

Utilization of Specialty Mental Health Care Among Persons with Severe Mental Illness: The Roles of Demographics, Need, Insurance, and Risk

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Objective. To examine the sociodemographic, need, risk, and insurance characteristics of persons with severe mental illness and the importance of these characteristics for predicting specialty mental health utilization among this group.

Data Source. The Healthcare for Communities survey, a national study that tracks alcohol, drug, and mental health services utilization. Data come from a telephone survey of adults from 60 communities across the United States, and from a supplemental geographically dispersed sample.

Study Design. Respondents were categorized as having a severe mental disorder, other mental disorder, or no measured mental disorder. Differences among groups in sociodemographics (gender, marital status, race, education, and income), insurance coverage, need for mental health care (symptoms and perceived need), and risk indicators (suicide ideation, criminal involvement, and aggressive behavior) are examined. Measures of service use for mental health care include emergency room, inpatient, and specialty outpatient care. The importance of sociodemographics, need, insurance status, and risk indicators for specialty mental health care utilization are examined through logistic regression.

Principal Findings. The severely mentally ill in this study are disproportionately African American, unmarried, male, less educated, and have lower family incomes than those with other disorders and those with no measured mental disorders. In a 12-month period almost three-fifths of persons with severe mental illness did not receive specialty mental health care. One in five persons with severe mental illness are uninsured, and Medicare or Medicaid insures 37 percent. Persons covered by these public programs are over six times more likely to have access to specialty care than the uninsured are. Involvement in the criminal justice system also increases the probability that a person will receive care by a factor of about four, independent of level of need. The average number of outpatient visits for specialty care varies little across type of disorder, and the median number of visits (ten) is equivalent for those with a severe mental illness and those with other disorders.

Conclusions. Persons with severe mental illness have a high level of economic and social disadvantage. Barriers to care, including lack of insurance, are substantial and many do not receive specialty care. Public insurance programs are the major points of leverage for improving access, and policy interventions should be targeted to these programs. Problems of adequate care for the severely mentally ill may be exacerbated by the managed care trend to reductions in intensity of treatment.

Key Words. Severe mental illness, mental health care, psychiatric services

BACKGROUND

Severe mental illnesses (SMI) are those that are the most clinically complex and persistent. Although the specific diagnoses and illnesses that meet these criteria may be debatable, and diagnosis alone does not define the need for care (Mechanic 1999), there is consensus that schizophrenia and bipolar disorders are among the most severe mental illnesses. These disorders are often associated with severe deficits in functioning and require ongoing treatment from mental health care professionals (Harrow et al. 1997; Goldberg, Harrow, and Grossman 1995; McKay et al. 1995). The failure to engage and maintain persons with SMI in mental health treatment increases risks for hospitalization, poor social and clinical functioning, and diminished quality of life. Given limited mental health care resources, and the inherent rationality of targeting resources to those most in need, it is important to examine factors that either facilitate or impede utilization of services among persons who are the most severely mentally ill.

Data from the Epidemiologic Catchment Area (ECA) study indicate that the one-year prevalence of schizophrenic/schizophreniform disorders and bipolar disorder is just over one percent (Regier, Narrow, Rae, et al. 1993). Yet many persons with these disorders do not receive regular specialty mental health treatment. The National Comorbidity Survey (NCS) estimated

This article is part of a collaborative effort funded by the Robert Wood Johnson Foundation (Healthcare for Communities: The Alcohol, Drug and Mental Illness Tracking Study). The conclusions presented are solely those of the authors and should not be construed as representing those of either the funding agency or the collaborative group.

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that about 48 percent of persons with non-affective psychoses used specialty alcohol, drug, or mental health (ADM) outpatient services in a 12-month period, compared to a treatment rate of about 12 percent for persons with any mental disorder (Kessler, Zhao, Katz, et al. 1999). Similarly, the ECA study, based on five sites, estimated that about 46 percent of persons with schizophrenia and 32 percent of persons with bipolar disorder used specialty ADM services in a 12-month period, compared to almost 13 percent for persons with any disorder (Regier, Narrow, Rae, et al. 1993).

While the gap between need for care and use of services is well documented, we know little about the factors that increase access among persons with SMI in the general population. Most studies of access have been based on general population samples with and without disorder, or on studies of persons with any of many measured mental disorders. This research suggests that women, whites, and those with more education receive more mental health care (Howard, Cornille, Lyons, et al. 1996; Leaf, Livingston, Tischler, et al. 1985). Insurance also increases access to mental health care, with those who are insured being more likely to receive such care (Landerman, Burns, Swartz, et al. 1994; Rabinowitz, Bromet, Lavelle, et al. 1998). Contextual factors, particularly risk indicators, are also important; persons selected into specialty care are those who are more likely to be perceived by their family, social networks, and health care providers as more dangerous and disruptive (Mechanic, Angel, and Davies 1991; Sullivan, Young, and Morgenstern 1997).

Although this research has informed us about the various pathways into specialty mental health care among the general population, or among those with specific disorders such as depression, it has not focused on persons with the most severe illnesses such as schizophrenia. Moreover, the penetration of managed behavioral health care may make earlier reports less relevant to present circumstances. This article examines correlates of the utilization of specialty mental health care in a recent national sample of persons with SMI. Three questions are addressed: (1) How do persons with SMI differ in terms of demographic characteristics, need, insurance status, and perceived risk factors? (2) What are the rates of services utilization among persons with SMI? and (3) What factors are associated with specialty mental health services use among this group?

DATA AND METHODS

Data come from the Healthcare for Communities Study (HCC), a national study focused on tracking changes in the alcohol, drug, and mental health

care services systems. The sample, interviewed between September 1997 and November 1998, included individuals who had been originally interviewed approximately 15 months earlier as part of the Community Tracking Study (CTS). The sampling strategy and measures are briefly described here; more details are provided elsewhere (Sturm, Gresenz, Sherbourne, et al. 1999).

The CTS involved a random sample of 60 communities, with 12 of them chosen for intensive study. These 12 communities are referred to as "high-intensity" sites; the remaining 48 communities are referred to as "low-intensity" sites. In addition, a supplemental national sample of about 3,500 households was included. To reduce the design effect, respondents in the HCC were oversampled from the low-intensity sites. The HCC oversampled persons with low income, and every respondent who had reported high psychological distress or mental health services use in the CTS was eligible for selection in the HCC. To increase the precision of national estimates, every adult from the CTS supplemental national sample was also eligible for selection in the HCC.

The response rate for the HCC was approximately 64 percent. The final sample includes between 70 and 250 respondents from each of the 60 communities that were part of the CTS, and approximately 1,300 persons from the supplemental national sample. In these analyses, the combined sample of 9,585 adults is used, ranging in age from 18 to 97 years (mean = 46.9, s.d. = 17.2). The HCC is weighted back to the CTS to make all estimates nationally representative of the civilian, noninstitutional population in the 48 contiguous states. The estimates presented here may differ from those of other HCC publications because of differences in the weights used; we use the most recent set of weights, released in September 1999. SUDAAN software is used to adjust standard errors for the complex sampling strategy (Shah, Barnwell, and Bieler 1996).

Measures

Severe Mental Illness. The HCC study was not designed as a general population study of persons with SMI, and it does not include diagnostic measures of the most severe illnesses such as schizophrenia and bipolar disorder. For these analyses, therefore, the sample of SMI persons is identified through responses to a number of screener items included in the survey. First, 85 respondents indicated that a doctor had "ever told" them they had schizophrenia or schizoaffective disorder (Burnam and Young 1996). In addition, 105 respondents indicated that they had "ever been hospitalized overnight" because of hearing voices that other people could not hear, believing that they were being

followed or that others were trying to hurt them, feeling that they could hear others' thoughts, or feeling that someone else was putting thoughts into their mind or taking thoughts out of their mind. Positive responses to these items were used to identify persons likely to have schizophrenia or other psychoses. Finally, 110 persons were classified as SMI because they were at risk for bipolar depression, as indicated by evidence of significant depressed mood and a positive response on the lifetime screener for mania: "Has there ever been a period of at least four days when you were so happy or excited that you got into trouble, or your family or friends worried about it, or a doctor said you were manic?" Some respondents met more than one of these criteria, leaving a sample of 235 identified as being the most severely mentally ill. Weighted to be nationally representative, this represents 3.3 million Americans, or about 1.7 percent of the civilian, noninstitutionalized adult population in July 1996.

Respondents were identified who had non-SMI mental disorders based on positive responses to screener questions to identify depression, dysthymia, anxiety, or panic disorder (Sturm, Gresenz, Sherbourne, et al. 1999). We compare the group of persons identified as having SMI ($N = 235$) with those who have other non-SMI disorders ($N = 1,641$), and those who do not meet the criteria for any of the measured disorders ($N = 7,709$). All analyses are based on the weighted data.

Services Utilization. We examine utilization of outpatient specialty mental health care within the past 12 months defined as a visit to a specialty provider such as a psychologist or a psychiatrist. The survey also asked whether the respondent was admitted to the hospital or visited an emergency room for an emotional or substance use problem, and we present descriptive results about these types of service use.

Independent Variables. Demographic characteristics including gender, race, marital status, age, education, and income were collected from all respondents. Respondents were asked about their current insurance coverage and this was coded as private insurance (employer- or self-purchased), Medicaid, Medicare, uninsured, or other (military, Indian Health Insurance, other state insurance). We also assessed whether the respondent had a visit to a primary care physician in a 12-month period, because this may be one important route to specialty care.

Need for care was assessed through two indexes: the mental health component of the SF-12 (Ware, Kosinski, and Keller 1996) and the Mental Health Inventory (MHI-5), a measure of global mental health (Wells et al. 1996). The MHI-5 ranges from 0 to 100, with higher scores indicating better mental health. In addition, respondents were asked if they believed that

they needed help for emotional or mental health problems in the past year. Respondents were categorized as having a substance use problem if they indicated that they had emotional or mental problems attributable to the use of substances; had, in a 12-month period, used an increasing amount of substances to achieve the same effect; or met the threshold score on the Alcohol Use Disorder Identification Test (Saunders, Aasland, Babor, et al. 1993).

We control for physical symptomatology, measured with the SF-12 physical health component (Ware, Kosinski, and Keller 1996) and an additive scale of the number of chronic physical conditions (ranging from 0 to 17) experienced by respondents.

Three measures of risk of dangerousness or disruptiveness were used, consistent with earlier work in the area (Mechanic, Angel, and Davies 1991). First, suicide ideation was coded positive for those who indicated that they had thoughts of suicide within the last year; however, the question was asked only of those who indicated that they had experienced significant depressed mood. In addition, respondents were asked if in the past 12 months they had injured themselves or someone else as a result of drinking. Finally, respondents who had recent criminal involvement were identified through positive responses to questions that asked if they had been arrested in the past year or had been under court supervision (e.g., in jail or on probation).

RESULTS

Table 1 describes differences in the demographic, need, and risk characteristics of the SMI sample compared to those of the respondents identified as having non-SMI disorders, and of participants who do not meet the criteria for any disorder in this survey. As shown, the most severely ill group of respondents are the most economically and socially disadvantaged. Persons with SMI are younger and have less education than those with no measured mental disorder. Approximately twice as many persons with SMI are African American than are found in the group of persons with other measured disorders. Their yearly family incomes are 40 percent lower than the incomes for persons with no measured disorder and almost 30 percent lower than for persons with other non-SMI disorders.

Although the group with SMI and those with other disorders do not significantly differ on the SF-12 mental health scale, both groups report worse functioning in this area than respondents with no measured disorder. The SMI

Table 1 Sociodemographics, Need, and Risk Indicators Among Adults, According to Type of Mental Disorder (std. errors in parentheses)

		<i>SMI</i> (Sample = 235; Weighted = 3.3 million)*	<i>Non-SMI Disorder</i> (Sample = 1641; Weighted = 22.8 million)	<i>No Measured Disorder</i> (Sample = 7709; Weighted = 164.7 million)
<i>Sociodemographics</i>				
Female	%	46.5 (3.3) ^b	65.4 (1.6) ^{a,c}	50.9 (0.8) ^b
Married/Common-law	%	31.1 (4.2) ^{b,c}	48.4 (1.8) ^{a,c}	61.4 (1.1) ^{a,b}
Less than grade 12 education	%	27.5 (4.1) ^c	22.1 (1.7) ^c	13.6 (0.7) ^{a,b}
African American	%	27.1 (4.6) ^{b,c}	13.6 (1.6) ^a	11.2 (1.1) ^a
Family income (\$1000)	\bar{x}	27.5 (2.2) ^{b,c}	38.0 (1.1) ^{a,c}	46.4 (0.8) ^{a,b}
Age	\bar{x}	41.1 (1.6) ^c	43.6 (0.5) ^c	47.5 (0.4) ^{a,b}
<i>Need</i>				
SH-12 Mental Functioning	\bar{x}	42.6 (0.7) ^c	41.8 (0.3) ^c	46.2 (0.1) ^{a,b}
Mental Health Inventory	\bar{x}	55.6 (2.0) ^{b,c}	59.5 (0.7) ^{a,c}	83.8 (0.2) ^{a,b}
Perceived need for mental health care	%	62.7 (4.2) ^{b,c}	42.9 (2.0) ^{a,c}	4.9 (0.4) ^{a,b}
Substance use problem	%	26.9 (4.0) ^{b,c}	13.9 (1.1) ^{a,c}	6.0 (0.4) ^{a,b}
SF-12: Physical Functioning	\bar{x}	42.8 (0.6) ^c	43.3 (0.2) ^c	47.3 (0.1) ^{a,b}
Chronic conditions	\bar{x}	2.8 (0.2) ^c	2.5 (0.1) ^c	1.2 (0.03) ^{a,b}
<i>Risk Indicators</i>				
Suicide ideation	%	31.2 (3.8) ^{b,c}	17.4 (1.2) ^{a,c}	0.5 (0.1) ^{a,b}
Danger to self/others from alcohol use	%	2.8 (1.4)	1.4 (0.4) ^b	0.4 (0.1) ^c
Criminal involvement	%	11.0 (2.9) ^{b,c}	4.7 (0.9) ^{a,c}	1.7 (0.2) ^{a,b}
Visited a Primary Care Physician	%	72.1 (4.5)	80.8 (1.3) ^c	73.5 (0.7) ^b

Note: Superscripts denote significant differences ($p < .05$) between groups: (a) Different from group with severe mental illness; (b) Different from group with non-SMI mental disorder; (c) Different from group with no measured mental disorder. \bar{x} signifies Mean.

* Weighted to represent the U.S. adult, civilian, noninstitutionalized population in the 48 contiguous states in July 1996.

group also reports worse functioning on the Mental Health Inventory (mean = 56). They perceive a greater need for ADM treatment; over 60 percent of this group felt that they needed help for mental health problems within the past 12 months, compared to 43 percent of those with other disorders and less than 5 percent of those with no measured disorder. Need for care is also reflected in the higher rates of substance abuse problems among the SMI group. Respondents with either an SMI disorder or another measured

disorder report worse physical health and more chronic conditions than do respondents with no measured disorders.

Persons with SMI are also distinct in terms of risk indicators. This group is more likely to have thought of suicide in the past 12 months and reports greater involvement with the criminal justice system.

Patterns of insurance coverage for the three groups are shown in Table 2. Persons with SMI are the most likely to be uninsured (20 percent), although they do not substantially differ from respondents with other mental illnesses. Persons in the SMI group, however, are quite different in terms of their use of private insurance and reliance on public insurance. Almost equal proportions of persons with SMI are insured by public programs (35 percent) as are those who are privately insured (37 percent). In contrast, more than one-half of those who have other disorders and almost two-thirds of those with no disorders are covered by private insurance.

Figure 1 depicts the use of services among each group. We observe that persons with SMI are more likely to use inpatient, emergency room, and outpatient care. Overall, 43 percent of persons with SMI used specialty mental health care (outpatient or inpatient) within the past year, twice the rate for persons with other disorders and 20 times the rate for respondents with no measured mental illness disorder.

In Figure 2 we show the number of visits to specialty outpatient providers among users in each group. The sample sizes are too small to compute a parallel analysis of inpatient stays. As shown, the mean number of visits is comparable, across groups, with those who have non-SMI disorders

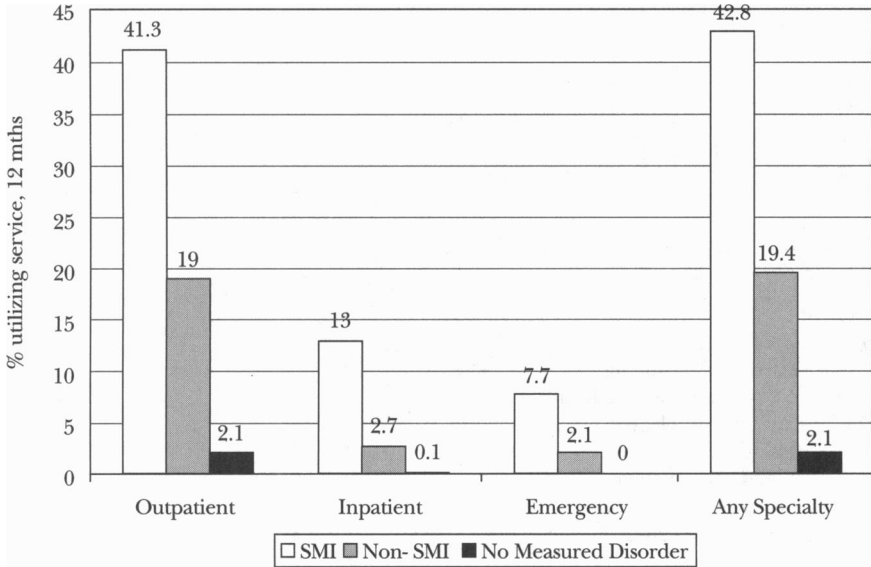
Table 2 Insurance Status Among Adults According to Type of Mental Disorder

	<i>SMI</i> (Sample = 235; Weighted = 3.3 million)*	<i>Non-SMI Disorder</i> (Sample = 1641; Weighted = 22.8 million)	<i>No Measured Disorder</i> (Sample = 7709; Weighted = 164.7 million)
	% (std. error)	% (std. error)	% (std. error)
No Insurance	20.4 (4.2)	18.2 (1.3)	11.4 (0.8)
Private	34.5 (3.9)	57.3 (1.8)	63.2 (0.8)
Medicare	21.5 (3.8)	14.4 (1.4)	19.7 (0.8)
Medicaid	16.0 (3.1)	7.1 (0.9)	2.3 (0.4)
Other	7.6 (2.0)	3.0 (0.6)	3.4 (0.3)

χ^2 test of independence = 80.86, $p = .000$

* Weighted to represent the U.S. adult, civilian, noninstitutionalized population in the 48 contiguous states in July 1996.

Figure 1: Rates of Mental Health Services Use Among Adults According to Type of Disorder



visiting outpatient providers slightly more frequently than the other two groups. The median number of visits (ten) is also comparable regardless of the type of mental disorder. Finally, we examine the relative influence of the measured variables on access to specialty mental health care among the severely mentally ill through the use of logistic regression analysis. As shown, the demographic factors do not contribute independently to access to specialty care among persons with SMI (Table 3). Of the measures of need for care, those who meet the criteria for SMI because of a diagnosis of schizophrenia or because of symptoms of psychoses are almost four times as likely to use specialty care than those for whom there is evidence of bipolar disorder. Perceived need for care increases the probability of using specialty care by a factor of six. It is likely that this measure captures both differences in need and the reciprocal relationship between perceived need and utilization. Persons who use services are also likely to perceive that they need services. Primary care physicians are also an important route to specialty care.

As compared to being uninsured, all three types of insurance increase access to specialty care. The privately insured are about 2.5 times more likely

Table 3 Logistic Regression of Use of Specialty Mental Care on Sociodemographics, Need, Insurance Status, and Risk Indicators Among Adults with Severe Mental Illness

	<i>Parameter Estimate</i>	<i>Odds Ratio</i>
Sociodemographics		
Male	.44	1.55
Married	-.80	.45
Less than grade 12 education	-.77	.46
African American	-.61	.54
Family income	.00	1.00
Age	.02	1.02
Need		
Mental Health Inventory	-.02	.99
SF-12 Mental Functioning	.02	1.01
Perceived need for mental health care	1.86***	6.43
Substance use problem	.33	1.39
Schizophrenia/Psychotic symptoms	1.36***	3.89
SF-12 Physical Functioning	.01	1.01
Number of chronic conditions	-.20	.82
Visited a primary care physician	1.42***	4.1
Insurance†		
Private	.92*	2.5
Public (Medicare/Medicaid)	1.76***	5.8
Other	1.96***	7.1
Risk Indicators		
Suicide ideation	-.76	.47
Danger to self/others from alcohol use	-.65	.52
Criminal involvement	1.33**	3.8

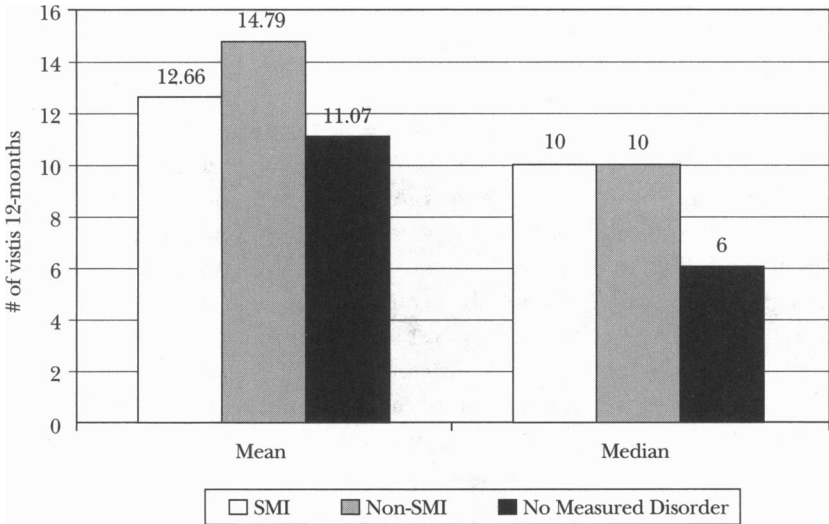
*Significant $p < .10$; **significant $p < .05$; ***significant $p < .01$,

† No insurance is the comparison category.

to use specialty care compared to those with no insurance, although the coefficient does not reach conventional levels of significance ($p = .059$). Persons with SMI who have public insurance (Medicaid or Medicare) are almost six times more likely to have access to specialty care, and those with other types of insurance are about seven times more likely to use specialty care.

Finally, of the risk indicators, only criminal involvement emerges as independently significant. Persons who were involved with the criminal justice system in the past year are about four times more likely to receive specialty care.

Figure 2: Number of Visits to Outpatient Specialty Providers Among Adults According to Type of Disorder



DISCUSSION AND POLICY IMPLICATIONS

Our results should be considered in the light of a number of important limitations in these data. First, the measures of mental illness are not diagnostic measures; therefore, our estimate only approximates those persons in this study who are the most severely ill. Second, all measures are self-reported, and we cannot validate persons' reports of their own service use, insurance, and other important variables. Third, we know that many of the services needed and used by people with SMI, such as residential and vocational programs, do not fit under traditional definitions of health services and are not captured in these data. The small sample size also limits our ability to provide detailed analyses of subgroup differences within the sample of persons with SMI. The data are cross-sectional, so caution should be used in making causal inferences.

Even given these important limitations, these analyses have important implications. The HCC represents the first national study of patterns of mental health care following major changes in health care delivery and management. Moreover, although most studies of the SMI population have been based

on treated samples of Medicaid clients, this study focuses on a national community sample of persons with the most severe mental disorders. Further, the inclusion of a wider variety of factors that may increase the utilization of services than most studies consider contributes to our understanding of the relative importance of demographics, clinical need, insurance, and risk for explaining who receives care.

Examining pathways into specialty care for the general population or among individuals with any mental disorder obscures the unique situation of persons with the most severe illnesses. As shown here, persons with SMI are the most economically and socially disadvantaged. In addition, one in five persons with SMI is uninsured. Given the level of economic disadvantage among this population, it would be useful to better understand why more in this population are not covered by SSI and Medicaid.

The observation that more African Americans met the criteria for SMI in the study is difficult to interpret, because it is not consistent with NCS or the ECA studies that found no race or ethnic differences in the prevalence of severe mental illness, independent of socioeconomic factors. Differences in measurement may explain our finding. African Americans were higher on only one of the three criteria we used for SMI: they were more likely to report that a doctor told them that they had schizophrenia or schizoaffective disorder. It is possible that this reflects the greater likelihood that African Americans are given a clinical diagnosis of schizophrenia rather than a difference in symptom prevalence (Garb 1997; Strakowski, Shelton, and Kolbrener 1993). Alternatively, reports of being told by a doctor that one has schizophrenia may more accurately capture cases of schizophrenia in community samples than do survey reports of symptoms that may be commonly misinterpreted in the case of items measuring psychotic symptoms.

The gap between need for mental health care and utilization reported in earlier studies persists. Although persons with severe mental illness are the most likely in this study to receive specialty mental health care, three-fifths reported that they received no such care in a 12-month period. Lack of insurance acts as a significant barrier as both private and public insurance increase the probability of receiving specialty care. However, the results presented here remind us of the central importance of public insurance. Medicare and Medicaid are the most common types of insurance for persons with SMI, and they significantly increase the likelihood of receiving specialty care. Policies to improve care for persons with SMI, therefore, should be considered in relation to these public programs. Although recent policy attention has been given primarily to parity, such achievements will

have only a small impact on access for persons who are most in need of treatment. Also, the observation that criminal involvement increases access to specialty care points to the importance of considering social context as an explanation for variations in utilization. Factors other than clinical need continue to operate.

Unfortunately, we lack sufficient sample sizes to fully explore correlates of variations in the intensity of care. However, we do observe that the number of outpatient visits to a specialty provider appears to be similar regardless of level of need. This result is quite different from that shown in the NCS data where, for example, persons with non-affective psychoses made almost twice the number of visits to specialty ADM outpatient providers (mean = 31.3 visits) as persons with major depression did. While the difference in our findings may be attributable to our measures of disorder, they may also be a result of the expansion of managed behavioral health care that occurred after the NCS was completed in the late 1980s and early 1990s. Recent research that focused on the inpatient sector, for example, suggests that the proportion of days of care requested that are approved by utilization reviewers varies little by severity of psychiatric diagnoses (Wickizer and Lessler 1998). Additionally, a recent comparison of mental health outpatient visits under Medicaid programs in three states, private insurance, and Medicare indicate that, although the severe mental illness diagnoses for enrollees under Medicaid are much greater than they are under private insurance, the rates of outpatient visits are comparable (Larson, Farrelly, Hodgkin, et al. 1998).

More equivocal support for the hypothesis that intensity of care is similar across diagnostic categories is provided by Leslie and Rosenheck's (1999) study of claims for mental health services under private insurance. They examine whether changes in outpatient costs and utilization offset the significant declines in inpatient days that occurred between 1993 and 1995. On the one hand, they found that declines in the number of outpatient visits among users of services were most substantial for the less severe mental illness diagnoses. Outpatient visits for persons with diagnoses of schizophrenia or major depression did not decline, suggesting that cuts in service have been most strongly targeted to less severe illnesses. On the other hand, reductions in inpatient care were not balanced by comparable increases in outpatient services. Moreover, in 1993 and in 1995 the differences in number of outpatient visits between those with severe and those with less severe diagnoses were much smaller than had been indicated in earlier studies such as the NCS. For example, among users of outpatient and inpatient care in 1995, those with a diagnosis of mild to moderate depression had about eight visits

to outpatient providers for the year, compared to 12 visits among persons with schizophrenia.

None of these studies are based on data comparable to the data used here. The research reported by Wickizer and Lessler (1998) and by Leslie and Rosenheck (1999) are based on privately insured populations, while the SMI in the HCC are more commonly publicly insured or uninsured. The research presented by Larson and colleagues (1998) is based on selected states and one data set of private claims. In contrast, our analyses are based on a national sample and self-report data. It is probably too early to draw definitive conclusions about trends in intensity of care. But the possibility that managed care may "democratize" mental health services requires further attention (Mechanic and McAlpine 1999).

In sum, it appears that large gaps persist in meeting the needs of persons with the most severe mental illnesses. Indeed, the majority of persons with SMI perceived that they needed mental health services, yet only a minority received care. The existence of structural barriers to care, such as lack of insurance, helps explain the gap between need and utilization. Moreover, these data suggest that these problems may be exacerbated under managed care as the intensity of care is reduced. The HCC demonstrates, once again, that the promises of deinstitutionalization and community care have yet to be realized.

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