

# Explaining Lifetime Criminal Arrests among Clients of a Psychiatric Probation and Parole Service

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This study examines the extent to which sociodemographic characteristics, clinical characteristics, substance abuse problems, and the array of lifetime criminal behavior may explain lifetime arrests among offenders supervised by the psychiatric probation and parole service. Three hundred twenty-five clients with new cases at a psychiatric probation and parole service in a large urban center were screened for major psychiatric disorders. They were also interviewed for sociodemographic characteristics, mental health treatment history, criminal behavior, and arrest history. Hierarchical block multiple regression analysis tested a model explaining lifetime arrests. After controlling for age and other demographic variables, the number of lifetime psychiatric hospitalizations and lifetime occurrences of mania diagnosis significantly explained lifetime arrests. The total model explained about 10 percent of the variance in lifetime arrests after controlling for opportunity variables, which explained 45 percent. The explanatory power of lifetime hospitalizations and mania support the contention that symptoms, rather than diagnosis, may be the most important clinical factor in explaining criminal arrest among persons with mental illness. Implications for psychiatric services include the development of effective jail diversion programs.

Since the advent of deinstitutionalization, there has been increasing concern about the criminalization of mental illness.<sup>1,2</sup> Evidence to date cannot establish a causal link between more restrictive admission

policies and increased arrest rates in this population.<sup>3</sup> However, research since 1965 has concluded that psychiatric patients are arrested at a higher rate than that of the general public, in almost all categories of crime.<sup>4-9</sup> One explanation proposed for this higher rate is that many sociodemographic and substance use factors associated with criminal behavior are also associated with serious mental illness.<sup>5, 10</sup> The research samples on which rates of arrest have been established among those with mental disorders have

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been public sector clients. Therefore, these samples tend to have higher proportions of young men and members of ethnic minority groups, which also reflects the characteristics of the subpopulation of those with major psychiatric disorders. Younger minority males are more likely to experience arrest than any other demographic group.<sup>5</sup> Hiday<sup>11-13</sup> has cautioned against being misled by the high arrest rates in these samples. Estimates from state hospital samples cannot account for the arrest rate among all persons with psychiatric disorders. High arrest rates among state hospital samples may be concentrated among a small segment of those with mental illness who cycle between both mental health and criminal justice systems, and consequently, these statistics do not reflect criminalization of the general population with mental illness.<sup>11</sup>

This line of reasoning does not account for the criminalization of those individuals with mental illness who have frequent, short hospital stays. The individual who, in a previous era, would have stayed for six months or longer in a state hospital is now often discharged, after stabilization of acute symptoms, in five days or less. If the hospital discharge plan is untenable, then it is reasonable to expect that such individuals may experience undue stress. Such stress may induce behavior that leads to arrest. This scenario is even more probable when one considers that those individuals who are more likely to be arrested tend to have characteristics linked to difficulties in treatment. Such characteristics are a history of antisocial behavior, substance abuse, and resistance to formal treatment.

Researchers who have investigated for explanatory factors of arrest among psychiatric patients have not found that a diagnosis of a mental illness is correlated with arrests, with the exception of substance abuse and antisocial personality disorders.<sup>8, 14-16</sup> Similarly, studies that examined criminal recidivism of psychiatric and nonpsychiatric offenders have not found mental illness related to re-arrest.<sup>17</sup> Factors that have been found to be associated with arrests and re-arrests among those with a mental disorders are virtually the same as for the general public. These factors fall into two categories: sociodemographic characteristics, such as age, race, gender, employment, and marital status; and criminal history, such as age at first arrest and number of prior arrests.<sup>18</sup> Research has consistently found that individuals who are younger, non-white, male, and of low socioeconomic status are more likely to be arrested.<sup>5, 8, 16</sup> It is also well established that those who have been arrested in the past are more likely to be arrested in the future than those with no arrest history.<sup>5</sup> The mental disorders that have consistently been found to correlate with criminal behavior are alcoholism, drug dependency, and antisocial personality.<sup>14-15, 19</sup> However, the predictive value of antisocial personality to criminal behavior has been questioned because of the tautological nature of these two concepts. A persistent history of antisocial behavior originating in childhood is required for this diagnosis, and an arrest history is commonly used as an indicator of this diagnostic category.<sup>5, 14</sup>

Information on the interaction of psychiatric factors and criminal arrest has

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significant implications for the development of strategies to more effectively and appropriately treat those with psychiatric disorders who become involved with the criminal justice system. To date, no research has examined the factors that explain the lifetime criminal arrest histories of those with mental disorders within the criminal justice system. Most research in this area has examined the rates or predictors of arrests among public psychiatric patients or psychiatric diagnoses or psychiatric histories among persons involved in the criminal justice system. As a part of a larger study that is investigating the incarceration/reincarceration of persons with major psychiatric disorders who are on probation or parole, the authors were offered an opportunity to examine the factors, including clinical ones, that may explain the lifetime arrest history of those designated as a psychiatric population involved in the criminal justice system. The present analysis examined lifetime criminal arrest histories of a population on psychiatric probation and parole in a large urban court system employing the sociodemographic characteristics, criminal history factors, and clinical psychiatric factors as explanatory variables.

The dependent variable is based on a self-report of lifetime arrests for any criminal charge. Previous related studies have tended to focus on violent behavior or on a history of arrest for violent crime. A number of recent studies have supported linkages between psychiatric disorder and violence,<sup>20, 21</sup> using arrests as indicators of violence. However, arrest should not be considered an empirical

referent for violence. Violence is the act of the perpetrator, and arrest is the act of authorities. The decision to arrest may arise from social objectives to control behavior, ensure public safety, or assert authority. These objectives may be unrelated to the extent or intensity of violence committed by the offender. Studies in this area are focused on three concepts that are often grouped together and that overlap to a great extent. These concepts are violence, criminal behavior, and criminal arrest. This study is focused on criminal arrests, and thus includes arrests for behavior that may not be violent. It plausibly includes false arrests and arrests for technical charges, such as violations of probation or parole stipulations. The study of lifetime arrests is important in public mental health because the research may indicate the extent to which the criminal justice system may be used to control symptomatic behavior in situations where appropriate mental health services were unavailable. In the present study, the lifetime arrest histories are examined among a sample of individuals who have all experienced at least one arrest. Thus, this study differs from previous work using birth cohorts or epidemiological studies, which sought to describe those who experienced arrest versus those who did not.<sup>20-22</sup> Furthermore, previous research employed hospitalization histories as an indicator of mental illness. The present study used research diagnostic screening techniques to determine specific psychiatric diagnostic categories.

Research design problems related to low base rates of arrest are not present in our study. Re-arrest rates among persons

who have experienced arrest at least once are relatively high. Consequently, this sample provides variance in lifetime arrests to be explained. Indeed, by targeting a sample of individuals already involved in the criminal justice system, the dynamics of how the justice system may be used to manage mental disorder can more readily be examined. Such a sample purposefully targets the subpopulation of individuals who are likely to experience arrest as a management strategy for mental illness. Thus, this sample provides an opportunity to test the hypothesis that mental health characteristics can explain lifetime arrest history after controlling for opportunity and other criminal history characteristics.

### Methods

**Setting** The present study samples persons who are assigned to psychiatric probation and parole (PPP) in a large urban center. The psychiatric probation and parole unit, because it is a specialized law enforcement unit rather than a clinical facility, does not diagnose or treat psychiatric disorders. Offenders are referred to the PPP units from a number of sources and for a variety of reasons, which include mental illness. Offenders may be assigned to this unit who do not have any psychiatric illness and who have never been in psychiatric treatment. Therefore, there is likely to be an optimum variance in psychiatric diagnoses and mental health treatment history as well as lifetime arrest history.

**Sample** Each subsequent new intake to PPP was approached for consent to participate in the study. New clients were

defined as those individuals who were new to PPP; those returning to the community from an imprisonment, but continuing to be supervised by PPP; or those current PPP supervisees who had acquired a new conviction and probation sentence.

A research worker was stationed daily at PPP to conduct screenings for eligibility to participate in a study examining incarceration of individuals with a major psychiatric diagnosis. In addition to taking referrals from officers, the research worker monitored the intake logs and the appointment sign-in sheet for new individuals to be approached for consent to participate in the screening portion of the study. One hundred eleven study participants who were approached refused consent for the screening. These refusers did not differ by age, ethnicity, gender, or the interaction of gender and ethnicity from those who consented. Sample recruitment began in February 1995. With 438 individuals approached, 327 individuals consented to screenings through July 1997. Complete data for 325 screenings were available for the present analysis.

At the initiation of data collection, PPP had 874 offenders being served by 10 probation officers. Twenty-seven percent were female, 70 percent were African-American, 3 percent Hispanic (there was a specialized Hispanic unit serving Spanish-speaking clients), and 1 percent Asian or other ethnic identity. As indicated by Table 1, the sample of 325 subjects for the present study appears representative of the current case load of PPP in terms of sociodemographic characteristics.

**Interviews** The screening interview

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**Table 1**  
**Sociodemographic, Clinical, and Arrest**  
**Background Characteristics of the Sample**

Variable	<i>N</i>	<i>n</i>	%
Ethnicity	325		
African-American		212	65.2
White		78	24.0
Hispanic/Latino		21	6.5
Asian/mixed/other		14	4.3
Male	325	243	74.8
Currently homeless	325	28	8.6
First arrest	325	69	21.2
No prior psychiatric hospitalization	324	124	38.2
Now on psychiatric medication	323	160	49.5
	<i>N</i>	<i>M</i>	<i>SD</i>
Age	322	34.62	9.63
Years of education	325	11.22	2.28
Number of times arrested	320	6.67	9.65
Age at first arrest	323	22.15	9.96
Age at first hospitalization	203	23.65	8.15

collected data on basic sociodemographic characteristics, psychiatric treatment history, and criminal history. Lifetime diagnosis based on the DSM-III-R was derived from the Quick Diagnostic Interview Schedule, or Q-DIS,<sup>23</sup> a computerized version of the lengthier Diagnostic Interview Schedule (DIS). The DIS is a highly structured standardized interview that was developed to make diagnoses by three systems, including the DSM-III-R, and it can be administered by clinicians or lay interviewers. It has been extensively used in a number of studies, including the Epidemiological Catchment Area study.<sup>24, 25</sup> The Q-DIS can be administered more quickly than the DIS, without sacrificing accuracy, by classifying respondents as cases or non-cases as

soon as it can be determined whether a diagnosis can be made. These screenings used the Depression, Mania, Schizophrenia and Antisocial Personality portions of the Q-DIS. The interviewer read Q-DIS items to the study participants and entered their responses directly into the computerized program using a notebook computer.

In the interview, participants were asked, "how many times have you been arrested in your life?" Research on self-report of arrests has been found to be reasonably valid.<sup>26</sup> Interviewed participants had been arrested an average of 6.67 (*SD* = 9.65) times in their lives, with a range from 1 to 77. However the distribution of lifetime numbers of arrests had an abnormally high positive skew (3.92, *SE* = .172) and a very high positive kurtosis (19.20, *SE* = .343). Therefore, the variable was transformed using a negative inverse<sup>27</sup> to produce a normal distribution in the variable (*skew* = -.75, *SE* = .172, *kurtosis* = -.85, *SE* = .343). This approach was preferable to collapsing a continuous variable into categories, which loses information. The negative inverse transformation preserves the directional interpretation of the variable in the analysis. In other words, lower numbers on the transformed variable still represent lower numbers of lifetime arrests.

As part of the screening interview, participants were also asked about their lifetime criminal behaviors. The construction of these items was based on the characterizations of the crime incident reports obtained from participants in a previous study.<sup>28, 29</sup> Each respondent in the present study was asked, "Have you ever done any of the following? Please tell me if

**Table 2**  
**Self-Reported Lifetime Criminal Behavior**

Variable	N	n	%
Shoplifted, pickpocketed, stole from another's belongings	325	164	50.5
Conned or tricked someone out of money	324	99	30.6
Wrote bad checks or used someone else's credit card	325	63	19.4
Forged a prescription	325	19	5.9
Damaged others property on purpose	324	131	40.4
Engaged in or solicited prostitution	325	72	22.2
Sold drugs	323	129	39.9
Worked for drug dealers	324	89	27.5
Carried a weapon	323	167	51.7
Beat, shot, or tried to injure someone	324	172	53.1
Broken into others property	323	81	25.1
Robbed someone in person	325	75	23.1

you have ever done these things or not, even if you were never arrested for them." Table 2 reviews these items and the frequency of positive responses to these items.

**Analysis** Hierarchical block multiple regression analysis was used to assess the impact of sociodemographic, clinical, and criminal behavior variables on lifetime arrest. Five blocks of variables were entered as follows. *Opportunity Variables* Respondent age and age at first arrest were entered first as a block to control for lifetime opportunity for number of arrests.

*Sociodemographic Characteristics* This block included gender, extent of education, ethnicity, and never married. These variables have all been demonstrated to explain arrests in prior research.

Ethnicity was entered as a dichotomization of African-American/not because this was the most frequent ethnic identification in the sample. Extent of education was employed as an indicator or proxy for socioeconomic status.

*Clinical Characteristics* Times hospitalized, whether the participant ever received any mental health treatment prior to first lifetime arrest, and Q-DIS results for mania, schizophrenia, depression, and anti-social personality disorder were entered.

*Substance Use* self-reported problem with alcohol, drugs, or both alcohol and drugs were entered.

*Criminal Behavior History* self-reports of ever participating in prostitution, assault, shoplifting, carrying a weapon, dealing drugs, working for drug dealers, burglary, conning or tricking someone out of money, or robbery were entered. These were the criminal behaviors reported by at least 20 percent of the sample. Also included in this block was the participant's self-report of ever having been arrested as a juvenile.

## Results

The correlation matrix presented in Table 3 indicates that many variables had correlations with the number of lifetime arrests, consistent with previous research studies on similar topics. In these bivariate correlations, a greater number of lifetime arrests are associated with being of the male gender, having less education and fewer psychiatric hospitalizations, diagnoses of mania, schizophrenia, or anti-social disorder, having an alcohol and drug problem, and having been arrested

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as a juvenile. A greater number of lifetime arrests was also correlated with not having received mental health treatment prior to the first lifetime arrest and with most of the crime activity items.

The results of the regression, however, indicate that many of these univariate correlations do not translate into significant effects in the multivariate model. As indicated by Table 4, the first block, showing opportunity control variables with age and age at first arrest, accounted for 45.5 percent of the variance in the dependent variable. An older respondent age and younger age at first arrest were associated with a greater number of lifetime arrests. The remainder of the analysis explained 10 percent of the additional variance.

The second block, sociodemographic characteristics, contributed significantly to the model as it was entered ( $F(4, 313) = 1.811, p < .01$ ). It added only 1.2 percent in explained variance. Among its variables, male gender was associated with more lifetime arrests ( $t = 2.44, p < .05$ ).

The third block, showing clinical characteristics, contributed 4.3 percent of explained variance as it was entered into the analysis ( $F(6, 307) = 4.509, p < .001$ ). Among the variables in this block, a greater number of lifetime arrests was associated with mania ( $t = 2.359, p < .05$ ) and number of lifetime psychiatric hospitalizations ( $t = 2.566, p < .05$ ). The fourth block, for self-reported drug and alcohol problems, did not add significantly to the explanatory power of the model as it was entered.

The fifth and final block, for criminal behavior, added significantly to the model as it was included ( $F(10, 294) =$

$2.912, p < .01$ ). It added 4.4 percent in explained variance. Among these variables, only involvement in prostitution ( $t = 2.406, p < .05$ ) and ever having been arrested as a juvenile ( $t = 2.082, p < .05$ ) were statistically significant.

## Discussion

This analysis indicates that the clinical characteristics that significantly explained a greater number of criminal arrests over the life course for persons who were on psychiatric probation or parole were mania and a greater number of lifetime psychiatric hospitalizations. It is notable that the negative relationship between lifetime hospitalizations and lifetime arrests in the univariate correlation matrix was reversed to a positive relationship in the regression model, which controlled for sociodemographic and clinical characteristics. Also notable were those characteristics that did not explain greater number of lifetime arrests in the final model. Neither substance abuse problems nor antisocial personality diagnosis were significant in explaining lifetime arrests. Among persons with mental illness on probation and parole, a greater number of lifetime arrests appeared to be associated with being male, being diagnosed with mania, and having an arrest history that began in the juvenile years.

Before attempting to understand the apparent incongruencies of the current report with previous literature or expectations, it is important to understand how the sample for this study differed from the samples for previous studies. All respondents in this sample were sentenced to probation and parole. Therefore, all had

**Table 3**  
**Correlation Matrix for Variables in Hierarchical Regression Model**

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Negative inverse of lifetime arrests	1.0												
2. Age	.16	1.0											
3. Age at first arrest in life	-.57	<b>.32</b>	1.0										
4. Gender (male)	<b>.27</b>	-.04	-.27	1.0									
5. Years of education	-.20	-.01	<b>.24</b>	-.01	1.0								
6. Never married	-.05	-.44	-.21	—	-.02	1.0							
7. African-American	.04	—	-.08	-.13	.05	<b>.16</b>	1.0						
8. Received mental health treatment prior to first arrest	-.31	-.08	<b>.40</b>	-.08	.14	.03	-.06	1.0					
9. Times hospitalized in life	-.21	<b>.18</b>	-.03		-.05	-.08	.02	.02	1.0				
10. Depression	.02	-.04	.10	-.10	-.13	-.12	-.16	.08	.14	1.0			
11. Mania	<b>.15</b>	-.01	-.02	.01	.08	—	-.11	.07	.13	<b>.34</b>	1.0		
12. Schizophrenia	<b>.19</b>	.06	-.13	—	-.14	.08	.08	-.05	<b>.20</b>	<b>.18</b>	<b>.18</b>	1.0	
13. Antisocial	<b>.24</b>	-.16	-.26	.11	-.16	.03	-.03	-.13	.05	<b>.29</b>	<b>.23</b>	.13	1.0
14. Self-reported alcohol problem	.03	.11	-.03	-.06	-.16	.07	-.05	-.01	-.04	.07	.06	.05	.03
15. Self-reported drug problem	.10	-.07	-.05	.04	—	-.02	-.08	-.06	.02	<b>.14</b>	.12	.08	.12
16. Self-reported alcohol and drug problem	<b>.16</b>	.02	-.12	.10	-.13	-.04	-.01	-.04	.10	<b>.15</b>	.02	<b>.16</b>	<b>.16</b>
17. Shoplifted	<b>.24</b>	-.13	-.20	.10	.14	.13	-.06	-.12	.03	.14	<b>.18</b>	<b>.12</b>	<b>.30</b>
18. Conned or tricked someone out of money	<b>.28</b>	-.07	-.25	.14	-.11	-.02	-.06	-.12	.05	<b>.16</b>	<b>.23</b>	.10	<b>.40</b>
19. Sold or dealt drugs	.27	-.20	-.26	.18	-.17	.02	-.10	-.07	.02	<b>.15</b>	.10	.11	<b>.25</b>
20. Worked for drug dealers	<b>.24</b>	-.17	-.24	.10	-.18	.03	-.02	-.06	.01	<b>.16</b>	.13	<b>.16</b>	<b>.18</b>
21. Carried a weapon	<b>.26</b>	.01	-.27	<b>.15</b>	-.12	-.02	.02	-.06	.09	.07	.06	.11	<b>.22</b>
22. Beat, shot, or tried to injure someone	<b>.23</b>	-.04	-.21	.08	-.02	-.02	-.01	-.04	-.03	.14	.14	.10	<b>.29</b>
23. Burglarized someone else's property	<b>.37</b>	-.02	-.30	<b>.22</b>	-.19	.04	-.06	-.09	.08	.05	.13	.06	<b>.30</b>
24. Robbed someone	<b>.26</b>	-.16	-.31	<b>.23</b>	-.19	.02	.03	-.07	.09	.12	.07	.02	<b>.33</b>
25. Engaged in or solicited prostitution	<b>.21</b>	.10	-.02	-.01	-.01	-.09	-.02	-.03	.12	<b>.15</b>	.08	.12	.14
26. Arrested as a juvenile	<b>.49</b>	-.07	-.62	.21	-.20	.01	.03	-.27	.01	.03	.01	.04	<b>.22</b>

(continues)

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Table 3  
(Continued)

	14	15	16	17	18	19	20	21	22	23	24	25
14. Self-reported alcohol problem	1.0											
15. Self-reported drug problem	-.11	1.0										
16. Self-reported alcohol and drug problem	-.13	-.13	1.0									
17. Shoplifted	.05	.14	.18	1.0								
18. Conned or tricked someone out of money	—	.22	.13	.36	1.0							
19. Sold or dealt drugs	-.04	.20	.19	.30	.39	1.0						
20. Worked for drug dealers	-.05	.19	.22	.29	.36	.66	1.0					
21. Carried a weapon	—	-.11	.13	.15	.28	.23	.25	1.0				
22. Beat, shot, or tried to injure someone	.09	-.02	.08	.17	.23	.26	.23	.34	1.0			
23. Burglarized someone else's property	.01	-.02	.22	.37	.36	.22	.21	.20	.30	1.0		
24. Robbed someone	-.11	.09	.23	.34	.32	.32	.26	.31	.30	.45	1.0	
25. Engaged in or solicited prostitution	-.01	.17	.22	.20	.18	.14	.09	.12	.13	.19	.08	1.0
26. Arrested as a juvenile	.03	.09	.09	.14	.29	.17	.14	.20	.20	.28	.30	.02

Italic,  $p < .05$ ; boldface italic,  $p < .01$ ; boldface,  $p < .001$ ; —, absolute value of correlation  $< .01$ .

experienced arrest. This circumstance differs from a number of previous studies that compared persons who had been arrested with those who had not. Another difference is that this study sought to explain arrests for any crime, not just violent crime. Much of the previous literature has focused on violence and arrests for violence. The substantive interest in the present study is the lifetime experience of arrest for any reason, including possible management of psychiatric symptoms.

As in prior research,<sup>30</sup> inclusion of antisocial personality diagnosis and criminal behavior in the analysis resulted in nonsignificant results for substance abuse variables. These results differ from Abram and Teplin's study.<sup>30</sup> This incon-

sistency could be explained by the high correlation between antisocial disorder and age at first arrest, because an antisocial diagnosis requires antisocial behavior in younger years. It may also be explained by the inclusion of self-reported lifetime crime behaviors, which include drug-related criminal behavior. However, only one of these criminal behaviors, prostitution, was significantly associated with lifetime arrests in the final model. Another explanation for these differing results is that because the present analysis sought to explain all arrests and not simply violent arrests, illegal behaviors associated more with economic survival than with antisocial disorder played a role in the lifetime arrests variable.

Lifetime arrests were positively associ-

**Table 4**  
**Regression on Number of Lifetime Arrests (negative inverse)**

Variable	Standardized Betas at Each Step				
	1	2	3	4	5
Age	.386***	.362***	.343***	.347***	.324***
Age at first arrest	-.696***	-.653***	-.605***	-.602***	-.485***
Male gender		.107*	.113**	.106*	.088*
Years of education		-.047	-.041	-.042	-.026
African-American		.019	.035	.038	.043
Never married		-.031	-.023	-.019	-.013
Depression			.037	.025	.004
Mania			.105*	.106*	.092*
Schizophrenia			.026	.016	.012
Antisocial			.069	.061	.016
Number psychiatric hospitalizations			.107*	.104*	.105*
Received mental health treatment prior to first arrest			-.040	-.036	-.039
Alcohol problem				-.005	-.016
Drug problem				.061	.021
Alcohol and drug problem				.052	-.006
Ever shoplifted, pickpocketed, stolen					.057
Ever conned or tricked for money					-.033
Ever sold drugs					.068
Ever worked for drug dealers					.051
Ever carried a weapon					.014
Ever beat, shot, or tried to injure					.038
Ever broken into another's property					.084
Ever robbed someone in person					-.024
Ever engaged in or solicited prostitution					.103*
Ever arrested as a juvenile					.112*
<i>R</i> <sup>2</sup> change		.012	.043	.005	.044
<i>F</i> ( <i>df</i> ) for change		1.811** (4,313)	4.509*** (6,307)	1.076 (3,304)	2.912** (10,294)
<i>R</i> <sup>2</sup>	.455	.467	.510	.515	.559
<i>F</i> ( <i>df</i> )	132.13*** (2,317)	45.702*** (6,313)	26.643*** (12,307)	21.545*** (15,304)	14.905*** (25,294)

*N* = 320.

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

ated with lifetime psychiatric hospitalizations. Previous studies have treated psychiatric hospitalizations more as a methodological problem than an explanatory variable. The logic was that individuals with mental illness who experience more hospitalizations may have fewer arrests as an artifact of lost opportunity for

arrest. Thus, arrest rate variables were structured to account for the lost opportunity. In the present analysis, the negative bivariate correlation between lifetime arrests and lifetime psychiatric hospitalizations ( $-.21, p < .001$ ) noted in Table 3 supports this logic. It has been previously noted, however, that increased ar-

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rests may represent an increased use of both hospitals and jails for the treatment of a difficult-to-reach subpopulation of persons with serious mental illness.<sup>31</sup> Therefore, lifetime numbers of hospitalizations or rates of hospitalizations may be an important explanatory variable for lifetime arrests and rates of arrest, indicating the use of jails to manage psychiatric symptoms. Consequently, in the present study, lifetime psychiatric hospitalizations are conceptualized as a clinical characteristic rather than as an opportunity indicator.

As noted in Table 3, lifetime number of hospitalizations was also significantly correlated with depression (.14,  $p < .05$ ), mania (.13,  $p < .05$ ) and schizophrenia (.20,  $p < .001$ ). However, neither depression nor schizophrenia contributed to explaining lifetime arrests. Note also that depression and mania are correlated (.34,  $p < .001$ ). Given that mania significantly contributed to explaining lifetime arrests, manic episodes may be related to depression. An interaction term for mania and depression was added to the present model to explore this possibility. It did not contribute explanatory power and thus was trimmed from the model.

The fact that hospitalizations contributed to explaining lifetime arrests when controlling for diagnoses suggests support for recent findings explaining violence among persons with mental illness.<sup>20, 32, 33</sup> These researchers found that psychotic behavior, rather than diagnosis of a psychotic disorder, was a more important predictor of violent behavior. In the present analysis, the number of hospitalizations could be interpreted as an

indicator of the number of acute episodes. Consequently, individuals with a greater number of acute episodes are more likely to experience a greater number of arrests. These findings provide further support for the occurrence of symptoms, not the categorical disorder, explaining arrests. It may be more appropriate to speak of the criminalization of symptomatic behavior rather than the criminalization of the mentally ill.

This research substantiates the need for effective engagement in psychiatric treatment for probationers and parolees who have mental illness. Such treatment should closely monitor symptoms and be effectively linked to accessible treatment resources so that the unnecessary use of criminal arrest to control deviant behavior among persons with mental illness can be curtailed. Such treatment also needs to protect the rights of individuals to govern the course of their treatment.<sup>34</sup>

Among such treatment strategies, jail diversion services have received little rigorous attention in the research literature. Effectiveness studies of jail diversion studies would provide information for planning and implementing services for individuals who come in contact with the criminal justice system. Such diversion services could target individuals who experience arrest or who are diverted from re-arrest. Individuals can then be assisted in receiving adequate treatment. Furthermore, diverted individuals can learn to recognize symptoms which, in their past, have tended to lead to legal entanglements. Other service models include intensive case management<sup>28, 29, 35</sup> and intensive supervision probation and

parole.<sup>36</sup> All of these service programs would include a clinical treatment focus. The intent of diversion programs is to provide appropriate mental health treatment to those with psychiatric illness who become entangled with the criminal justice system. In all of these services, care should be taken that monitoring be accompanied by effective treatment and rehabilitation. Prior research indicates that monitoring intensive services without effective treatment or rehabilitation could enhance, rather than reduce, the likelihood or criminal recidivism.<sup>28, 29, 36</sup>

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