

HEALTH ISSUES OF PEOPLE WITH
SEVERE MENTAL ILLNESSES

**The Health Foundation of Greater Cincinnati
One West Fourth Street, Suite 512
Cincinnati, Ohio 45202
(513) 241-1400**

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FOREWORD

In 1997, The Health Foundation of Greater Cincinnati – then called The ChoiceCare Foundation – launched a multifaceted project to identify the health issues and to assess the health care needs of the Cincinnati area, encompassing portions of Ohio, Kentucky and Indiana. The purpose of the project was to guide the Foundation in its strategic planning and priority-setting processes.

This report is one of several topical reports the Foundation prepared to assess regional health care needs. The information in this report helped shape the Foundation's decision to focus its grantmaking in four areas of concern:

- Strengthening Primary Care Providers to the Poor
- School-Based Child Health Interventions
- Substance Abuse
- Severe Mental Illness

This report was updated in August, 1999 with the latest available data for the Foundation's 20-county service area.

If you need assistance or have a question with regard to health data, the Foundation may be able to help you. Contact:

Shiloh K. Turner, Health Data Analyst
The Health Foundation of Greater Cincinnati
One West Fourth Street
Cincinnati, OH 45202
(513) 241-1418
sturner@healthfoundation.org

This report and others, as well as links to web sites containing health data, can be found on The Health Foundation of Greater Cincinnati's web site: www.healthfoundation.org.

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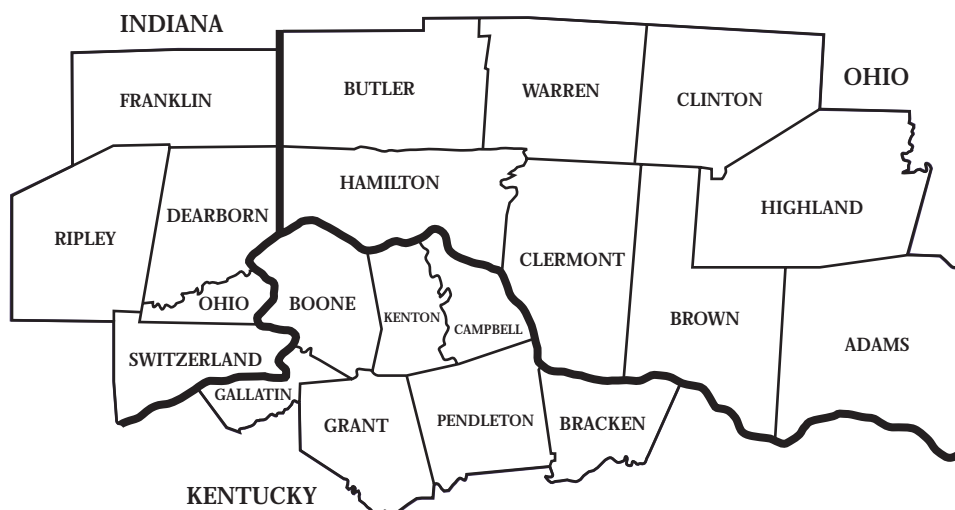
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Health Issues of People with Severe Mental Illnesses

Introduction

Although there is no standard, clinical definition, severe mental illnesses are considered to be ones that profoundly disrupt a person's ability to think, feel, work, and relate to others and to the environment. In addition, severe disorders are usually further characterized by chronicity (the duration of at least two years). The three most debilitating mental illness are those in the schizophrenia spectrum and the anxiety and mood disorders. Of these, schizophrenia and two of the mood disorders—bipolar disorder and major depression—are viewed as the most severe mental disturbances. The purpose of this report is to highlight significant issues related to severe mental illness, especially schizophrenia and the two named mood disorders, in the Health Foundation of Greater Cincinnati's 20-county service area (see Figure 1).

Figure 1. The Health Foundation of Greater Cincinnati's service area



During the process of collecting and interpreting data from the states served by the Foundation and the different service entities within them, it became clear that the lack of standardization of data across the states would make state-to-state comparison of that data difficult if not impossible. Whenever possible, comparisons between states are made. However, most of the data are compared on a county or regional level within each state.

This report begins with the presentation of the diagnostic profile of severely mentally ill persons in the Foundation's service area. The focus then shifts to the use of inpatient and emergency services by this population and recent trends in the availability and utilization of hospital care. This

is followed by a discussion of the various types of outpatient community-based services used by individuals with severe mental illnesses. The need for and the availability of employment-related services and the overall vocational status of people with severe mental illnesses in the area are described in greater detail. Problems associated with the involvement of the criminal justice system in dealing with severely mentally ill individuals are outlined, followed by a discussion on housing and homelessness. Finally, issues related to the co-occurrence of substance abuse and severe mental illnesses are presented.

Source of the Data

The data provided in this report for all three states are from state-funded service providers. No records from privately-funded or for-profit hospitals and providers are included. The data presented are what were available at the time this paper was produced. If county, region, or board data are left out, it is because these data were not accessible at the time of production.

Ohio hospitalization data came from the Patient Care System (PCS) records of the Ohio Department of Mental Health (ODMH) hospitals. PCS is a computerized patient tracking system installed in every ODMH hospital. Other Ohio data are from the ODMH and its Mental Health Boards, which are county or multi-county boards that distribute state funds to non-profit providers.

In Kentucky, the state provides services through regional mental health centers. Six of the seven Foundation-served Kentucky counties are in the NorthKey region, and the seventh county (Bracken) is in the Comprehend region. Mental health data from Kentucky's state-funded centers (which coordinate hospitals and other community-based services) are maintained by the University of Kentucky Research and Data Management Center (RDMC). The Kentucky data in this report came from the RDMC.

Indiana also offers state-funded services through regional mental health centers. The Indiana counties in the Foundation's area are served by the Community Health Center, Inc. (CMHC), located in Lawrenceburg. The data for the Indiana counties in this report were obtained from the Family and Social Services Administration Division of Mental Health's *Biennial Report* and the Community Mental Health Center, Inc.'s *Client Demographic, Profile, and Service Report*, both of which were published in 1995. We have also been able to access more recent information (for fiscal year 1997) on the diagnostic codes and employment status of the clients served by the CMHC.

Diagnostic profile of severely mentally ill clients in the area

Table 1 shows the estimated adult population in each state suffering from severe mental illnesses in 1990. As can be seen from the table, the three states seem very similar in this dimension. However, because the type of mental illness information available from each state varies so widely, and because each state uses its own definition of severe mental illness, it is difficult to draw further conclusions.

Table 1. Adults with severe mental illnesses (SMI), 1990

| State | Number of people with SMI | Percent of population with SMI |
|----------|---------------------------|--------------------------------|
| Indiana | 237,115 | 5.8 |
| Kentucky | 161,141 | 5.9 |
| Ohio | 474,795 | 5.9 |

Ohio

Ohio has made considerable progress in improving the quality of its mental health services, moving from twenty-sixth in the nation in 1986 to fourth in the nation in 1990 (ODMH, 1999). This is largely due to the state's Mental Health Act, passed in 1988, which resulted in a shift from institutionalization towards greater use of community services as well as a change from state to local control.

Despite the recent changes in emphasizing community-based services, hospitalization still remains an important and commonly used method of care for people with severe mental illness in Ohio. The number of public psychiatric hospital admissions for the three main diagnostic categories (schizophrenia, bipolar disorders, and major depression) in seven of the eight Foundation-served counties can be seen in Tables 2, 3, and 4. Hamilton County is the largest and most heavily populated county in the Foundation's Ohio service area and has over 50 mental health service providing agencies, which are possible reasons why the number of people hospitalized for the three main diagnoses in Hamilton County greatly exceeds that of the other counties.

As can be seen from the tables, the number of admissions for individuals diagnosed with schizophrenia and bipolar and major depressive disorders has declined between 1994 and 1998 for the seven-county area as a whole. Admissions declined significantly in Adams, Brown, Clermont, Hamilton, and Highland Counties. However, schizophrenia remains by far the most common psychiatric diagnosis leading to hospital admissions in the seven-county region, as is shown in

Table 5. This is because the mood disorders are more treatable outside of an institution today than they were in the past, while many persons with schizophrenia still may need to be treated with periods of hospitalization.

Table 2. Admissions to psychiatric hospitals of individuals with schizophrenia-spectrum disorders

| County | 1994 | 1995 | 1996 | 1997 | 1998 |
|-----------------------|------|------|------|------|------|
| Adams | 6 | 6 | 1 | 0 | 0 |
| Brown | 8 | 4 | 4 | 1 | 5 |
| Butler | 52 | 52 | 44 | 45 | 56 |
| Clermont | 39 | 11 | 9 | 7 | 13 |
| Hamilton | 509 | 359 | 246 | 213 | 231 |
| Highland | 13 | 8 | 2 | 0 | 0 |
| Warren | 16 | 13 | 18 | 18 | 21 |
| 7-county total | 643 | 453 | 324 | 284 | 326 |

Table 3. Admissions to psychiatric hospitals of individuals with bipolar disorder

| County | 1994 | 1995 | 1996 | 1997 | 1998 |
|-----------------------|------|------|------|------|------|
| Adams | 0 | 0 | 0 | 0 | 1 |
| Brown | 1 | 1 | 0 | 1 | 2 |
| Butler | 15 | 11 | 18 | 16 | 21 |
| Clermont | 8 | 3 | 2 | 2 | 8 |
| Hamilton | 123 | 95 | 37 | 38 | 31 |
| Highland | 2 | 1 | 0 | 1 | 0 |
| Warren | 6 | 10 | 7 | 8 | 8 |
| 7-county total | 155 | 121 | 64 | 66 | 71 |

Table 4. Admissions to psychiatric hospitals of individuals with major depression

| County | 1994 | 1995 | 1996 | 1997 | 1998 |
|-----------------------|------|------|------|------|------|
| Adams | 4 | 2 | 1 | 0 | 0 |
| Brown | 7 | 5 | 1 | 1 | 2 |
| Butler | 19 | 26 | 28 | 11 | 9 |
| Clermont | 20 | 7 | 6 | 9 | 1 |
| Hamilton | 140 | 53 | 9 | 14 | 13 |
| Highland | 7 | 1 | 1 | 0 | 1 |
| Warren | 5 | 8 | 12 | 6 | 10 |
| 7-county total | 202 | 102 | 58 | 41 | 36 |

Table 5. Percentages of admissions in the 7-county area for schizophrenia, bipolar disorder, and major depression.

| Diagnosis | 1994 | | 1995 | | 1996 | | 1997 | | 1998 | |
|---|-------------------|-----------------|------|------|------|------|------|------|------|------|
| | No. of admissions | % of admissions | No. | % | No. | % | No. | % | No. | % |
| Total admissions for the three disorders | 1,000 | | 676 | | 446 | | 391 | | 433 | |
| Schizophrenia | 643 | 64.3 | 453 | 67.0 | 324 | 72.7 | 284 | 72.6 | 326 | 75.3 |
| Bipolar disorder | 155 | 15.5 | 121 | 17.9 | 64 | 14.3 | 66 | 16.9 | 71 | 16.4 |
| Major depression | 202 | 20.2 | 102 | 15.1 | 58 | 13.0 | 41 | 10.5 | 36 | 8.3 |

Kentucky

Historically, Kentucky has been at the forefront of service provision to persons with mental illnesses (Kurtz, 1999). However, the state's mental health system is faced with a number of challenges, such as providing supported employment and integrating and coordinating community services.

In Kentucky in fiscal year (FY) 1997, about 33% of people with severe mental illnesses suffered from schizophrenia-spectrum disorders, while approximately 48% were afflicted with mood disorders. Table 6 shows the statistics on the number of mentally ill adults in Kentucky and in the NorthKey and Comprehend regions.

Table 6: Adult population by diagnosis, FY 1997

| Region | Schizophrenia | | Mood Disorders | | Depression | |
|-------------------|---------------|---------------------|----------------|---------------------|---------------|---------------------|
| | No. of adults | % of SMI population | No. of adults | % of SMI population | No. of adults | % of SMI population |
| NorthKey | 383 | 33.7 | 161 | 14.2 | 267 | 23.5 |
| Comprehend | 49 | 23.2 | 35 | 10.3 | 141 | 41.4 |
| Kentucky | 6164 | 33.9 | 2555 | 14.1 | 5951 | 32.8 |

Indiana

In Indiana's state hospitals, 60% of severely mentally ill patients have a primary diagnosis of schizophrenia and 16% are diagnosed with mood disorders. In fiscal year 1997, approximately 28% of all clients receiving services at the CMHC were diagnosed with schizophrenia-spectrum disorders, 22% with bipolar disorder, and 6% with depression.

Use of inpatient and emergency services

The last several decades have witnessed a significant decrease in the availability and utilization of inpatient services and an increase in the size and scope of outpatient mental health programs. For the population of individuals with severe mental illnesses, the availability of crisis and emergency services is crucial. Emergency services provide treatment that can reduce acute psychological or psychiatric symptoms to the point that crisis is alleviated and less intensive or less restrictive treatment is indicated.

Ohio

The average daily resident population (ADRP) of Ohio state psychiatric hospitals has decreased steadily over the last 20 years, moving from 10,000 in 1975 to 1,300 in 1996. During the same period of time, the number of cases taken on by community-based service providers in Ohio has grown from 95,000 to 172,000 and the number of community agencies from 92 to 448 (ODMH, 1999).

Table 7 shows the number of admissions and resident days (the number of days a person is hospitalized for severe mental illness) for fiscal year 1998 in each of the eight Foundation-served Ohio counties. Data show that Clinton and Warren Counties have the highest hospital admission rate per 100,000 people. We will look at possible reasons for this later. Hamilton County has the highest rates of resident days per 100,000 people as well as the highest average length of stay.

This is again probably due to the fact that Hamilton has the highest population density and has many community-based services (which will be looked at later in this report), so only the most severe clients are hospitalized and therefore probably need to be hospitalized longer due to the severity of their illness.

Table 7. Number of hospital admissions and resident days, FY 1998

| County | Number of admissions | Admissions per 100,000 people | Resident days | Resident days per 100,000 people | Average stay (in days) |
|----------|----------------------|-------------------------------|---------------|----------------------------------|------------------------|
| Adams | 1 | 3.6 | 40 | 144.6 | 40 |
| Brown | 12 | 30.9 | 863 | 2,221.4 | 71.9 |
| Butler | 96 | 30.4 | 9,167 | 2,904.6 | 95.5 |
| Clermont | 38 | 22.7 | 1,932 | 1,157.3 | 50.8 |
| Clinton | 21 | 55.2 | 473 | 1,244.1 | 22.5 |
| Hamilton | 311 | 36 | 62,350 | 7,217.2 | 200.5 |
| Highland | 2 | 5.1 | 149 | 380 | 74.5 |
| Warren | 50 | 38.1 | 3,418 | 2,603.3 | 68.4 |

The dramatic decrease in the use of inpatient services is evident when one examines the unduplicated count of individuals served by psychiatric hospitals between the years of 1993 and 1998, which are presented in Table 8 by Mental Health Board. With the exception of the Warren-Clinton Board, the downward trend is clear. A similar trend can be observed when one examines the number of hospital admissions in Ohio counties between 1994 and 1998, as shown in Table 9.

Table 8. Unduplicated count of patients served at state mental hospitals, FY 1993–1998

| Board | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|-----------------------|--------|-------|-------|-------|-------|-------|
| Scioto-Adams-Lawrence | 209 | 195 | 179 | 21 | 12 | 18 |
| Brown | 24 | 23 | 15 | 12 | 7 | 11 |
| Butler | 150 | 125 | 138 | 132 | 96 | 105 |
| Clermont | 101 | 89 | 32 | 24 | 32 | 32 |
| Warren-Clinton | 57 | 58 | 73 | 78 | 92 | 72 |
| Hamilton | 1,440 | 1,260 | 930 | 577 | 491 | 456 |
| State total | 10,364 | 9,686 | 8,934 | 7,155 | 5,853 | 5,631 |

Table 9. Number of hospital admissions of severely mentally ill, FY 1994–1998

| County | 1994 | 1995 | 1996 | 1997 | 1998 |
|----------|------|------|------|------|------|
| Adams | 25 | 13 | 2 | 1 | 0 |
| Brown | 22 | 15 | 9 | 5 | 12 |
| Butler | 113 | 119 | 114 | 83 | 96 |
| Clermont | 93 | 27 | 21 | 30 | 38 |
| Hamilton | 1195 | 713 | 345 | 303 | 311 |
| Highland | 27 | 16 | 3 | 1 | 2 |
| Warren | 36 | 41 | 50 | 45 | 50 |

Based on these data related to hospital admission rates, inpatient service rates in Clinton and Warren Counties are not decreasing like rates in the other Foundation-served counties are. There are three possible reasons for this disparity. First, unlike other Ohio counties where both private and state hospitals admit patients with psychiatric disorders, people with severe mental illnesses in Clinton and Warren Counties receive inpatient services primarily in state hospitals. Since the data presented in this report are based exclusively on the utilization of state mental hospitals, patients of private hospitals in the Foundation's Ohio counties are not represented. Second, prior to mid-1997 the only crisis intervention services available in Clinton and Warren Counties were a hot line and pre-hospitalization screening. In July 1997, a new crisis stabilization unit opened to serve the two counties, making services available to more people. This new center is probably responsible in part for the increased number of individuals served by state hospitals since more people are being seen and assessed. Third, the population of Warren County has grown dramatically in the last few years, which likely led to an increase in the population of people with severe mental illnesses.

Table 10 presents data on the number of crisis intervention units of service used in Foundation-served Ohio boards. Crisis intervention service in Ohio is defined as a face-to-face or telephone response to a crisis or emergency situation experienced by an individual. The ratio between the number of units of service (one contact session either in person or by phone between the service provider and the consumer) and the number of clients indicates the extent to which each client is using this service. The unit-client ratio is largest in the Warren-Clinton Board area, suggesting that the same individuals are receiving the service time after time, and smallest in the Brown and Hamilton Board regions, indicating that many different clients utilize crisis intervention services.

Table 10. Crisis intervention services utilized by SMI clients, FY 1997

| Board | Crisis intervention | | |
|-----------------------|---------------------|----------------|---------------------|
| | Clients served | Units received | Units/clients ratio |
| Brown | 7 | 13 | 1.8 |
| Butler | 255 | 839 | 3.3 |
| Clermont | 185 | 389 | 2.1 |
| Hamilton | 528 | 969 | 1.8 |
| Warren-Clinton | 61 | 1,846 | 30.3 |
| State total | 12,153 | 89,064 | 7.3 |

Another type of crisis care offered to the people with severe mental illnesses in Ohio is the crisis residential facility. These facilities provide intensive treatment and supervision of clients experiencing acute emotional problems and include any type of residential facilities with designated crisis-care beds as well as places solely designed for the purpose of providing residential crisis care. Ohio residents of these facilities tend to receive fewer community support services than those not living in these facilities, as is shown in Table 11. Persons with severe mental illnesses possibly choose these facilities in times of crisis because these individuals may not be connected to community services or a support system. Whether the lack of these ties to services and support is due to access issues or the individual's choice is unclear. We will take a closer look at community-based services later in this paper.

Table 11. Number of SMI clients living in crisis residential facilities, FY 1997

| Board | Crisis facility residents | |
|--------------------|--|--|
| | Clients receiving community support services | Clients not receiving community support services |
| Butler | 4 | 3 |
| Clermont | 1 | 1 |
| Hamilton | 13 | 69 |
| State total | 141 | 383 |

Kentucky

In Kentucky, data on the utilization of inpatient and residential services for the state as a whole as well as the NorthKey and Comprehend regions are shown in Table 12. (Note: These data are only for individuals receiving care through community mental health centers, not state psychiatric

hospitals.) As the table suggests, Kentucky seems to prefer to serve its clients on an outpatient basis, reserving residential services for the most severe cases. No data on the use of emergency services by persons with severe mental illnesses in Kentucky were available.

Table 12. Utilization of outpatient, inpatient, and residential services by SMI adults, FY 1997

| Region | Outpatient | | Inpatient | | Residential | |
|-------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|---------------------|
| | Number of SMI clients | % of SMI population | Number of SMI clients | % of SMI population | Number of SMI clients | % of SMI population |
| NorthKey | 1,078 | 94.7 | 0 | 0 | 13 | 1.1 |
| Comprehend | 289 | 84.8 | 2 | 0.6 | 0 | 0 |
| Kentucky | 16,280 | 89.6 | 109 | 0.6 | 431 | 2.4 |

Indiana

The majority of inpatient clients with severe mental illnesses served by the CMHC live in Dearborn County. This trend will be seen again, and possible reasons for it are outlined later. As Table 13 shows, about half of all units of care extended in the Indiana counties covered by the Foundation are given to residents of Dearborn County.

Table 13. Number of inpatient clients served at the CMHC, FY 1995

| County | Number of clients served | % of total clients served |
|--------------------------------|--------------------------|---------------------------|
| Dearborn | 133 | 45.2 |
| Franklin | 31 | 10.5 |
| Ohio | 12 | 4.1 |
| Ripley | 71 | 24.1 |
| Switzerland | 26 | 8.8 |
| Other Indiana counties* | 9 | 3.1 |
| Out of state* | 12 | 4.1 |

* These are residents of other Indiana counties or other states who were served at the CMHC.

Table 14 strongly demonstrates the chronic nature of mental illness and the need for services over time. Approximately three fourths of all units (with one unit being defined as a one-day period of care) of inpatient service provided in 1995 were provided to clients who had also received care before 1995. Only 25% of inpatient days of care and 7% of residential days of care during this year were provided to new clients served. ("New clients" here refers to the fact that these people had not been treated at the CMHC before. Whether they had been treated in another state or center is not

recorded.) Dearborn County data are provided to again illustrate the fact that the CMHC serves more residents of this county than any other Indiana county in the Foundation area. The data on the usage of emergency services at the CMHC are shown in Table 15.

Table 14. Inpatient and residential service units for the CMHC, FY 1995

| Type of care | Total days of care | Days of care for new clients | Days of care for clients served pre-1995 | Days of care for Dearborn County clients |
|--------------|--------------------|------------------------------|--|--|
| Inpatient | 4,140 | 1,029 | 3,111 | 1,953 |
| Residential | 23,314 | 1,698 | 21,616 | 11,091 |

Table 15. Number of clients using emergency services at the CMHC

| | 1993 | | 1994 | | 1995 | |
|--|--------|------|--------|------|--------|------|
| | Number | % | Number | % | Number | % |
| Total clients served | 415 | | 394 | | 387 | |
| Total emergency visits | 514 | | 497 | | 474 | |
| Total emergency service hours | 481 | | 443 | | 437 | |
| Avg. length of visit (in minutes) | 56 | | 53 | | 55 | |
| Dearborn | 196 | 47.2 | 220 | 55.8 | 206 | 53.2 |
| Franklin | 38 | 9.2 | 28 | 7.1 | 31 | 8 |
| Ohio | 15 | 3.6 | 19 | 4.8 | 15 | 3.9 |
| Ripley | 90 | 21.7 | 60 | 15.2 | 70 | 18.1 |
| Switzerland | 33 | 8 | 24 | 6.1 | 34 | 8.8 |
| Other Indiana counties | 15 | 3.6 | 15 | 3.8 | 8 | 2.1 |
| Out of state | 28 | 6.7 | 28 | 7.1 | 23 | 5.9 |

Dearborn County has by far the highest number of clients using emergency services at the CMHC, as well as the highest rates of inpatient services usage. One possible reason for this is that Dearborn has the highest population of any of the Foundation's Indiana counties. And, the CMHC is located in this county, giving its residents easier access to services. Dearborn County residents who are severely mentally ill are probably also more familiar with the services the CMHC provides, making them more apt to access these services. In addition, Indiana residents of counties with limited services can access services in a neighboring county. Because their own counties offer limited services, people who live in Franklin, Ripley, Ohio, and Switzerland Counties may access services at a site in a neighboring county that is closer to them than the CMHC.

Community-based and outpatient services

As states move toward the deinstitutionalization of their mental health services, the number and scope of community-based professional and consumer-run services has increased dramatically. Community-based care is a blend of health and social services provided in the community for the purpose of promoting, maintaining, and restoring health and self-sufficiency as well as minimizing the effects of illness and disability. Outpatient services consist of periodic contact of short duration, including such activities as medication monitoring, ambulatory detoxification, social clubs, and individual, family, and group therapy.

Ohio

One way of monitoring the success of community-based support programs is by looking at the number of days individuals with severe mental illnesses spend in the community prior to a new period of hospitalization. Table 16 provides this information for fiscal year 1998 for Ohio mental health boards in the Foundation's service area. Approximately one-quarter of the state's previously hospitalized individuals with severe mental illnesses were able to stay in the community for over a year before another inpatient hospitalization. In the Hamilton County Board area, however, this figure is almost twice as large, perhaps due to a wider network of outpatient community support services available to consumers in that area. At the other end of the spectrum is the Clermont County Board area, where only about 10% of mental health consumers had spent more than one year outside the hospital environment prior to their next inpatient treatment.

Table 16. Number of days in the community prior to hospital readmission, FY 1998

| Board | 0: 1st admit | | 0 – 30 days | | 31 – 90 days | | 91 – 365 days | | Over 1 year | |
|-----------------------|--------------------|---------------------|-------------|------|--------------|------|---------------|------|-------------|------|
| | No. of SMI clients | % of SMI population | No. | % | No. | % | No. | % | No. | % |
| Scioto-Adams-Lawrence | 5 | 35.7 | 3 | 21.4 | 0 | 0 | 2 | 14.3 | 4 | 28.6 |
| Brown | 6 | 50 | 2 | 16.7 | 0 | 0 | 1 | 8.3 | 3 | 25 |
| Butler | 39 | 40.6 | 7 | 7.3 | 10 | 10.4 | 11 | 11.5 | 29 | 30.2 |
| Clermont | 19 | 50 | 8 | 21.1 | 2 | 5.3 | 5 | 13.2 | 4 | 10.5 |
| Hamilton | 96 | 30.3 | 11 | 3.5 | 12 | 3.8 | 47 | 14.8 | 151 | 47.6 |
| Warren-Clinton | 39 | 54.9 | 9 | 12.6 | 3 | 4.2 | 6 | 8.5 | 14 | 19.7 |
| State total | 2,203 | 39.4 | 641 | 11.5 | 414 | 7.4 | 784 | 14 | 1,545 | 27.7 |

Kentucky

As was seen previously, Kentucky seems to prefer to treat its residents with severe mental illnesses through outpatient programs. The state offers a variety of such services, including partial care (where clients are treated during the day at a facility and sent home at night), case management, in-home services, and social clubs. Table 17 shows the usage of these services in the NorthKey and Comprehend regions as well as the state as a whole in 1997.

Table 17. Usage of outpatient treatment services, FY 1997

| Region | Partial | | Outpatient | | Case Management | | In-Home | | Social Club | |
|-------------------|--------------------|---------------------|------------|------|-----------------|------|---------|-----|-------------|-----|
| | No. of SMI clients | % of SMI population | No. | % | No. | % | No. | % | No. | % |
| NorthKey | 204 | 17.9 | 1,078 | 94.7 | 234 | 20.6 | 0 | 0 | 0 | 0 |
| Comprehend | 88 | 25.8 | 289 | 84.8 | 94 | 27.6 | 7 | 2.1 | 0 | 0 |
| Kentucky | 3,266 | 18.0 | 16,280 | 89.6 | 4,520 | 24.8 | 9 | 0.1 | 175 | 1.0 |

Indiana

The following array of outpatient and community-based services are available to the five Indiana counties in the Foundation service area: crisis/stabilization, outpatient, day treatment (similar to Kentucky's partial care service, where clients are treated at a facility during the day and sent home at night), case management, medication management, and outpatient physician visits. The hours of outpatient and community-based services through the CMHC are given in Table 18. The data are presented for total clients, new clients, previously served clients, and Dearborn County clients. In addition, the average number of service units per client are calculated. "Clients served pre-95" again refers to clients who were served at the CMHC in a year previous to 1995 and again in 1995.

Table 18. Clients served by outpatient or community-based services at the CMHC, FY 1995

| Type of service | Total hours of service (2,689 clients) | Avg. hours of service per client | Hours for Dearborn Co. clients (1,191 clients) | Avg. hours of service per Dearborn Co. client |
|-----------------------------|--|--------------------------------------|---|---|
| Case management | 8,066 | 3.0 | 4,900 | 4.1 |
| Day treatment | 16,026 | 6.0 | 7,882 | 6.6 |
| Medication management | 1,293 | 0.5 | 331 | 0.3 |
| Outpatient | 17,494 | 6.5 | 8,558 | 7.2 |
| Outpatient physician visits | 3,082 | 1.1 | 1,253 | 1.1 |
| Type of service | Hours for new clients (1,053 clients) | Avg. hours of service per new client | Hours for clients served pre-95 (1,636 clients) | Avg. hours of service per pre-95 client |
| Case management | 396 | 0.4 | 7,670 | 4.7 |
| Day treatment | 633 | 0.6 | 15,393 | 9.4 |
| Medication management | 11 | 0.01 | 1,282 | 0.8 |
| Outpatient | 5,001 | 4.7 | 12,493 | 7.6 |
| Outpatient physician visits | 401 | 0.4 | 2,681 | 1.6 |

Employment

One of the most devastating consequences of being diagnosed and living with a severe mental illness is the difficulty one encounters in finding and maintaining employment. At the same time, involvement in meaningful activities like being employed has been shown to be an important aspect of recovery from mental illnesses. Of all persons with disabilities, those with mental illnesses are confronted with the highest degree of stigmatization in the workplace and the greatest barriers to employment opportunities, which results in high rates of unemployment and dependency on social assistance (CPAnet, 1999).

There are 3 million working-age adults with severe mental illnesses in this country, and about 2.5 million of them are unemployed. This rate represents the highest in the U.S. for any group of individuals with disabilities (NAMI, 1999). At the same time, approximately 70% of those diagnosed with severe psychiatric disorders consider employment to be an important goal for them. Rehabilitation programs for individuals with severe mental illnesses are placing more than 50% of their clients into paid employment, with over half of them remaining employed after a year. As the

number of severely mentally ill persons seeking Social Security Insurance/Social Security Disability Insurance (SSI/SSDI) support is growing, the need for vocational rehabilitation programs aimed at helping people find employment and live independently is strongly indicated (NAMI, 1999).

There are two basic types of employment services offered to people with severe mental illnesses: work-related and vocational. Work-related services provide assistance in obtaining employment opportunities by focusing on job placement, on-the-job training and support, coordination with other mental health services, and support for employers. Vocational services, on the other hand, include interventions directed toward career exploration, training, and work experience. Their purpose is to assist the person in identifying, obtaining, and maintaining employment based on his or her choices and abilities.

Ohio

Information on the utilization rates of vocational services in Foundation-served Ohio board areas is presented in Table 19. Of the boards listed, the Clermont County Board provides more vocational service units to individuals than the other board regions.

Table 19. Vocational service utilization rates, FY 1997

| Board | Clients | Units | Units/clients ratio |
|-------------|---------|---------|---------------------|
| Butler | 27 | 1,743 | 64.5 |
| Clermont | 29 | 5,927 | 204.4 |
| Hamilton | 20 | 3,076 | 153.8 |
| State total | 1,267 | 199,479 | 157.4 |

When looking at employment data in terms of primary source of income, interesting trends emerge in the area of support services utilized. As can be seen from Table 20, more individuals who participate in community services in the Brown, Butler, and Warren-Clinton Board regions earn wages than those who are not involved in them. However, in the Clermont and Hamilton Boards and the state as a whole, people who earn wages tend to receive fewer community services. Overall, individuals supported by their families are less involved in community support services, while people who receive various forms of government aid (welfare, SSI, SSDI) appear more apt to use community-based services. This is most likely due to the fact that families provide emotional support as well as financial and lessen the need for the clients to access community services.

Table 20. Primary income sources and usage of community services for SMI adults

| Board | Wages/Salary | | Family/Relative | | Welfare | | SSI | | SSDI | |
|-----------------------|--------------|-------|-----------------|-------|---------|-------|-------|--------|-------|-------|
| | No* | Yes** | No | Yes | No | Yes | No | Yes | No | Yes |
| Brown | 4 | 9 | 10 | 10 | 1 | 11 | 6 | 24 | 4 | 16 |
| Butler | 52 | 146 | 62 | 39 | 13 | 28 | 68 | 376 | 26 | 152 |
| Clermont | 51 | 14 | 3 | 3 | 3 | 2 | 33 | 138 | 16 | 108 |
| Hamilton | 372 | 262 | 128 | 103 | 34 | 101 | 467 | 1,117 | 164 | 596 |
| Warren-Clinton | 6 | 62 | 14 | 91 | 3 | 17 | 8 | 155 | 3 | 79 |
| State total | 4,126 | 3,791 | 2,731 | 2,001 | 707 | 1,980 | 3,332 | 13,704 | 1,577 | 7,197 |

**not receiving community support services; ** receiving community support services*

Kentucky

The Kentucky statewide percentage of employed people with severe mental illnesses in 1997 was 8.9%. For the NorthKey region, the rate was 10.6%. Table 21 shows that the percent of persons with severe mental illnesses receiving work-related services in the NorthKey area (5.5%) significantly exceeds the extent to which they are used in the state as a whole (2.8%). As is shown in Table 22, about half of NorthKey’s mental health consumers who are currently unemployed have some history of employment.

Table 21. Clients receiving work-related services, FY 1997

| Region | Number of SMI clients | % of SMI population |
|-------------------|-----------------------|---------------------|
| NorthKey | 62 | 5.5 |
| Comprehend | 0 | 0 |
| Kentucky | 514 | 2.8 |

Table 22. Vocational status of SMI clients, FY 1998

| Region | No history of employment | | Not employed, some history | | Center-based | | Community employment education | | Competitive employment | |
|---------------------|--------------------------|---------------------|----------------------------|------|--------------|------|--------------------------------|-----|------------------------|------|
| | No. of SMI clients | % of SMI population | No. | % | No. | % | No. | % | No. | % |
| NorthKey | 71 | 6.2 | 537 | 47.2 | 45 | 4.0 | 68 | 6.0 | 119 | 10.5 |
| Comprehend | 108 | 31.7 | 98 | 28.7 | 34 | 10.0 | 6 | 1.8 | 24 | 7.0 |
| State totals | 2,203 | 12.1 | 8,788 | 48.4 | 1,275 | 7.0 | 504 | 2.8 | 938 | 5.2 |

Indiana

Data on the employment status of clients served by the CMHC are presented in Table 23. Approximately 24% of the individuals receiving services at the CMHC are employed at least part-time. Table 24 shows the usage of vocational services at the CMHC in 1995. Once again, clients served previously to 1995 utilized the most hours of service in 1995.

Table 23. Employment status of clients served by the CMHC, FY 1997

| | Not in labor force | Disabled | Unemployed | Employed full-time | Employed part-time | Retired | Laid-off | Unknown |
|---------------------|--------------------|----------|------------|--------------------|--------------------|---------|----------|---------|
| No. of SMI clients | 227 | 130 | 114 | 130 | 53 | 49 | 4 | 46 |
| % of SMI population | 30.1 | 17.3 | 15.1 | 17.3 | 7.0 | 6.5 | 0.5 | 6.1 |

Table 24. Usage of vocational services at the CMHC, FY 1995

| | Total hours | Hours for new clients | Hours for clients served pre-1995 | Hours for Dearborn County clients |
|--------------------|-------------|-----------------------|-----------------------------------|-----------------------------------|
| Vocational service | 756 | 45 | 711 | 170 |

In addition to the vocational services already provided, the Indiana State Office of Vocational Rehabilitation has undertaken an effort to work with several community health centers in the state to fund supported employment projects for mentally ill individuals.

Criminal justice

In recent years, the rate of mental disorders and substance abuse in prison populations has increased. Some attribute this trend to the failures of the public mental health system, such as fragmented services, as well as to the lack of social supports available to the persons with severe mental illnesses. Individuals who receive appropriate mental health treatment have a better long-term prognosis and a reduced risk for returning to jail for a similar offense. In a 1992 nationwide survey sponsored by the National Alliance for the Mentally Ill (NAMI) and the Public Citizen's Health Research Group, almost 30% of the jails were found to hold individuals with severe mental illnesses who had no criminal charges against them (Foster, 1996). These individuals were incarcerated because no other facilities are available to respond to psychiatric emergencies. This survey also reported that 81% of Kentucky jails were used to hold severely mentally ill individuals who were awaiting hospitalization without criminal charges. This problem has since been corrected (see below).

Incarcerating persons with severe mental illnesses because there is no other way to handle psychiatric emergencies may be a quick, easy answer for the community, but it is an expensive one. In California, for example, approximately 14% of state prison inmates and 11% of county jail inmates in 1996 were seriously mentally ill (Izumi et al., 1996). The total state prison and parole costs for handling severely mentally ill inmates in California could range from \$245 million to \$619 million. At least some of these individuals could be helped by more cost-effective treatment programs, including community-based services which cost significantly less than incarceration, usually more than \$20,000 per person per year less. Unfortunately, no local data are available on the costs associated with keeping people with severe mental illnesses in the corrections system.

Ohio

In Ohio in 1997, approximately 390 individuals with severe mental illnesses were in correctional facilities. Of these, 228 were accessing various community-based services in jail while 162 were not. Whether inmates not accessing services did so by their choice or because services were not available was not specified in the data.

Another service related to criminal justice offered to persons with severe mental illnesses is a forensic evaluation. Forensic evaluation services assist the courts and the adult parole authority to address mental health issues as part of the individual's court sentence. Table 25 shows available data on the number of mentally ill persons charged with a crime who received forensic evaluation services.

Table 25. Mentally ill individuals who were criminally charge and received forensic services, FY 1997

| County | Units | Clients | Units/clients ratio |
|-------------|-------|---------|---------------------|
| Butler | 21 | 10 | 2.1 |
| Clermont | 141 | 104 | 1.6 |
| State total | 555 | 379 | 1.5 |

Kentucky

As a result of the 1992 study's findings, Kentucky initiated several projects designed to eliminate the use of jails in the hospitalization process. In 1994, Kentucky passed a law to prohibit the detention in jail of any mentally ill person without pending criminal charges. Also, police officers are not allowed to criminally charge a mentally ill individual in need of hospitalization to avoid

transporting them to a psychiatric facility. To help enact this law, the state distributed funds among the regional mental health centers to provide 24-hour-a-day, 7-day-a-week evaluation and transportation to psychiatric hospitals of persons needing treatment. However, NorthKey, which provides services to six of the Kentucky counties served by the Foundation, receives less than 2% of the state allocated funds although it serves over 9% of the state's population of severely mentally ill individuals.

Indiana

Data on the relationship between criminal justice and mental health systems were not available for the state of Indiana.

Housing and homelessness

Nationally, there are over 200,000 persons who are homeless and suffer from a serious mental illness. Although homeless adults with severe mental illness represent only 5% of all people with serious mental illnesses in the United States, they constitute approximately one-third of all single, unattached homeless adults. Despite the disproportionate number of severely mentally ill people among the homeless population, the growth in homelessness does not appear to be attributable to the release of severely mentally ill individuals from institutions. Most patients were released from mental hospitals in the 1950s and 1960s, but vast increases in homelessness did not occur until the 1980s, when incomes and housing options for those living on the margins began to diminish rapidly. Many people with severe mental illnesses not only live on the margins of income levels, they also have housing issues.

Severely mentally ill individuals who are homeless tend to share a number of important characteristics:

1. They are homeless for longer periods of time and are more visible, residing on the streets and in parks and subways.
2. At least half of homeless persons with severe mental illnesses also have a co-occurring substance use disorder.
3. They are generally in poorer physical health than other homeless persons are.
4. The vast majority are eligible for, but relatively few receive, any form of income maintenance, including SSI and public assistance.

5. Minorities, especially people of color, are overrepresented among the severely mentally ill homeless population.
6. Most are willing to accept mental health and substance abuse treatment, but at least initially are more likely to want help in meeting basic survival needs.

Research findings also suggest that homelessness is associated with the onset of mental illness at an early age, co-occurring personality disorders, and a history of childhood disturbances (NIMH, 1991). Homeless individuals with severe mental illnesses encounter more barriers to employment and have more contact with the legal system than homeless people who do not suffer from mental illness. However, only 5–7% of homeless persons with mental illness need to be institutionalized. Most severely mentally ill people can live in the community with the appropriate supportive housing. Unfortunately, there is not enough appropriate, affordable housing to accommodate the number of people disabled by severe mental illnesses in the U.S.

The Center for Mental Health Services' (CMHS) McKinney Demonstration Projects have shown that an integrated system of care for homeless persons with severe mental illnesses must include a number of specific treatment and service components:

1. Outreach is crucial in linking the homeless with severe mental illnesses to services. Often, these people will not seek treatment for their illness on their own.
2. Responses by service providers must take into account the individual's perception of need.
3. Formerly homeless people are an important resource in engaging those who are currently homeless.
4. Once the person is involved, provisions need to be made for follow-up case management to meet the person's health, mental health, and social service needs.
5. Assessment of the need for and access to appropriate substance abuse treatment is essential.
6. Services must be sensitive to the needs of persons of diverse cultures and ethnic groups.
7. Links to entitlements and opportunities for employment are essential to maintaining residential stability.

The results of federal demonstration programs reveal that housing when combined with supportive services, meaningful daily activity in the community (including work), and access to therapy can provide the framework necessary to end homelessness for many individuals.

Ohio

In Ohio, about 2.2% of the total number of persons with severe mental illnesses in the public mental health system are reported as homeless. The number of homeless severely mentally disabled individuals in Foundation-served Ohio county board areas in FY 1997 is shown in Table 26. In all the county board areas and the state as a whole, there are fewer homeless persons among individuals who do not receive community support services than among those who do receive them. This could be because those who do not receive community support services are much more difficult to diagnose, count, and track.

Table 26. Known number of homeless SMI persons, FY 1997

| Board | No community services | Community Services |
|--------------------|-----------------------|--------------------|
| Brown | 0 | 1 |
| Butler | 3 | 28 |
| Clermont | 1 | 4 |
| Hamilton | 35 | 109 |
| Warren-Clinton | 0 | 5 |
| State total | 504 | 1,087 |

Ohio Boards in the Foundation area provide some housing options for the mentally ill, as is shown in Table 27. In Adams County, there are two transitional housing apartments for severely mentally ill persons but no permanent housing. Butler County offers 132 apartment units, 19 supported living units, 69 congregate living units, 21 residential treatment units, and 90 rest home units. In Clermont County, 20 transitional housing units are linked to residential care units, and they also offer permanent housing, with three apartment buildings with a total of 18 one- and two-bedroom apartments. In addition, Clermont's Mental Health Board has money to subsidize cluster housing units and they use out-of-county facilities, albeit minimally. Hamilton County transitional housing consists of 502 units, 38 of which are quick access housing units. The county's permanent housing includes 1,315 units.

Table 27. Housing units in the Foundation's Ohio service area

| Adams | | Butler | | | | | Clermont | | Hamilton | |
|-------|-----|-----------|------------------------|-------------------------|-----------------------------|-----------------|----------|----|----------|-------|
| t* | p** | Apt units | Supported living units | Congregate living units | Residential treatment units | Rest home units | t | p | t | p |
| 2 | 0 | 132 | 19 | 69 | 21 | 90 | 20 | 18 | 502 | 1,315 |

*temporary (defined as 2 years or less); **permanent

Kentucky

In Kentucky for fiscal year 1997, 4.54% of homeless individuals were severely mentally ill.

Table 28 shows the housing status of the severely mentally ill population in NorthKey, Comprehend, and the state as a whole.

Table 28. Housing status of Kentucky SMI adults, FY 1997

| Region | Homeless | | Insitutionalized | | Family | | Congregate Living | | Independent | | Not Reported | |
|-------------------|-------------------|---------------------|------------------|-----|--------|------|-------------------|-----|-------------|------|--------------|------|
| | No. of SMI adults | % of SMI population | No. | % | No. | % | No. | % | No. | % | No. | % |
| NorthKey | 9 | 0.8 | 105 | 9.2 | 134 | 11.8 | 29 | 2.6 | 539 | 47.4 | 322 | 28.3 |
| Comprehend | 1 | 0.3 | 28 | 8.2 | 54 | 15.8 | 0 | 0 | 187 | 54.8 | 71 | 20.8 |
| Kentucky | 200 | 1.1 | 1,217 | 6.7 | 2,713 | 14.9 | 401 | 22 | 9,584 | 52.8 | 4,054 | 22.3 |

Among the major barriers to keeping the Kentucky population with severe mental illnesses housed are the following:

1. Very low incomes are a barrier, as approximately 85% of the people with severe mental illnesses earn less than 30% of their local median family income.
2. The full array of community support services (i.e. assertive case management, payee services, supported employment) is incomplete throughout Kentucky, and there is limited funding for most components of the array.
3. Rental assistance is limited.
4. Service systems are fragmented (Kurtz, 1999).

Some housing services do exist in Northern Kentucky. There are 10 transitional apartments in Erlanger at Birchplace, and 19 permanent single-room apartments in Greenup. Approximately \$88,000 in HUD funds are also available for rental subsidies (the client pays 35% of the rent).

Indiana

In the Foundation's Indiana service region, the CMHC is the only provider of either transitional or permanent housing for the severely mentally ill population. Two of the transitional sites offer a cluster apartment setting. The first is in Lawrenceburg, which has four apartments with a capacity for three people of the same sex per apartment. The other location is Batesville, which offers two two-bedroom (allowing for family housing) and two one-bedroom apartments. Also, southeast Indiana recently restored a HUD grant that will offer additional dollars for transitional housing to

support scattered site, market value apartments. Although the number of units depends on the going market value, it is estimated that 10–12 apartments may be covered by this grant.

In the Indiana service area, two permanent housing sites financed by HUD dollars exist. The first is in Lawrenceburg, and is an eight-unit site of one-bedroom apartments. The other is in Vevay, and also has an eight one-bedroom units. The northern part of the Indiana region the Foundation serves (Ripley and Franklin Counties) has no transitional or permanent housing.

Co-occurring mental illnesses and substance abuse

The co-occurrence of mental illness and substance abuse are more common than most people might think. Approximately 37% of alcohol abusers and 53% of drug abusers have at least one serious mental illness. Of all people with mental illness, about 29% abuse either alcohol or drugs. Whether these individuals developed psychiatric or substance abuse problems first is unclear. Sometimes, people with mental illnesses “self-medicate” with drugs or alcohol in an attempt to feel calmer or more cheerful. If allowed to continued unchecked, this practice of self-medication may lead to a substance abuse problem. In other cases, the alcohol or drug dependency develops first and its severity may lead to psychiatric disorders. This is especially true of teenage substance abusers whose habits continue into adulthood.

People suffering from psychiatric disorders have been found to have an increased risk for substance abuse than those who do not suffer from psychiatric disorders (NMHA, 1999). These risk rates are shown in Table 29. Based on these rates, an individual diagnosed with schizophrenia is 10.1% more likely to develop a substance abuse problem, while those diagnosed with major depression are 4.1% more likely.

Table 29. Risk factors for substance abuse among those diagnosed with severe mental illnesses

| Psychiatric disorder | % of increased risk of substance abuse |
|--|---|
| Antisocial personality disorder | 15.5 |
| Manic episode | 14.5 |
| Schizophrenia | 10.1 |
| Panic disorder | 4.3 |
| Major depressive episode | 4.1 |
| Obsessive-compulsive disorder | 3.4 |
| Phobias | 2.4 |

One common public misconception is that persons with mental illnesses are violent and dangerous to the community, especially if these persons have been released from a mental hospital. In a 1998 study of neighborhoods in Worcester, MA, Pittsburgh, and Kansas City, Henry Steadman and his colleagues found that mentally ill individuals who did not have substance abuse problems and who were discharged from mental hospitals were no more likely to be violent than the people in the comparison group—made up of other residents in the same neighborhood—who also did not have substance abuse problems. Substance abuse significantly increased the rate of violence in both the former-patient and the comparison groups. Steadman et al. also found that the released patients in each neighborhood were more likely to be abusing substances than were those in the comparison groups. In addition, this study gave evidence to dispel the myth that mentally ill people are dangerous to strangers. Steadman and his colleagues found that among both the patient and comparison groups, violence was most frequently targeted at family members and friends and occurred most often in the home. Although some forms and degrees of severity of mental illness do tend to make sufferers more violent, a co-occurring substance abuse problem seems to increase the risk of violence regardless of the psychiatric diagnosis.

Given the highly co-occurring nature of substance abuse and mental illnesses and the increase in rate of violence among the dually diagnosed, there is a clear need for substance abuse prevention and treatment directed at people with severe mental illnesses. Children with serious emotional disturbances or other, less severe mental health problems are especially at risk of developing a substance abuse problem, so substance abuse prevention should be an early part of their psychiatric treatment (National Drug Control Strategy, 1999).

According to Drake, Mueser, Clark, and Wallach (1996), most dually diagnosed persons are in and out of mental health and substance abuse treatments with little cross monitoring. The burden of integrating these treatments falls largely on the client. Studies are available that support the effectiveness of integrated treatments in leading to lower hospitalization costs, reduced substance use, and other improvements in quality of life. Drake and colleagues (1996) also point out that current policy and reimbursement focus on short-term programs, while most persons with dual diagnosis require long-term treatments.

Statistics on the dually diagnosed in the Foundation service area are incomplete. Approximately 18% of persons with severe mental illnesses in Kentucky in 1998 also had a substance abuse diagnosis. Given the national prevalence estimates, Hamilton County, Ohio, one would expect the

county to have 5,790 adult mentally ill substance abusers. However, in 1995, only 1,158 of the adults for whom the Hamilton Mental Health Board maintained records were noted as having a substance abuse problem. Approximately half of those whose records indicated substance abuse in 1994 were treated in one of the two substance abuse/mental illness (SAMI) programs funded by the Mental Health Board.

Managers of agencies providing substance abuse treatment alone have indicated that they believed they were also treating a number of mentally ill consumers, but it is not known how many. Significant gaps exist in both diagnosis and services, leaving the dually diagnosed substantially underserved. While there do not appear to be waiting lists for outpatient SAMI treatment, those needing residential treatment face delays of two and a half months or more. A shortage of beds for dually diagnosed females seems to be particularly acute (Hamilton County, 1995).

Conclusion

The lack of data standardization across the three states is a major barrier for service providers who are looking to other states for comparison, especially agencies at the “corners” of states, like the providers in the Foundation’s area. Studies have shown that severely mentally ill persons are best treated in the community when an integrated network of services is provided. Sharing information about effective service networks becomes difficult when each state reports data in a different way using different parameters. Agencies can share ideas and practices, but not data, which can be problematic when these agencies are asked for statistical proof that the approaches will work.

The general trend in the public mental health system across all three states is the decreased reliance on hospital use and a growth in the availability of outpatient, community-based services for severely mentally ill people. In Ohio, an exception to this trend was seen in Clinton and Warren Counties, and possible reasons for it were outlined in this report. Building a network of community-based systems does not happen overnight and there are many issues to be considered, such as how housing, substance abuse, employment, and the criminal justice system interact with treatment given to severely mentally ill people. As more and more individuals with severe mental illnesses are able to remain outside of the institutional setting, these networks of community-based care have to continue to grow and develop to ensure that clients do not fall through the cracks.

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