

# An Analysis of Police Referrals to 10 Psychiatric Emergency Rooms

Bruce B. Way, M.A., Mary E. Evans, Ph.D., and Steven M. Banks, Ph.D.

Data were collected on all psychiatric referrals to 10 emergency rooms in New York State during a 72-hour period in early December 1988. Overall, 30 percent of the 362 cases were brought by the police while the 10 emergency room percentages referrals varied from 10 to 53 percent. As compared with nonpolice referrals, police cases were as likely to be rated by clinicians as currently having psychotic symptoms, having a severe mental disorder, currently using substances, having a major mental illness diagnosis, and/or being referred to the emergency room for threatening to do harm or actually harming self. Police cases were more likely than nonpolice referrals to be male, to be referred to the emergency room due to impaired judgment or dangerous behavior to others, to be admitted to a psychiatric inpatient setting, and/or to have a longer length of stay in the emergency room. In addition, at municipal hospitals only, police referrals were more likely to be assaultive in the emergency room and/or not have payment resources. A logistic regression differentiated police cases from nonpolice cases on dangerous behavior to others and impaired judgment as reasons for referral, payment resources in municipal hospitals, and gender but not on any of the mental disorder variables. Policy implications for training and access to pretransport information and consultation are discussed.

Police play a major role in the initiation and delivery of mental health services in the community.<sup>1-6</sup> Police are relied on by community members for these services partly due to a lack of alternatives,<sup>4</sup> especially for persons who may resist.<sup>3</sup> Once contact with a person with a mental disorder has been made, the police can choose among several alternative dispositions.<sup>6</sup> A large portion of this type of police involvement is characterized

by no violation of the penal code. Even in cases that involve minor criminal violations, police have discretion to seek psychiatric assistance rather than arrest. Bonovitz and Bonovitz<sup>2</sup> found that 53 percent of the police calls involving a person with emotional disturbance did not include a penal law violation, and in those calls involving a violation of the penal code, only 13 percent resulted in an arrest.

One major psychiatric option for police is transporting the individual to a psychiatric emergency room (PER) or psychiatric hospital. Bonovitz and Bonovitz<sup>2</sup> found that in 34 percent of

---

Bruce B. Way and Dr. Evans are affiliated with the Bureau of Evaluation and Services Research, New York State Office of Mental Health. Dr. Banks is affiliated with the Bureau of Planning Assistance and Coordination, New York State Office of Mental Health, 44 Holland Avenue, Albany, NY 12229.

the police calls involving persons with emotional disturbance, the client was taken to a mental hospital. Similarly, Pogrebin<sup>4</sup> found that psychiatric hospitalization was chosen by police for 43 percent of the mental health calls. Cohen and Marcos<sup>7</sup> have commented that for law enforcement personnel the psychiatric emergency room has become "the place of first resort for the indigent mentally ill" (p. 198).

Police are a major referral source to the PERs with percentages of referrals varying from 7 to 34 percent.<sup>7-13</sup> Additionally, the portion of all psychiatric emergency room presentations brought by police appears to be rising. The proportion of referrals brought by police in New York City rose from 16 percent in 1983 to 22 percent in 1989.<sup>7</sup>

Also, over the last several years there has been a large increase in the absolute number of police referrals to psychiatric emergency rooms. In New York City the number of people involuntarily transported by police to general hospitals for psychiatric evaluations rose from 1,084 in 1976 to 17,237 in 1985.<sup>8</sup>

Due to the substantially increasing volume of police referrals, it is important to examine the nature of these clients. Not all cases brought to the PER by police may be judged appropriate by clinicians or PER administrators. Steadman *et al.*<sup>11</sup> in a small study (14 police cases) of a general hospital emergency room concluded that police may be referring clients with less serious mental disorders and, therefore, less appropriate clients. Further, the police cases may strain PER resources since these clients

may take longer to evaluate due to clients' low motivation, inability to communicate,<sup>14</sup> and/or denial of their mental illness.<sup>3</sup>

Few studies have examined the characteristics of police referrals to emergency rooms, and these studies are contradictory. Steadman *et al.*<sup>11</sup> found that police referrals, as compared with non-police referrals, to a New York City hospital were less likely to be psychotic, more likely to be classified as having a mild mental disorder, more likely not to be admitted to an inpatient setting, and more likely to be discharged without referral to outpatient care. Further, Steadman *et al.*<sup>11</sup> found that police referrals were younger, more often female, and four times more likely to have displayed violent behavior. The difference on dangerous behavior was attributed to evaluator bias, i.e., clients accompanied by police may be more likely to be classified as violent by PER staff.

In contrast, more recent examinations of police referrals to psychiatric emergency rooms found police referrals to have more or as serious mental disorders. McNeil and associates<sup>12</sup> compared 108 police referrals to a San Francisco emergency room with referrals from other sources. They found that in comparison with nonpolice referrals, the police cases were older, had more severe Global Assessment Scores, were more likely to display violent, but not suicidal, behavior before coming to the emergency room, but had similar diagnoses and were equally likely to be hospitalized. Sales<sup>13</sup> compared 62 police cases with other referrals in a Cincinnati emer-

## Analysis of Police Referrals

agency room and found that the police cases had similar diagnoses, were more likely to be male, were more likely to be assessed as dangerous to self or others but not suicidal, and were much more likely to be hospitalized.

Whereas the two more recent studies provide data regarding one hospital, the current study allows an examination of police referrals in 10 hospitals. Consistent findings across many sites adds confidence to the results. The opportunity to examine this issue across several hospitals occurred in response to a legislative request for data to inform the development of a new program, Comprehensive Psychiatric Emergency Program (CPEP), to be sponsored by the New York State Office of Mental Health.

### Method

The purposive sample comprised 10 urban psychiatric emergency rooms (PERs) in New York State. Eight of the hospitals were in New York City, and two were in upstate urban cities. Five of the hospitals were voluntary, and five were municipal.\* The sample was comprised of all clients presenting for service at these hospitals during an 72-hour period in early December 1988. Most of the samples included one whole (24 hour) weekend day or extended into early Sunday morning terminating before 6 a.m. One sample included all of Saturday and Sunday. All samples were completed prior to December 12, 1988,

\* Voluntary hospitals are privately held and usually have discretion regarding to whom they can provide service. Municipal hospitals are operated by government entities and usually must serve all clients brought regardless of payment resources.

minimizing any potential holiday effects.

A special data form, completed by the examining physician, included information concerning the presentation date, time, gender, ethnicity, living arrangement, source of referral (who brought the client), reason for referral, presence of assaultive behavior in the PER, DSM III-R diagnosis, presence of current psychotic behavior, seriousness of the mental disorder, current substance use, prior psychiatric hospitalization history, disposition, services provided in the PER, waiting time before evaluation, and waiting time before disposition. Several variables such as currently psychotic, severity of mental illness, and diagnosis were clinician assessments. Psychiatrists employed usual and customary procedures in establishing DSM III-R diagnoses. For most variables fewer than five percent of the cases had missing data, but almost 40 percent of the cases were missing data concerning prior inpatient hospitalizations.

There were 10 possible reasons for referral identified on the form. They were: a) loss of a loved one, b) patient ceased medication, c) loss of housing, d) destroyed property, e) danger to self—actual harm, f) danger to self—impaired judgment, g) danger to self—threat, h) danger to others—actual harm, i) danger to others—threat, and j) other. In addition, combinations of the dangerous behavior referral reasons (d-i) were created for use in the analysis.

This data set has previously been used to examine psychiatric admission decision making.<sup>15</sup>

During the sample period, 368 clients were seen in the PERs. Six did not have a referral source listed and were dropped from the analysis, leaving 362 cases. Thirty percent of the referrals were brought by the police with variability among hospitals from 10 to 53 percent. Thirty percent of the referrals to municipal hospitals were from police compared with 24 percent of the referrals to voluntary hospitals. Other referral sources included self (34%), family (15%), mental health organization (4%), medical emergency room (3%), physician (2%), other psychiatric emergency room (1%), and other (11%).

### Results

Univariate comparisons between the police cases and cases referred by all other sources, as well as, the results of chi-square (Yates' correction or Fisher's exact test) or *t*-test statistical tests are presented in Table 1. A modified Bonferroni procedure<sup>16</sup> was used to adjust the observed *p* values, so that the .05 level of statistical significance was preserved. This was necessary due to the numerous univariate comparisons. These data presented in Table 1 were pooled across all 10 hospitals, however, to examine if the effects were consistent between municipal and voluntary hospitals; and among hospitals in general, Breslow-Day tests for homogeneity were conducted for nominal variables. For interval level variables hospital interaction terms were created and tested with general linear model procedures.

Clients brought by the police to the emergency room were more likely to be

male (72% versus 55%), have a dangerous behavior as a reason for referral (78% versus 46%), be admitted to an inpatient setting (48% versus 30%), and to have longer time intervals between the beginning of the assessment and disposition (9 versus 5 hours) and from arrival to disposition (11 hours versus 7 hours). Two of the three dangerousness to self referral reasons, actual harm and threat, did not differentiate between police and nonpolice cases while danger to self—impaired judgment (34% versus 16%) did.

Police cases were similar to nonpolice cases in their ethnic profile, use of alcohol/drugs, and mean age as well as on *all indicators of mental disorder*. Specifically, police cases were as likely as nonpolice cases to have mental disorders rated as moderate or severe, be rated as currently psychotic, as having a major mental illness diagnosis, and having a prior mental hospitalization.

The type of hospital, municipal or voluntary, significantly mediated the relationship between police/nonpolice referrals on three variables: loss of housing as a referral reason, assaultive behavior in the PER, and lack of payment resources. Lack of housing was more likely to be a referral reason of police cases to voluntary hospitals but less likely a reason for police cases referred to municipal hospitals; however, neither relationship within hospital was significant. At municipal hospitals, police cases were more likely to be assaultive in the PER (19% versus 2%), and to lack resources for payment (79% versus 55%), but the

**Analysis of Police Referrals**

**Table 1**  
**Univariate Analysis of Police and Nonpolice Referrals at 10 Psychiatric Emergency Rooms**

	Referral Source		Statistical Significance <i>p</i> > Value <sup>a</sup>
	Police (n = 107) %	Other (n = 255) %	
Male	72.0	54.9	.005
White	37.7	37.3	NS
Hispanic	18.9	27.8	NS
Current substance abuse	56.2	45.9	NS
Mean age	34.0	34.2	NS
Reason for referral			
Loss of loved one	3.7	6.4	NS
Ceased medications	18.7	19.6	NS
Destroy property	13.1	3.2	.001
Danger to self			
Actual harm	8.4	8.0	NS
Impaired judgment	33.6	16.0	.001
Threat	15.9	18.4	NS
Danger to others			
Actual harm	11.2	2.4	.005
Threat	27.1	13.6	.005
Other	13.1	24.3	NS
Any dangerous behavior	77.6	46.4	.00001
To others	38.3	15.6	.00001
To self	52.3	38.8	NS
Actual harm	18.7	10.0	NS
Potential <sup>b</sup>	60.7	40.0	.001
Seriousness of mental disorder			
None/mild	24.5	30.2	
Moderate	50.0	50.0	
Severe	25.5	19.8	NS
Currently psychotic	42.3	31.7	NS
Admitted to inpatient setting	47.6	30.3	.005
Diagnosis DSM-III-R			
Major mental illness <sup>c</sup>	51.0	51.0	NS
Schizophrenia	31.4	27.8	NS
Major mood disorder	12.7	15.4	NS
Substance disorder	40.2	32.4	NS
Adjustment disorder	17.6	12.0	NS
Type of hospital			
Voluntary	29.0	38.4	
Municipal	71.0	61.6	NS
Prior psychiatric hospitalization	36.5	38.9	NS
Mean wait between arrival and beginning of assessment	2.2	2.5	NS
Mean wait between beginning of assessment and disposition	8.8	4.7	.005
Mean wait between arrival and disposition	10.8	6.9	.01

**Municipal/Voluntary Hospital Interaction<sup>d</sup>**

	Municipal			Voluntary		
	Police (n = 76) %	Other (n = 157) %	<i>p</i> > Value <sup>a</sup>	Police (n = 31) %	Other (n = 98) %	<i>p</i> > Value <sup>a</sup>
Assault in emergency room	18.7	2.0	.000	0.0	3.1	NS
No insurance	78.6	54.7	.005	50.0	54.2	NS
Loss of housing	3.9	11.2	NS	12.9	4.1	NS

<sup>a</sup> Chi-square or *t*-test; NS = *p* > .05 adjusted by a modified Bonferroni procedure.

<sup>b</sup> Includes threatening behavior and impaired judgment.

<sup>c</sup> Includes schizophrenia, major mood disorders, and psychotic disorders not elsewhere classified.

<sup>d</sup> For categorical data the Breslow-Day tests for homogeneity of the odds ratios were examined. For interval level data the significance of the interaction term (type of hospital/brought by police) was examined.

relationships were not present at voluntary hospitals.

None of the single hospital Breslow-Day tests or interaction terms were significant.

Stepwise logistic regression analyses were conducted using SAS<sup>17</sup> software to further understand the difference between these types of referrals. Such multivariate analysis permits the examination of joint and independent effects of each independent variable. Logistic regression was chosen as it permits the utilization of skewed distributions of dichotomous dependent and nominal independent variables, and makes no assumption concerning the normality of the distributions.<sup>18</sup> In the logistic regression, separate indicators for the nominal variables such as diagnosis were created. At each step in logistic regression, the one variable that reduces the most unexplained variance is selected. Except prior inpatient hospitalization, all variables in Table 1 and the interactions with class of hospital were examined with logistic regression. Prior hospitalization was dropped due to the large quantity of missing data.

Five variables significantly entered a logistic regression model that distinguished police cases from nonpolice cases. These variables in the order of stepwise entry and their respective log odds were: 1) payment resources/municipal hospital interaction (2.3 log odds); 2) danger to self—impaired judgment (2.6 log odds); 3) danger to others—actual harm (4.5 log odds); 4) danger to others—threat (2.4 log odds); and 5) gender (male) (1.8 log odds). Log odds

indicate the relative importance of the variables and are easily manipulated. For example, compared with no effect (log odds equal 1.0), a client brought to a PER due to danger to others—actual harm was 4.5 times more likely to have been referred by the police. Further, individual covariates can be aggregated by multiplication. For example, a male (1.8) referred due to danger to others—threat (2.4) would have a combined probability of being brought by the police of 4.3 times greater than average.

### Discussion

The analysis indicated that police cases were as psychiatrically disturbed as referrals from other sources. There were similar percentages of police and nonpolice referrals on all the psychiatric disability indicators in the univariate analysis, and none of these variables entered a logistic model that differentiated the police cases from other referral types. Therefore, when compared with clients from other referral sources, the police referred clients had as serious mental disabilities.

Police referrals to psychiatric emergency rooms are more likely to be judged by clinicians to have been referred due to behavior that was dangerous to others or to have impaired judgment, and this led to a higher percentage of police cases being admitted to inpatient care. The fact that police referrals are more likely to be judged as dangerous may make sense as citizens frequently call police to control threatening behavior in the community that they feel they cannot control, whereas other referral methods may

### Analysis of Police Referrals

be available for persons with mental illness displaying deviant but nonviolent behavior.<sup>3,4</sup> However, assuming that these clinician judgments are correct, emergency rooms may not be well equipped in terms of staff expertise, physical environment, or other resources to deal with a large volume of dangerous persons.<sup>8</sup> Staff may benefit from specialized training in the assessment, prevention, and treatment of violence. Such training of psychiatric inpatient staff has been shown to reduce the risk of assault on staff.<sup>19</sup> Training of staff may also reduce risk of injury to all clients, including clients not identified as dangerous.

However, it is important to recognize that dangerousness is a clinical judgment and therefore could be subject to bias. Police cases may be judged by emergency room staff as more dangerous, not by objective standards, but simply due to the presence a police officer. Accompaniment by others including the police has been shown to have an effect on client disposition,<sup>20</sup> and studies have reported differences in clinical judgment among emergency room clinicians.<sup>21,22</sup>

In addition to dangerousness, many of the variables in this study such as currently psychotic are also clinician judgments. These judgments may be hard to reproduce from objective data. Underlying these judgments are numerous behavioral and organizational cues. Further, the temporal order of judgments can be hard to ascertain. Unknowingly, the clinician may decide for other reasons to admit a police referral and moments later make judgments that

correspond with legal admission requirements according to New York State statute.

Much work remains to be done to clarify the components of clinical judgments. Exposing variables underlying judgments may improve decision making since it gives clinicians an opportunity for inspection, improvement, and revision.<sup>23</sup> Mulvey and his associates<sup>20,24,25</sup> are working toward understanding these clinical judgments. They have been using more precise definitions of aggressive behavior and are comparing clinician judgment on 7-point Likert scales with transcripts of emergency room presentations. Other researchers<sup>26,27</sup> are investigating the reliability of DSM-III-R diagnoses, and their findings indicate that the use of semi-structured interviews by clinicians seems to improve reliability.

Further, our data seem to support the findings of Sheridan and Teplin<sup>14</sup> that police cases stay longer in the emergency room. The factors related to this increase in time are worthy of investigation. Additional security procedures and attempting more extended record reviews may be issues. An important implication of these findings for the mental health system is that if the percentage of police cases continues to rise, emergency room resources may need to be increased to handle the additional time these cases take.

In a comprehensive system of emergency care, two other services may be useful for police. They are the provision of off-site mental health assessments<sup>28-30</sup> and the provision of pretransport patient

information. Gillig *et al.*<sup>28</sup> comment that although "as law enforcement officers, respondents felt competent to decide whether an individual met the legal criteria for emergency detention in a psychiatric facility," (p. 664) they felt that additional information regarding the client, such as history of suicide and violence, and current treatment, would be helpful. Pogrebin<sup>4</sup> found that if police know the person is in treatment, such as having a case manager, the client is not transported to the PER. However, the hospital needs better access to records as well. It was noted in the current study that for 40 percent of the sample prior inpatient history even in their own hospital was unknown. This varied among hospitals with lowest having only seven percent unknown while another had 80 percent unknown.

In the future, information on treatment and sentinel behaviors may be more readily available to PER staff and the police as PERs begin to automate their clinical records. Automation of information has been implemented in psychiatric emergency rooms in the Bronx, New York,<sup>31</sup> and is being developed in the Office of Mental Health's Comprehensive Psychiatric Emergency Program (CPEP) initiative. This automation has been recognized as extremely valuable to PER staff.<sup>8</sup>

Mobile crisis teams also are an integral component of the new CPEP model as well as other comprehensive emergency service models. These teams can respond to police requests for on-site assessments.

The sample in this study was drawn

in early December and is expected to be representative of most other parts of the year. It may be speculated, however, that extremely cold temperatures such as those that occur in February could influence police behavior to transport less serious and less dangerous mentally ill persons to emergency rooms than other parts of the year. However, extreme cold temperatures are not common in early December in the cities where our 10 hospitals were located.

The degree and availability in each community of resources other than psychiatric emergency rooms to which the police can refer clients with mental illness could have some impact on the overall referral patterns of police to the PER. Although we collected no information on this variable, we did find that consistently over 10 different hospitals that the police are the major source of referral of dangerous clients to the PER. This finding may be generalizable to most locales regardless of community resources.

#### Acknowledgment

The authors wish to acknowledge the useful comments and suggestions made by David L. Shern, Ph.D., and Judith Cox.

#### References

1. Bittner E: Police discretion in emergency apprehension of mentally ill persons. *Social Prob* 14:278-92, 1967
2. Bonovitz JC, Bonovitz JS: Diversion of the mentally ill into the criminal justice system: the police intervention perspective. *Am J Psychiatry* 138:973-6, 1981
3. Liberman R: Police as a community mental health resource. *Community Ment Health J* 5:111-20, 1969
4. Pogrebin MR: Police responses for mental health assistance. *Psychiatr Q* 58:66-73, 1986-7



## Analysis of Police Referrals

5. Teplin LA, Filstead WJ, Hefter GM, Sheridan EP: Police involvement with the psychiatric-emergency patient. *Psychiatr Ann* 10:46-54, 1980
6. Teplin LA, Pruett NS: Police as streetcorner psychiatrist—managing the mentally ill. *Int J Law Psychiatry* 15:139-56, 1992
7. Cohen NL, Marcos LR: Law, policy, and involuntary emergency room visits. *Psychiatr Q* 61:197-204, 1990
8. Marcos LR, Cohen NL: Taking the suspected mentally ill off the streets to public general hospitals. *N Engl J Med* 315:1158-61, 1986
9. Bauer SF, Balter L: Emergency psychiatric patients in a municipal hospital. *Psychiatr Q* 45:382-93, 1971
10. Bassuk EL: The impact of deinstitutionalization on the general hospital psychiatric emergency ward. *Hosp Community Psychiatry* 31:623-7, 1980
11. Steadman HJ, Morrissey JP, Braff J, Monahan J: Psychiatric evaluations of police referrals in a general hospital emergency room. *Int J Law Psychiatry* 8:39-47, 1986
12. McNiel DE, Hatcher C, Zeiner H, Wolfe HL, Myers RS: Characteristics of persons referred by police to the psychiatric emergency room. *Hosp Community Psychiatry* 42:425-7, 1991
13. Sales G: A comparison of referrals by police and other sources to the psychiatric emergency service. *Hosp Community Psychiatry* 42:950-2, 1991
14. Sheridan EP, Teplin LA: Police-referred psychiatric emergencies: advantages of community treatment. *J Community Psychol* 9:140-7, 1981
15. Way BB, Evans ME, Banks SM: Factors predicting referral to inpatient or outpatient treatment from psychiatric emergency services. *Hosp Community Psychiatry* 43:703-8, 1992
16. Simes RJ: An improved Bonferroni procedure for multiple tests of significance. *Biometrika* 73:751-4, 1986
17. SAS Institute: SUGI Supplemental Library User's Guide, Version 5. Cary, NC: SAS, 1986
18. Bishop YM, Fienberg SE, Holland PW: Discrete Multivariate Analysis: Theory and Practice. Cambridge, MA: Massachusetts Institute of Technology Press, 1975
19. Infantino JA, Mussingo S: Assault and injuries among staff with and without training in aggression control techniques. *Hosp Community Psychiatry* 36:1312-4, 1985
20. Gondolf EW, Mulvey EP, Lidz CW: Psychiatric admission of family violent versus non-family violent patients. *Int J Law Psychiatry* 14:245-54, 1991
21. Apsler R, Bassuk E: Differences among clinicians in the decision to admit. *Arch Gen Psychiatry* 40:1133-7, 1983
22. Marson DC, McGovern MP, Pomp HC: Psychiatric decision making in the emergency room: a research overview. *Am J Psychiatry* 145:918-25, 1988
23. Hammond KR, Stewart TR, Brehmer B: Social judgment theory, in *Judgment and Decision Making*. Edited by Arkes HR, Hammond KR. New York, Cambridge University Press, 1986
24. Mulvey EP, Lidz CW: Back to basics: a critical analysis of dangerous research in a new legal environment. *Law Hum Behav* 9:209-19, 1985
25. Lidz CW, Mulvey EP, Appelbaum PS, Cleveland S: Commitment: the consistency of clinicians and the use of legal standards. *Am J Psychiatry* 146:176-81, 1989
26. Riskind JH, Beck AT, Berchick RJ, Brown G, Steer RA: Reliability of DSM-III diagnoses of major depression and generalized anxiety disorder using the structured clinical interview. *Arch Gen Psychiatry* 44:817-20, 1987
27. Zimmerman M, Coryell W: The reliability of personality disorder diagnoses in a non-patient sample. *J Pers Disord* 3:53-6, 1989
28. Gillig PM, Dumaine M, Stammer J, Hillard JR, Grubb P: What do police officers really want from the mental health system? *Hosp Community Psychiatry* 41:663-5, 1990
29. Finn P, Sullivan M: Police handling of the mentally ill. *J Criminal Justice* 17:1-14, 1989
30. Bengelsdorf H, Alden DC: A mobile crisis unit in the psychiatric emergency room. *Hosp Community Psychiatry* 38:662-5, 1987
31. Salamon I: A computerized emergency service linkage system. *The Bulletin, Area Council, American Psychiatric Association*