linkage to services would not be meaningful for this relatively small population. The MHC did not allow inclusion of those with felony, domestic violence or driving under the influence charges, therefore people with these types of charge were not recruited at the comparison site either. Finally, people at the comparison site who were considered by the judicial system to be fugitives from another state or county were not recruited, because following these individuals would have been problematic.

Sample matching variables included demographic characteristics (i.e. race, gender, age) and symptom severity (Brief Psychiatric Rating Scale Total Scores). The MHC and comparison site (Hillsborough) participants were similar on these variables as a result of a staggered recruitment process used at the comparison site (see Table 1).

As noted below, our research protocol included questions about behavior (i.e. aggression and violence), the answers to which may have been incriminating for some individuals. To protect these participants, we did not record any details (e.g. date, time, location, name of victim) that might be helpful in initiating an investigation of such events. To further protect the confidentiality of these data, we obtained a Certificate of Confidentiality for this study from the U.S. Department of Health and Human Services.

Table 1. Sample characteristics by site

	MHC (<i>n</i> = 116)		Comparison (<i>n</i> = 101)		Odds ratio (<i>p</i> value)
	<i>N</i>	%	<i>N</i>	%	
Sex					
Male	77	66.4	61	60.4	
Female	39	33.6	40	39.6	0.83 (0.36)
Race					
White	79	68.1	58	58.0	
Black	26	22.4	26	26.0	
Other	11	9.5	16	16.0	2.98 (0.23)
	Mean	SD	Mean	SD	<i>t</i> value (<i>p</i> value)
Age	36.36	10.40	37.66	9.63	0.51 (0.61)
Total BPRS score at enrollment	34.63	9.84	34.02	7.78	0.51 (0.61)
No. of arrests 12 months pre-enrollment	1.50	0.89	2.17	1.50	-3.95 (<0.001)
No. of participants with aggressive acts 3 months pre-enrollment	40	34.5	60	59.4	13.50 (<0.001)
No. of participants with violent acts 3 months pre-enrollment	22	18.9	19	18.8	<0.001 (0.98)

Measures and Analyses

Time in Jail for Index Arrest

Jail records in Broward County (MHC sample) and Hillsborough County (comparison sample) were examined to determine the number of days incarcerated in association with the index arrest. Because these data were highly skewed (see results, below), analyses compared median (rather than mean) scores, which are less sensitive to the effects of outlier cases.

Arrest Data

Identifying information collected at the baseline interview (date of birth, gender, and social security number) was used to specify the individuals for whom arrest data were needed. Arrest data were obtained from the Florida Department of Law Enforcement (FDLE) for arrests statewide up to one year before and up to one year after participants were enrolled in the evaluation. The date of the arrest and the offense(s) as recorded by the arresting officer(s) were contained in the FDLE data. Because arrest history was not used as a sample matching variable, arrest data for the year prior to enrollment were obtained in order to compare pre- and post-enrollment arrests between samples and to control, where needed, for groups differences in pre-enrollment arrest history. A probabilistic strategy was used to identify FDLE data for study participants, which involved the generation of a confidence score based on points assigned for matches on data elements such as name, date of birth, social security number, race, and gender. A cut-off match score was chosen to maximize the accurate identification of FDLE data, based on our prior experience with these data.

In addition to descriptive data on the prevalence and number of re-arrests, two primary analyses were conducted. First, a repeated measures analysis of variance was conducted to compare the number of arrests up to one year post study enrollment for the two groups. Second, time to rearrest up to one year post enrollment was investigated with survival analyses.

Self-Reported Violent and Aggressive Behavior

Intake interviews were conducted within a week of the initial MHC hearing at which the individuals were recruited (Broward sample) or the date of the first appearance court hearing for the comparison site participants. Follow-up interviews were conducted approximately 1, 4 and 8 months after the initial interview. At each interview the participant was asked to provide retrospective reports of violent or aggressive behavior during the prior 3 month period.

Variables utilized from the longer protocol included age, gender, race, total score on the anchored version of the Brief Psychiatric Rating Scale (BPRS-A) (Woerner, Mannuzza, & Kane, 1988), as well as counts of self-reported acts of aggression and violence. Self-reported information about acts of aggression and violence were collected using a modified version of the MacArthur Community Violence Instrument (Monahan, unpublished measure). *Aggressive acts* were categorized as any of

the following done to another at least once in the 3 months prior to the interview that did not result in injury: thrown something, pushed, grabbed, shoved, slapped, kicked, bitten, choked, hit with a fist or object or beaten up, or other acts not in these categories that did not involve injury. *Violent acts* were categorized as any of the actions just described that resulted in injury of another, or the following done to another at least once in the 3 months prior to the interview: forcing someone to have sex against his/her will, threatening with a gun, knife, or other lethal weapon in hand, using a knife on someone, or firing a gun at someone or using any other lethal weapon against someone. This means that actions categorized as aggressive acts were *not* also included as violent acts (i.e. self-reported acts were coded as one or the other, but not both). The categorization of events was structured to correspond to earlier work using this instrument (Robbins, personal communications, August, 2003).

RESULTS

Group Differences in Time Spent in Jail for the Index Offense

The median number of days in jail for the arrest that was identified as the index arrest was 3.00 (SD = 58.74, skewness = 4.97, $n = 96$) for the MHC group and 12 days (SD = 26.03, skewness = 3.70, $n = 99$) for the comparison sample.¹ The data were log transformed because of skewness. An analysis of variance performed on the log transformed data indicated that this difference was statistically significant ($F(1, 191) = 8.66, p < 0.01$).

Arrests After Study Enrollment

Recidivism, as indexed by rearrest, was examined in terms of both prevalence (percentage of individuals in each group rearrested) and incidence (mean number of arrests per group). Approximately 47% of MHC clients and 56% of comparison site participants experienced at least one arrest in the 1 year following the initial court appearance from which they were recruited into the study (see Table 2). This difference in the likelihood of rearrest between the two sites was not statistically

¹Although identifying the jail stay associated with the index arrest (arrest associated with study recruitment) was not without difficulty, we knew enough about the likely timing of the arrest to allow for additional logical quality checks for this specific arrest that allowed for the use of jail time data for this analysis. The index arrest used for this analysis was based on the arrest closest in time to study recruitment. A more conservative way to approach this issue was to exclude arrest dates that were far enough removed from the study recruitment date to suggest that they were likely not the index arrest, based on our experience that most study participants were arrested only days before study recruitment. Using arrest dates no more than 7 days removed from the enrollment interview in the MHC sample and no more than 3 days removed from the enrollment days at the comparison site (logical time spans based on our recruitment experiences) yielded a similar result to what is reported in the text (MHC median jail days associated with index arrest = 2 days, SD = 3.76, $n = 45$; comparison median = 11 days, SD = 25.49, $n = 89$). The removal of the most extreme outlier (a 189 day jail stay in the comparison sample) resulted in a median of 10 days (SD = 17.87, $n = 88$) for the comparison sample. However, even with these concerns with the data, the subset of jail stays that were identified most conservatively and those identified more liberally as time associated with the index arrest led to similar results.

Table 2. Demographic characteristics by arrest versus no arrest

	Comparison site (Hillsborough County)					Mental health court site (Broward County)				
	At least one arrest (<i>n</i> = 57)		No arrest (<i>n</i> = 44)			At least one arrest (<i>n</i> = 56)		No arrest (<i>n</i> = 60)		
	<i>N</i>	%	<i>N</i>	%	Odds ratio (<i>p</i> value)	<i>N</i>	%	<i>N</i>	%	Odds ratio (<i>p</i> value)
Sex										
Male	33	54.09	28	45.90		37	48.05	40	51.95	
Female	24	60.00	16	40.00	0.48 (0.79)	19	48.72	20	51.28	1.41 (0.49)
Race										
White	31	53.44	27	46.55		38	48.10	41	51.90	
Black	16	61.54	10	38.46		11	42.31	15	57.69	
Other	9	56.25	7	43.75	0.35 (0.56)	7	63.64	4	36.36	0.01 (0.95)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i> value (<i>p</i> value)	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i> value (<i>p</i> value)
Age	36.82	9.52	38.75	9.78	1.00 (0.32)	39.19	10.67	37.58	10.18	-0.83 (0.41)
Total BPRS score at enrollment	33.61	7.59	34.34	7.98	-0.46 (0.66)	34.11	10.18	35.19	9.52	-0.59 (0.56)
No. of participants with aggressive acts 3 months pre-enrollment	32	53.33	28	46.67	0.58 (0.45)	24	60.00	16	40.00	3.36 (0.07)
No. of participants with violent acts 3 months pre-enrollment	13	68.42	6	31.58	1.36 (0.24)	13	59.09	9	40.91	1.27 (0.26)

significant (odds ratio = 1.38, CI = 0.81–2.37, $\chi^2 = 1.44$, *df* = 1, *p* = 0.23). The mean number of arrests for the 1 year follow-up period did not significantly differ across sites (*t* = -1.61, *p* = 0.11), with an average of 1.00 arrest for the MHC group (SD = 1.34; *n* = 55 arrests) and 1.40 for the comparison group (SD = 1.78; *n* = 57 arrests).² Figure 1 displays the number of arrests by sample (MHC versus comparison) for 1 year post study enrollment.

In the 1 year follow-up period 17% (*n* = 20) of the MHC and 15% (*n* = 15) of the comparison sample had at least one felony level arrest. The FDLE data do not allow for finer distinctions than felony versus non-felony. Arrests that are coded in the FDLE data as felony level may also be pled to misdemeanor charges, therefore the FDLE data provide only a rough index of the severity of criminal activity and may not coincide with final charges.

We also compared, within MHC and comparison site groups, those individuals with one or more arrests during follow-up versus those with no arrest. Within each

²This result should be interpreted within the context of the relatively small sample size, such that conclusions about the existence of no difference are weakened by the lack of statistical power.

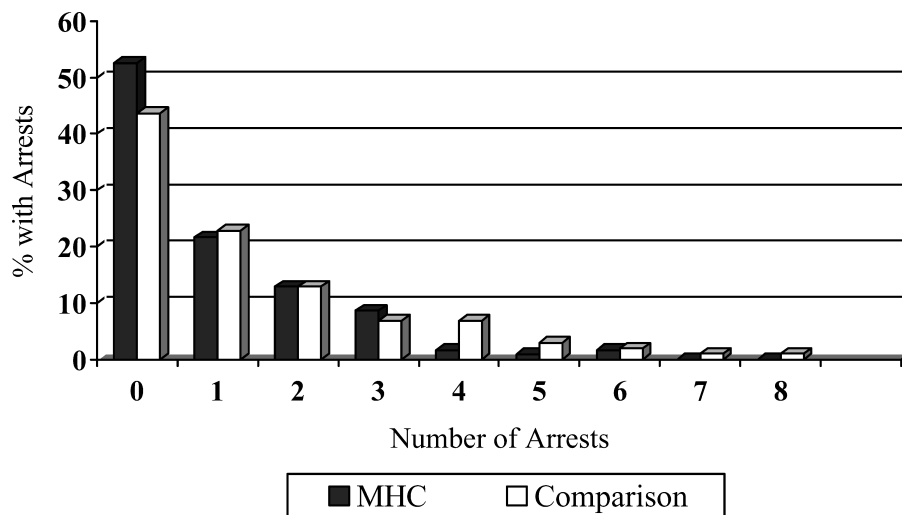


Figure 1. Arrests 1 year post study enrollment.

sample, these groups did not differ by age, race, gender, total BPRS score, or self-reported acts of aggression and violence at the intake interview (see Table 2).

Repeated measures analysis of variance showed that the mean number of arrests for each site significantly decreased from the 1 year pre enrollment to the 1 year post enrollment period ($F(1, 215) = 32.13, p < 0.001$). The mean number of arrests for each site was also significantly different ($F(1, 215) = 13.01, p < 0.001$), with the mean number of arrests higher in the comparison site. There was a decrease for MHC participants from an average of 1.50 arrests ($SD = 0.89$) one year before enrollment to 1.00 arrest ($SD = 1.34$) 1 year post enrollment. The decrease for the comparison site participants was from 2.17 ($SD = 1.50$) arrests one year before enrollment to 1.40 ($SD = 1.78$) arrests 1 year post enrollment. The site by time interaction was not significant ($F(1, 215) = 1.23, p = 0.27$). This suggests that the difference in the number of arrests pre-enrollment was not related to the number of arrests post-enrollment, although as with other analyses there is the possibility that low statistical power affected our ability to detect a significant interaction.

Time to Rearrest

Although the MHC clients returned to the community more quickly and were arrested at slightly lower rates than comparison court clients, it was possible that MHC clients reoffended more quickly after release. Therefore, survival analysis was conducted to compare the groups in terms of time to re-arrest. This involved plotting a figure in which the X axis represents the number of days that have elapsed until the first arrest during the time period and the Y axis represents the probability of "survival" to re-arrest. The probability of survival to re-arrest decreases over time as additional people in a sample are re-arrested.

The survival curves, shown in Figure 2, reveal that MHC participants had a slightly more favorable survival (i.e. were re-arrested *less quickly* after release) than

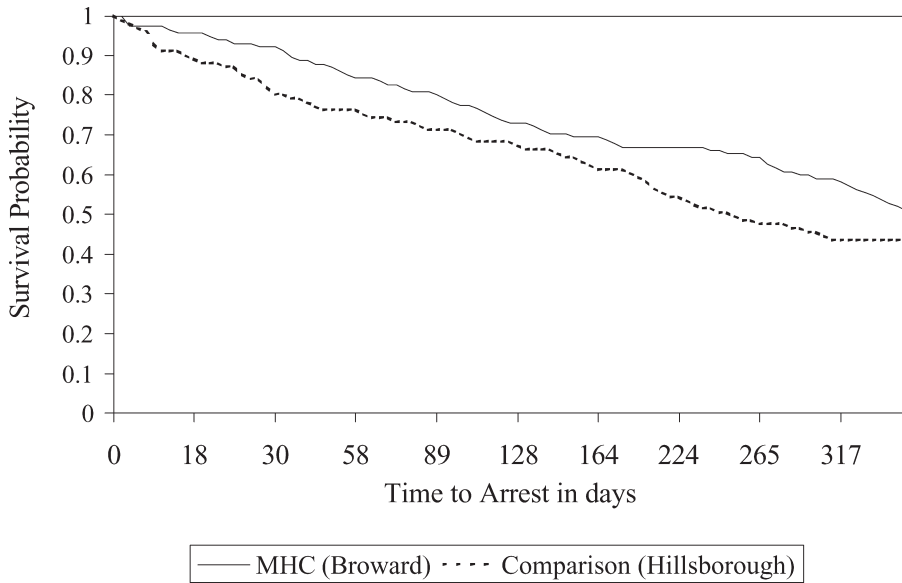


Figure 2. Survival curves for time to arrest by site.

those at the comparison site, although log rank statistics ($\chi^2 = 2.23$, $df = 1$, $p = 0.14$) indicated that this difference was not statistically significant.³ Further, Cox proportional hazard modeling (see Table 3), which adjusts for censoring and can include numeric covariates (one or more of which may be time dependent), indicated that number of arrests prior to the intake interview was the only covariate significantly associated with time to arrest ($\chi^2 = 21.10$, $df = 1$, $p < 0.001$).⁴ That is, individuals with more arrests during the year prior to study enrollment were re-arrested more quickly during the 1 year follow-up.

Table 3. Cox proportional hazard model

Variable	Beta	Hazard ratio	<i>p</i> value
County	0.281	1.32	0.14
Age	-0.005	0.99	0.36
Gender	0.103	1.11	0.59
Race	0.100	1.11	0.45
Number of pre-arrests	0.299	1.35	<0.001
BPRS score	0.006	1.01	0.53
Aggression	0.157	1.17	0.40
Violence	0.388	1.48	0.08

³Lack of statistical power due to low sample size may have been a factor in the lack of statistically significant findings, although the *p* value of 0.14 and the direction of the findings suggests a trend.

⁴People are censored if lost to follow-up or deceased. For these analyses no one was lost to follow-up because the data used were for statewide arrests (so in theory should have captured all arrests in Florida for all participants). Therefore, everyone was assumed to be in the study until the end of the follow-up period for the survival analysis, except for those who died during the study period. Four individuals from Broward and two from the comparison site were found to be deceased within 1 year after recruitment into the study. Data for these individuals was censored based on their date of death.

Time to felony level arrests was also tested using survival analysis. The average for time to felony level arrest was 314.9 days for MHC participants and 271.0 days for comparison site participants. However, this difference was not statistically significant ($\chi^2 = 0.207$, $df = 1$, $p = 0.64$).

Self-Reported Aggression and Violent Behavior

Attrition

At enrollment and at interviews conducted 4 and 8 months after enrollment, the modified MacArthur Community Violence Instrument was used to solicit participants' self-report of aggressive or violent behavior during the prior 3 months.⁵ Whereas all participants provided this retrospective report at enrollment, some participants were lost to attrition (did not participate in either the 4 or 8 month follow-up). Therefore, we first examined differences in pre-enrollment aggression and violence between the attrition group and those who participated in at least one follow-up interview.

No significant differences in self-reported levels of aggression or violence at the enrollment interview were found between those that were lost to follow-up and those found for follow-up. This suggests that (1) the defendants lost to follow-up did not differ with respect to the likelihood that they reported aggressive or violent acts at intake, (2) no differential attrition occurred across sites with respect to the likelihood that defendants reported aggressive or violent acts at intake, and (3) therefore, the simple unadjusted rates of aggressive and violent act across time are adequate to describe these variables over time.

Unadjusted Rates of Aggressive and Violent Acts⁶

Table 4 reports the percentage of participants who had at least one self-reported aggressive act (upper panel) or violent act (lower panel) for the three-month period prior to each of the three interviews (data columns 1–3) or across both follow-up interviews (last column).

Self-reported aggressive acts

Chi-square analyses comparing the proportions of individuals reporting aggressive acts revealed significant differences by site at intake (MHC 34.70%; comparison

⁵There was also a follow-up interview 1 month after enrollment. Because the retrospective 3 month period for reporting aggressive and violent behavior for this follow-up overlapped by 2 months with the retrospective period inquired about at enrollment, self-report data from the 1 month follow-up were excluded from these analyses.

⁶The term "unadjusted" was used to indicate that these results consist of separate chi-square analyses performed on available data from the 4 and 8 month interviews. Because we did not have a complete set of 4 and 8 month interviews for all participants, some individuals are included at each time period and some are included only for the time periods for which we have data (i.e. any combination of 4 and 8 month data). No controls for the number of observations were used in these analyses.

58.40%, $\chi^2 = 12.29$, $df = 1$, $p < 0.001$) with an odds ratio indicating a 2.64 greater likelihood of reporting aggression prior to the study for the comparison sample. The proportions of individuals between groups reporting aggressive acts at the 4 month and 8 month follow-ups were not significantly different. However, whereas self-reported aggressive acts decreased at the MHC site at 8 months, they increased at the comparison site at the 8 month time period. Although the prevalence of self-reported aggression decreased somewhat over the course of the study for both groups, this decrease was somewhat more pronounced in the comparison site sample. This more marked decrease for the comparison group may have been due in part to regression to the mean as well as a floor effect.

A 2 (site: MHC versus comparison) by 2 (time: 4 versus 8 month follow-up interview) repeated measures analysis of co-variance was conducted. Self-reported acts of aggression at intake were used as a covariate to control for the comparison site's significantly higher proportion of participants with self-reported acts of aggression as compared to MHC participants. There were no significant main effects or interactions, although limited statistical power due to the small sample size may have limited our capacity to detect small effects in this analysis.

Self-reported violent acts

Chi-square analyses comparing groups on the prevalence of individuals self-reporting at least one violent act were not significant at intake and 4 months or across follow-up periods combined. However, the groups did differ in self-reported violence at the 8 month interview (MHC 2.67%; comparison 10.94%, $\chi^2 = 3.90$, $df = 1$, $p = 0.048$). As the lower panel of Table 4 reveals, prevalence rates of self-reported violent behavior decreased across time for both groups, somewhat more so for the MHC participants. A 2 (site: MHC versus comparison) by 3 (time: enrollment versus 4 versus 8 month interview) repeated measures analysis of variance of self-reported acts of violence showed only this main effect for time ($F(2, 112) = 6.85$, $p < 0.01$). In sum, self-reported acts of violence decreased over time (see Figure 3). It is also evident in Figure 3 that self reported acts of aggression also decreased over time, but this was not evident in the analysis because self-reported aggression had to be used as a covariate (rather than a dependent variable).

Table 4. Percentage of respondents with at least one self-reported aggressive or violent act

	Intake	4 month	8 month	Any follow-up
		<i>Aggressive acts</i>		
MHC	34.70	17.95	14.67	16.95
Comparison	58.40*	14.49	21.87	20.79
Odds ratio	2.64	0.78	1.63	1.29
		<i>Violent acts</i>		
MHC	19.50	5.13	2.67	5.08
Comparison	17.80	8.70	10.94**	11.88
Odds ratio	0.90	1.76	4.48	2.52

* $\chi^2 = 12.29$, $df = 1$, $p < 0.001$.

** $\chi^2 = 3.90$, $df = 1$, $p = 0.048$.

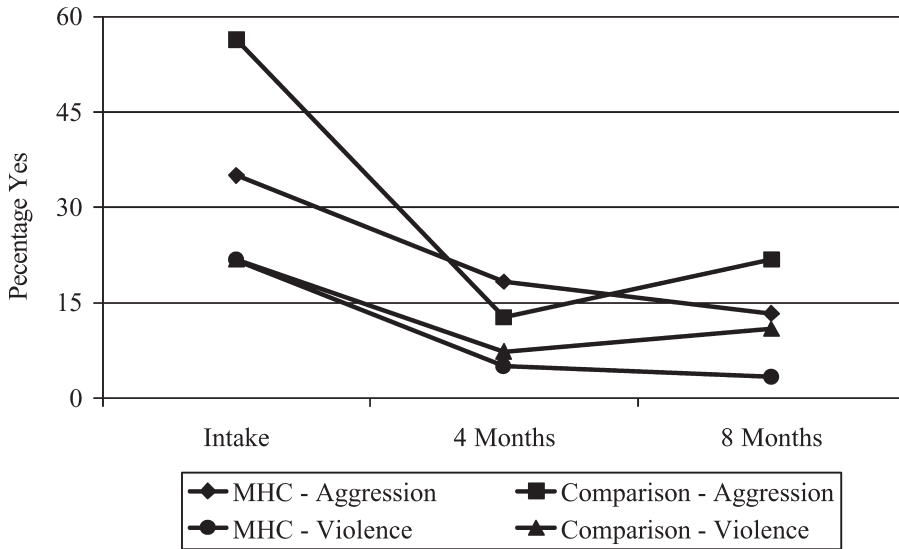


Figure 3. Prevalence of aggressive and violent acts over time by site.

DISCUSSION

Among the contextual factors that led to the creation of the Broward County Mental Health Court were (a) significant overcrowding at the Broward County jails and (b) large numbers of persons with mental illness residing in the jails who were not receiving adequate mental health services (De Groot, 1997). In creating the MH Court, the major objectives of the Task Force included (1) increasing the efficiency of the court by reducing days in jail for misdemeanants with mental illness, while (2) increasing their access to treatment services, but (3) without compromising public safety. We have previously reported the success of the MH court in accomplishing the second of these objectives. The present findings suggest that it has been successful in the others as well.

Attesting to the efficiency of the Broward County Mental Health Court, we found that its clients served minimum jail time (median = 3.00 days) for the index offense, which is consistent with our anecdotal data from observing the MHC extensively over several years. Time spent in jail associated with the index arrest for MHC clients in our study was significantly lower than that of similarly situated misdemeanant clients with mental illness in a comparison county with no mental health court (comparison site median jail days = 10.5–12, depending on the sample of data utilized), and substantially lower than the average reported number of jail days for defendants with mental illness in Broward County prior to the mental health court's existence (average length of stay = 23 days) (De Groot, 1997).

There is no indication in our data that the positive effects of the MHC were at the cost of public safety. In fact, the difference in arrest rates between sites slightly favored the MHC, although this difference was not statistically significant. The significant main effect for fewer arrests over time (fewer arrests during 1 year follow-up than during the year prior to enrollment) indicates reduced arrest activity for

both groups. In the present study, patterns of participant self-report data regarding aggressive or violent acts did not suggest significantly higher rates of problem behavior for the MHC sample.

The significant main effect for reduced arrests over time replicates a finding reported for the municipal mental health court in Seattle, although the county level Seattle mental health court sample obtained reduced booking rates whereas the control group for that court did not (Trupin & Richards, 2003). This highlights an important caveat regarding the findings from our study—our results may not necessarily generalize to other settings, given organizational and structural differences between the Broward County Mental Health Court and other mental health courts (Trupin & Richards, 2003). The Broward County Mental Health Court operates on a pre-adjudication basis and only takes cases with misdemeanor charges, with the additional exclusion of cases with charges of domestic violence and driving under the influences. For example, the prevalence of and issues specific to aggression and violence may be quite different for felony offenders and those with domestic violence charges. (Subsequent to the data collection for our evaluation, the Broward Mental Health Court has begun to include selected felony defendants with mental illness in a mental health court). Further, except for funds (from a variety of sources) to support a small number of residential transitional beds for MHC clients, the Broward MHC was not provided with any additional dedicated resources.

Other study limitations are also worth noting. There may have been inadequate statistical power to detect certain effects, which is important to consider in light of the context of the study findings. That is, no difference across sites in measures such as aggression were interpreted as meaning that the MHC court did not jeopardize public safety. This means that failure to detect an effect when one exists (Type II error) may have just as much impact on the policy implications of the data as the more typical concerns about reporting an effect where none exists (Type I error).

Comparisons across sites have value because they place the results within context. However, the study results should be interpreted with the knowledge that although participants were successfully matched on several key clinical and demographic variables, the groups differed in the average number of arrests prior to study enrollment (MHC 1.50; comparison 2.17) and percentage of members with at least one pre-enrollment self-reported act of aggression (MHC 34.70%; comparison 58.40%). Because previous criminal behavior is a significant risk factor for future criminal behavior, the non-equivalence of groups on these risk indicators suggests caution in interpreting our between-groups recidivism findings. The groups may also have differed on other variables not measured but key to the phenomenon studied, as is the case with all non-equivalent control group designs. For example, we did not measure judicial burden (docket case loads) across our two sites for judges handling misdemeanor cases involving mentally ill defendants. Hypothetically, a greater administrative burden in Hillsborough County might contribute to slower judicial processing and, therefore, a greater length of stay associated with index arrests for the comparison sample.

However, conclusions can be drawn with more confidence based on *pre- and post-intervention* comparisons within the Broward site. Here, our data show that there were fewer arrests from pre-enrollment to post-enrollment (1.50 pre to 1.00 post) for study participants and many fewer average days spent in jail (3 days) as

compared to historical data (23 days) for similar individuals prior to the creation of the MHC.

Ideally, we would have included data on time in county jails post study enrollment in additional analyses, beyond our investigation of time in jail associated with index arrests. This would have allowed us to account for time at risk for arrest for a more accurate analysis of survival. Further, it would have allowed us to compare the MHC and comparison site participants on days spent in jail pre and post enrollment to assess the efficiency goals of the court over a longer period of time (i.e. the Task Force goal of reducing days in jail for misdemeanants with mental illness). Although our efforts to obtain and use data about time in jail were extensive, we ultimately concluded that the quality of these data was very likely different across sites. Had the data been similarly flawed at each site, comparisons between sites would still have been possible. However, there were strong indications of differential data quality across sites that did not permit such comparisons (for example, at one site we conducted follow-up interviews in the community with several participants who, according to official records, were incarcerated at the time of those interviews and for most or all of the year). Nevertheless, we were able to use the data for analysis of jail time associated with the index arrest because our knowledge of the likely time of the index arrest, based on our recruitment experience and the dates of study enrollment, allowed us to identify the jail stay associated with index arrests to the extent necessary for the analysis.

This leads to an important issue relevant to the evaluation of mental health courts, whether internal evaluations conducted by the courts or larger empirical studies. Availability of complete and accurate arrest and jail and prison time data are essential for optimal analyses of recidivism. Although this may be stating the obvious, we found that some stakeholders involved in the system assumed that these data and other information relevant to the larger evaluation were recorded in the systems of the Clerk of Courts, the sheriff's departments and elsewhere with a level of accuracy and structured in the manner necessary for research.

Thus, as new mental health courts prepare to become operational, we recommend that data systems be designed with the idea of evaluating the court in mind. Core variables of interest should be identified and sources for the collection of these data should be identified. The accuracy of these sources should be evaluated. If these sources are not accurate, then other methods of collecting the information may need to be developed and/or a change in data systems suggested and implemented. Personnel should be identified to manage the collection of these data, keeping in mind workload issues and strength of skills related to working with such data. The data systems, core variables and logical personnel to involve in this effort will vary based on the stated core goals of the courts and specific, perhaps community specific, concerns of stakeholders.

With these limitations in mind, however, the present findings indicate that the Broward County Mental Health court has been successful in accomplishing the primary goals stated in the administrative order upon which the court was founded. Mental health court clients have been able to access mental health services to a greater degree (Boothroyd et al., 2003) and have experienced lower levels of coercion at their initial hearings (Poythress et al., 2002) than have similar defendants in a comparison jurisdiction where no MHC court exists. Although released to the community more quickly following arrest for their index offense, and thus

potentially at risk for a longer period of time than comparison site participants for behaviors that could put the community at risk, our data regarding outcomes related to aggression, violence, or rearrest indicate that this has not occurred. Rather, our findings suggest that the Broward MHC has been largely successful in accomplishing its diversion of clients into treatment without adversely affecting public safety.

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