The Shortage of Public Hospital Beds for Mentally Ill Persons

A Report of the Treatment Advocacy Center

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Summary

Since the 1960s there has been a mass exodus of patients from public psychiatric hospitals. Data are available on the number of patients in such hospitals in 1955 and in 2004–2005. The data show that:

- In 2005 there were 17 public psychiatric beds available per 100,000 population compared to 340 per 100,000 in 1955. Thus, 95 percent of the beds available in 1955 were no longer available in 2005.

- The states with the fewest beds were Nevada (5.1 per 100,000), Arizona (5.9), Arkansas (6.7), Iowa (8.1), Vermont (8.9), and Michigan (9.9). The states with the most beds were South Dakota (40.3) and Mississippi (49.7).

- A consensus of experts polled for this report suggests that 50 public psychiatric beds per 100,000 population is a minimum number. Thus, 42 of the 50 states had less than half the minimum number needed, and Mississippi was the only state to achieve this goal.

- The total estimated shortfall of public psychiatric beds needed to achieve a minimum level of psychiatric care is 95,820 beds.

- The consequences of the severe shortage of public psychiatric beds include increased homelessness; the incarceration of mentally ill individuals in jails and prisons; emergency rooms being overrun with patients waiting for a psychiatric bed; and an increase in violent behavior, including homicides, in communities across the nation.

- The consequences of the severe shortage in public psychiatric beds could be improved with the widespread utilization of PACT (Program of Assertive Community Treatment) programs and assisted outpatient treatment (AOT), both of which have been proven to
decrease hospitalization. It could also be improved with greater flexibility in federal and state regulations allowing for the development of alternatives to hospitalization.

I. Introduction

The mass exodus of patients from public mental hospitals, known as deinstitutionalization, began in the 1960s. It was driven by a variety of factors:

1. Public revelations following World War II that most state mental hospitals were grossly overcrowded and that patients were living in squalid conditions, e.g., Albert Deutsch’s 1948 exposé *The Shame of the States*.

2. The introduction in 1954 of chlorpromazine (Thorazine), the first effective antipsychotic, which made it possible, for the first time, to control the symptoms of schizophrenia and thus discharge some patients.

3. The creation in the 1960s of federal programs such as SSI, SSDI, Medicaid, and Medicare, which provided fiscal support with federal funds for mentally ill individuals who were living in the community. Patients in state hospitals, however, were not eligible (with a few exceptions) for Medicaid and SSI. Since state mental hospitals continued to be almost completely funded with state funds, these federal programs created a huge incentive for states to discharge patients to the community and thus effectively shifted the cost of their care from the state to the federal government. Fiscal conservatives in the state legislatures therefore strongly encouraged deinstitutionalization.

4. The emergence of a group of young, civil libertarian lawyers in the 1960s who decided that mental patients needed to be “liberated.” They implemented a series of successful lawsuits, forcing states to discharge mental patients and making rehospitalization exceedingly difficult.
It is important to realize that very little was known about the causes of severe psychiatric disorders when deinstitutionalization was getting underway in the 1960s. Influential figures such as Dr. Thomas Szasz argued that mental illness was a myth (*The Myth of Mental Illness*, 1961). Others, such as sociologist Erving Goffman (*Asylums*, 1961) and novelist Ken Kesey (*One Flew Over the Cuckoo’s Nest*, 1962), argued that being hospitalized was itself causing the patients’ mental problems and that patients would be much better off if simply discharged. The history of deinstitutionalization, with its odd coalition of fiscal conservatives and civil rights liberals, has been thoroughly documented elsewhere.\(^1\)

### II. Study of the Availability of Public Psychiatric Beds, 1955 and 2005

Surveys of public psychiatric beds, were carried out in 2004 and 2005 by the Center for Mental Health Services, part of the U.S. Department of Health and Human Services, and by the NASMHPD Research Institute, an affiliate of the National Association of State Mental Health Program Directors (NASMHPD). Since similar data are also available from a survey done in 1955, it is possible to compare the availability of public psychiatric beds over a fifty-year period, prior to and after deinstitutionalization.

In 1955 there were 558,239 public (state and county) psychiatric beds available for mentally ill individuals. The population of the United States was 164.3 million. The availability of public psychiatric beds was thus 340 beds per 100,000 population.\(^2\) In 2005 there were 52,539 public (state and county) psychiatric beds available for mentally ill individuals. The population of the United States was 269.4 million. The availability of public psychiatric beds was thus 17 beds per 100,000 population.\(^3\)
Table 1 presents the 1955 and 2005 data by state. In 2005 the states with the most public psychiatric beds per 100,000 population were Mississippi (49.7), South Dakota (40.3), Delaware (33.8), and New Jersey (32.4). The states with the fewest beds were Nevada (5.1), Arizona (5.9), Arkansas (6.7), and Iowa (8.1). The difference in bed availability per population between the states with the most beds compared to states with the least beds was approximately sixfold.

Table 1 also presents public psychiatric bed availability in 2005 as a percentage of bed availability in 1955. On average, only 6.5 percent of the 1955 beds were still available in 2005. Mississippi (19.8%), New Mexico (18.7%), and South Dakota (17.0%) had the highest percentage of beds still available, while Arkansas (2.4%), Nevada (2.6%), and Vermont (2.6%) had the lowest percentage. This number is a measure of how completely the state has emptied its state and county psychiatric hospitals, the degree of deinstitutionalization.

In defending the emptying of public psychiatric hospitals, some officials have claimed that the decrease in public beds has at least been partially offset by increases in private psychiatric hospital beds and psychiatric beds in general hospitals. According to federal data, however, there were very modest increases in both types of facilities in the 1980s and 1990s, but both have subsequently decreased almost to their previous levels. Furthermore, 81 percent of psychiatric beds in general hospitals are in private, not public, general hospitals. Private hospitals are often reluctant to admit individuals who do not have health insurance or are deemed to be “disruptive” or “too violent” to be managed. Since most individuals with serious psychiatric disorders do not have insurance and many are thought to be inappropriate for care in these small settings, private psychiatric hospitals and private general hospitals have been of limited

* The District of Columbia was not included, since its public psychiatric hospital was used for many years for admissions of non-District residents and its data are not comparable with the states. Data are not available for Alaska and Hawaii in 1955, since they were not states at that time.
† In 2007, Nevada opened a new state mental hospital. Thus, their ranking on availability of beds would now be higher than is reflected by these 2005 and 2006 data.
usefulness in compensating for the massive loss of psychiatric beds in public hospitals; even if they do admit such patients, private hospitals tend to discharge them prematurely or transfer them to public hospitals. To make matters worse, there has also been a significant loss of psychiatric beds in Veterans Administration Hospitals since 1970.

III. **How Many Public Psychiatric Beds Are Needed?**

There were 340 public psychiatric beds per 100,000 population in 1955 but only 17 such public psychiatric beds per 100,000 population in 2005. This marked contrast raises the question of how many beds are actually needed. What is the correct number?

Surprisingly, almost nothing has been written on this question, and there are no federal guidelines. It is a difficult question to answer because it depends on several factors. These include:

1. **The number of seriously mentally ill individuals who are potential candidates for hospital admission.** Depending on how one defines “seriously mentally ill,” estimates of their number at any given time have ranged from 3 percent to 10 percent of the population. Furthermore, those needing hospitalization tend to be more concentrated in urban areas, so the need for psychiatric beds in cities is greater than in rural areas.

2. **The number of seriously mentally ill individuals who actually need hospital admission.** This depends heavily on the quality of outpatient treatment in the community. If a state has good community services, such as widespread PACT (Program of Assertive Community Treatment) programs and clubhouses, fewer admission will be needed. If the state uses laws allowing outpatient commitment (assisted outpatient treatment, or AOT), fewer admissions will also be needed, as has been demonstrated in multiple studies.⁵
3. How long the person remains in the hospital. If the average hospital stay of a person with mental illness is 20 days in one state and 10 days in another state, the first state will need twice as many hospital beds to accommodate the same number of admissions. The average length of hospitalizations depends on many factors, including the skill of the hospital’s treatment team, the ability of social workers to make realistic discharge plans, and the availability of appropriate housing and treatment in the community.

4. Short stay beds and long stay beds. Most individuals with serious psychiatric disorders are able to live in the community, either independently or in supervised housing, most of the time. When hospitalization is needed, it is usually for a few days to a few weeks. Public psychiatric beds are used chiefly for individuals needing such short stays; those staying for long periods in these beds are mostly forensic patients who have been court-ordered to the hospital.

Most seriously mentally ill individuals who require long-term supervised treatment, other than forensic patients, are no longer in public psychiatric beds. Instead they have been transferred to long-term residential facilities including nursing homes. Residential facilities vary widely from state to state; a 2003 survey by the Center for Mental Health Services reported 63 different types of residential facilities in 34 states. Furthermore, this survey was unable to obtain information on the other 16 states. Thus, there are no reliable data on the number of seriously mentally ill individuals in long-term residential facilities in the United States.

5. How the beds are financed. The final factor determining the number of public psychiatric beds needed is how the beds are financed. The more flexible the financing is, the fewer beds will be needed. Currently in the United States, most such beds are financed
primarily with state funds with smaller amounts of federal funds. These programs have relatively inflexible regulations regarding what constitutes hospitalization, thereby restricting the utilization of alternative forms of care. It was demonstrated more than 30 years ago that alternatives to hospitalization such as the use of public health nurses\(^7\) and crisis homes\(^8\) can be effectively used as alternatives to hospitalization in many cases, but federal and state regulations have impeded their widespread development.

Taking into consideration all these factors, an estimate of the minimum number of public psychiatric beds needed was derived for children and adults with serious psychiatric disorders, including forensic patients. We solicited opinions from 15 experts on psychiatric care in the United States. They included individuals who have run private and state psychiatric hospitals, county mental health programs, and experts on serious psychiatric disorders. We asked them to assume the existence of good outpatient programs and the availability of outpatient commitment and told them that they would not be publicly identified.

The replies received were surprisingly consistent. Almost all 15 experts estimated a need for **50 (range 40 to 60) public psychiatric beds per 100,000 population** for hospitalization for individuals with serious psychiatric disorders. Since it assumes the availability of good outpatient programs and outpatient commitment, this is a minimum number.

IV. The Magnitude of Psychiatric Bed Shortage

Using **50 public psychiatric beds** per 100,000 population as a minimum, it is possible to compare the present bed capacity in each state with the minimum needed. The results are shown on Figure 1. The states can be divided as follows:
1. **Critical bed storage** (less than 12 beds per 100,000 population)

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada‡</td>
<td>5.1</td>
</tr>
<tr>
<td>Arizona</td>
<td>5.9</td>
</tr>
<tr>
<td>Arkansas</td>
<td>6.7</td>
</tr>
<tr>
<td>Iowa</td>
<td>8.1</td>
</tr>
<tr>
<td>Vermont</td>
<td>8.9</td>
</tr>
<tr>
<td>Michigan</td>
<td>9.9</td>
</tr>
<tr>
<td>Ohio</td>
<td>10.6</td>
</tr>
<tr>
<td>South Carolina</td>
<td>10.6</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>11.0</td>
</tr>
<tr>
<td>Idaho</td>
<td>11.3</td>
</tr>
<tr>
<td>Alaska</td>
<td>11.3</td>
</tr>
</tbody>
</table>

‡ In 2007, Nevada opened a new state mental hospital. Thus, their ranking on availability of beds would now be higher than is reflected by these 2005 and 2006 data.

2. **Severe bed shortage** (12–19 beds per 100,000 population)

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>12.1</td>
</tr>
<tr>
<td>Texas</td>
<td>12.1</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>12.5</td>
</tr>
<tr>
<td>Maine</td>
<td>12.6</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>13.0</td>
</tr>
<tr>
<td>Hawaii</td>
<td>13.5</td>
</tr>
<tr>
<td>Utah</td>
<td>13.8</td>
</tr>
<tr>
<td>West Virginia</td>
<td>14.2</td>
</tr>
<tr>
<td>Illinois</td>
<td>14.3</td>
</tr>
<tr>
<td>Kentucky</td>
<td>15.6</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>15.8</td>
</tr>
<tr>
<td>Colorado</td>
<td>16.9</td>
</tr>
<tr>
<td>North Carolina</td>
<td>17.1</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>17.2</td>
</tr>
<tr>
<td>California</td>
<td>17.5</td>
</tr>
<tr>
<td>Tennessee</td>
<td>18.1</td>
</tr>
<tr>
<td>Georgia</td>
<td>18.5</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>18.9</td>
</tr>
<tr>
<td>Washington</td>
<td>18.9</td>
</tr>
<tr>
<td>Oregon</td>
<td>19.2</td>
</tr>
<tr>
<td>Indiana</td>
<td>19.3</td>
</tr>
</tbody>
</table>
3. **Serious bed shortage** (20-34 beds per 100,000 population)

- Louisiana 20.2
- Nebraska 20.7
- Montana 20.9
- Missouri 21.5
- Maryland 21.6
- Kansas 21.7
- Alabama 22.1
- Virginia 22.2

- New Mexico 22.3
- Wyoming 24.1
- Connecticut 25.4
- North Dakota 25.9
- Minnesota 26.8
- New York 27.4
- New Jersey 32.4
- Delaware 33.8

4. **Marginal bed shortage** (35–49 beds per 100,000 population)

- South Dakota 40.3

5. **Meets minimal standard** (50 or more beds per 100,000 population)

- Mississippi 49.7

This assessment is a measure of the chances for a person with a serious mental illness to be admitted to a public psychiatric facility in that state; it does not assess the quality of psychiatric care the person, once admitted, is likely to receive.

Table 2 presents data on the actual number of public psychiatric beds available in 2004–2005 by state; the minimum number of beds that should be available (assuming 50 beds per 100,000 population) to meet minimum standards of treatment; and the number of beds that need to be added. In all 50 states, there are presently a total of 51,413 public psychiatric beds, whereas
147,233 are needed to meet minimum standards of treatment. The United States is thus 95,820 psychiatric beds short of what is needed for minimum standards of treatment. The number of beds to be added in each state is a target against which public officials can be measured and held accountable.

V. Discussion

The present study of public psychiatric beds in the United States suggests that 42 of the 50 states have less than half the minimum number of beds considered to be reasonable by knowledgeable experts. In 32 of the states, the shortage is critical or severe. Only one state, Mississippi, achieves the minimum standard, and one other state, South Dakota, has only a marginal shortage. At the other extreme, Nevada, Arizona, Arkansas, Iowa, Vermont, and Michigan have less than 20 percent of the minimum number of beds needed.

The consequences of this radical reduction in psychiatric hospital beds have been manifold. One has been a marked increase of severely mentally ill individuals who are homeless. A 2005 federal survey estimated that approximately 500,000 single men and women are homeless in the United States at any given time; multiple studies have reported that one-third of them are seriously mentally ill. These individuals are homeless because of deinstitutionalization and the failure of the state to provide aftercare for them once they are discharged from the hospital. A study in Massachusetts, for example, found that 27 percent of patients discharged from a state psychiatric hospital became homeless within six months of discharge; in a similar study in Ohio, the figure was 36 percent. A recent study of 81 American cities demonstrated a direct relationship between having fewer psychiatric beds and more homeless individuals.

‡ In 2007, Nevada opened a new state mental hospital. Thus, their ranking on availability of beds would now be higher than is reflected by these 2005 and 2006 data.
The effect of mentally ill homeless persons on the quality of life on nation’s sidewalks and in parks and public libraries are known by all who live in cities. According to one observer: “A simple visit to the local elementary school, post office or grocery store . . . can be a Dantesque journey through the dark underside of our society. Violence, harassment and an astonishing list of antisocial behavior are commonplace.” These social costs are matched by fiscal costs. In Los Angeles it was estimated that the cost of “arrests, incarcerations, emergency medical care and other crisis interventions” runs between $35,000 and $150,000 per person per year for individuals who are chronically homeless. In Reno “a chronically homeless mentally ill man . . . cost the county at least $1 million during his 10 years on the streets before he died in 2005.” Fiscal conservatives thought that they would save money by emptying state mental hospitals, but they in fact only shifted the fiscal burden from the department of mental health to departments of corrections and social services and to the courts.

A second consequence of the radical reduction in public psychiatric hospital beds has been a massive increase in severely mentally persons in jails and prisons. Conservative estimates have placed the number at 7 to 10 percent of all inmates, but some studies have put the figure at 20 percent or higher. In Alabama in 2007, for example, Corrections Commissioner Richard Allen told the state legislature that 20 percent of inmates in state prisons were “in need of mental health treatment.” In many jails, such as Miami’s Dade County Jail, 10 percent of the inmates are being treated with antipsychotic drugs. The three largest de facto psychiatric institutions in the United States are the Los Angeles County Jail, Chicago’s Cook County Jail, and New York’s Riker Island Jail. We have been unable to identify a single county in the nation where the county psychiatric inpatient facility is holding as many mentally ill individuals as the county jail. And once a person is in jail, it is almost impossible to find them a bed in a psychiatric hospital. In
Virginia, for example, Sheriff Paul Lanteigne of Virginia Beach “estimates that it typically takes at least six months to find an available bed for a deranged inmate.”

A third consequence of the reduction in psychiatric hospital beds is a concentration of mentally ill persons in emergency rooms (ERs), waiting for psychiatric beds to be found. In North Carolina, for example, Doug Trantham at the Smoky Mountain Mental Health Center described “an inpatient crisis so bad that what it does is backup the entire system.” Officers there have sometimes had to drive patients across the entire state—a seven- to eight-hour drive one way—to a hospital with a bed. Emergency rooms are said to have mentally ill people waiting “four or five days in our ICU just waiting for a place to go. . . . You may have somebody in there all weekend, screaming for 12 or 18 hours,” said a nurse. It is the same in every state; in Arlington, Virginia, county officials had to call 31 hospitals before finding one that would accept a patient. The impact of overburdening the ERs with patients needing hospital beds goes far beyond psychiatric patients; rather, it interferes with all medical and surgical care in the ER.

A fourth consequence of the reduction in psychiatric hospital beds is violent crime. Because there are so few beds available, individuals with severe psychiatric disorders who need to be hospitalized are often unable to get admitted, and those who are admitted are often discharged prematurely. Fred Markowitz, in his 2006 study of 81 American cities, reported a statistically significant correlation between the number of public psychiatric beds available in that city and the prevalence of violent crimes, defined as murder, robbery, assault, and rape. This is not surprising, since studies have shown that between 5 to 10 percent of seriously mentally ill persons living in the community will commit a violent act each year, almost all because they are not receiving treatment. Such individual are responsible for at least 5 percent of all homicides.
The correlation between fewer psychiatric beds and more violent crime, which was statistically demonstrated by the Markowitz study, is anecdotally illustrated by daily news reports. The following tragedies, for example, all occurred in California in recent years:

- **San Diego, April 2001**: Benjamin Flores, diagnosed with schizophrenia, was killed by the police after he attacked them with scissors. He had been released from a psychiatric hospital two days earlier.\(^{21}\)
- **Fresno, March 2002**: Bobby Mallory, diagnosed with bipolar disorder, killed his wife “within hours” of being released from a psychiatric hospital.\(^{22}\)
- **Los Angeles County, February 2004**: Edward Hernandez, diagnosed with schizophrenia, killed his brother within a day of being released from a psychiatric hospital.\(^{23}\)
- **Tiburon, September 2004**: Ramdeen Solomon, diagnosed with schizoaffective disorder, stabbed his mother the day after having been psychiatrically evaluated for possible admission but then refused for admission.\(^{24}\)

### VI. Solutions

The present severe shortage of public psychiatric beds should not be tolerated. It is imperative that individuals with severe psychiatric disorders have access to hospitalization when needed. The present shortage can be ameliorated by the following:

1. Holding state governors and mental health officials responsible for the shortage and demanding that they create the number of public psychiatric beds needed to meet the minimum standards of treatment.
2. Implementing and using PACT programs and assisted outpatient treatment (AOT) in every state; both programs have been proven to decrease the need for hospitalization.
3. Modifying federal and state regulations to allow more flexibility in the utilization of alternatives to psychiatric hospitalization.

4. Changing the federal prohibition on the use of Medicaid in state hospitals, thus moving decisions regarding treatment from being based primarily on fiscal considerations to being based on clinical needs.

5. Implementing a moratorium on the closure of any more beds in state psychiatric hospitals.

6. Making the public aware that the current severe shortage in public psychiatric beds is in part responsible for the increase in homelessness, the increase in the number of mentally ill persons in jails and prisons, the increase in mentally ill persons in emergency rooms, and the increase in violence, including homicides.

A civilized nation has a responsibility to protect those who cannot protect themselves. If people need care they should be able to access it and then to not be discharged until they are ready. As Dr. Robert Reich eloquently expressed it:

No one who is chronically mentally ill should be summarily discharged to the community unless the community can provide an appropriate and safe place for him or her to live. Those patients unable to physically protect themselves must be protected from the predators in our society; those unable to feed and clothe themselves must be placed in a surrounding where they will be fed and clothed. . . . [The] freedom to be sick, helpless and isolated is not freedom. . . . Our present policy of discharging helpless human beings to a hostile community is immoral and inhumane. It is a
return to the Middle Ages, when the mentally ill roamed the streets and little boys threw rocks at them.25

Acknowledgments

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3 (a) 2006 State Mental Health Agency Profiles (Alexandria, Va.: NASMHPD Research Institute, October 2007); this includes state hospital data only. (b) Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2004 State Tables, Table 10b (Rockville, Md.: Department of Health and Human Services); this includes state and county hospitals.
6 Henry Ireys, Lori Achman, and Ama Takyi, State Regulations of Residential Facilities for Adults with Mental Illness (Rockville, Md.: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2006).
11 F. E. Markowitz, Psychiatric hospital capacity, homelessness, and crime and arrest rates, Criminology 2006;44:45–72.
13 P. F. Mangano and G. Blasi, L.A. should do what other cites already are: move the homeless into permanent housing, and stop just managing the problem, L. A. Times, October 29, 2007.


17 Jail is no place for the mentally ill (editorial), Virginia Pilot, January 14, 2008.


