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The Delivery of Mental Health Services

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THE DELIVERY OF MENTAL HEALTH SERVICES[1]

Darrel A. Regier and Carl A. Taube

Mental health services in the United States are provided by a diverse group of professional personnel and facilities with little coordination or centralized governmental planning. As a result, a combination of public and private, general medical and specialty mental health, multispecialty group and solo practice settings constitute what has previously been described as the "de facto U.S. mental health services system." Major changes in this service delivery system have been the result of multiple economic forces, sociocultural pressures, and therapeutic innovations, as well as governmental policy decisions.

This chapter will describe the principal characteristics of the current mental health services system and the evolutionary trends that have emerged over the past twenty-five years. By starting with a brief review of epidemiological data on the prevalence of mental disorders, it is possible to provide some perspective on the scope of the mental health problems that the service system is designed to address. The major sites for mental health service delivery will be identified, as will the trends that have emerged in the service delivery system since 1955. Finally, the characteristics and distribution of professional personnel involved in providing specialty mental

health services will be briefly discussed.

Scope of the Problem: Prevalence of Mental Disorders

A basic and seemingly simple question often asked of mental health experts is: How many people in the United States have mental disorders? Unfortunately, firm answers are hard to obtain. Epidemiologists responsible for such information have been hampered by several problems, including disagreement about the criteria for diagnosing mental disorders and difficulty in obtaining reliable case identification data when communities of untreated people are surveyed. Many of these technical problems are being overcome, but current epidemiological data reflect these long-standing problems. Still, it is possible to obtain some rough estimates of the proportion of the U.S. population affected by these disorders, either at one point in time (point prevalence) or over a given period of time (period prevalence), and to describe the rate at which new cases develop (incidence).

The best current estimate of the prevalence of mental disorders is that at least 10 percent of the U.S. population is affected by mental disorders at any given point in a year. This conclusion is based on the findings of several different studies. A 1954 survey of the noninstitutionalized population of Baltimore, Maryland, found that at any given point in the year 10 percent of the total population of all ages had a mental disorder. Using different case

identification criteria, a 1954 study found that among people twenty through fifty-nine years of age, 23 percent was affected by a serious psychiatric impairment at any point in time. In 1967, a study in New Haven, Connecticut, found a point-prevalence rate of about 16 percent for mental disorders in the population twenty years of age and over. A resurvey of the same population indicated that 15.1 percent had definite mental disorders, and an additional 2.7 percent had probable disorders; thus 17.8 percent of the population now twenty-six years of age and over exhibited some form of mental disorder.

Such studies, although useful, do not specify how many people are mentally ill within a given time period (for example, annual-period prevalence). To obtain such data, one must account not only for the point prevalence but also for the rate at which new cases develop (annual incidence). Although studies of the incidence of mental disorders are extremely rare, a 5 percent annual rate of new cases for the nation can be extrapolated from the rate of new, treated cases in a community-wide psychiatric case register.

Using the results of the study with the lowest point-prevalence estimate (10 percent) and adding another 5 percent for new cases during the year, the annual-period prevalence of all mental disorders in the United States is conservatively estimated to be at least 15 percent of the population. (This will be the prevalence rate referred to in later sections of this chapter.) In the

future, when newer and more precise case identification methods are used in large-scale population studies, such as the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area Program, evidence will probably mount for point-prevalence rates of at least 15 percent, and for annual-prevalence rates of more than 20 percent.

Overview of the Mental Health Service System

Any attempts to define where and by whom mental health services are delivered must begin with some definition of mental health services themselves and the mental health service delivery system. An operational definition is necessary to place reasonable boundaries on the concept of mental health in a society where many nontraditional therapists offer a bewildering array of "mental health" services. Hence, the definition of mental health services should aim for the best possible understanding of where persons with mental disorders receive services. To that end, four major sectors where mental health services are provided may be identified.

The specialty mental health (SMH) sector encompasses a wide range of facilities, which include state and county mental hospitals, psychiatric units of general hospitals, private psychiatric hospitals, residential treatment facilities for children, community mental health centers, freestanding outpatient psychiatric clinics, partial care and halfway houses for the mentally ill, college

campus mental health clinics, and office-based practices of mental health professionals. In 1975, approximately 3 percent of the U.S. population, or one-fifth (21.5 percent) of those estimated as having mental disorders, received services from this sector. Figure 35-1 shows that there is some degree of treatment overlap with the general medical sector for these patients.

No health specialty, whether medical, surgical, or mental health, can provide all necessary services for patients with disorders in its area of special expertise. Hence, there is a necessary division of patient care responsibility between the specialty and the general medical service sectors of the mental health services system. Figure 35-1 shows that approximately 58 percent of the mentally ill receive services exclusively in the general hospital inpatient /nursing home (GHI/NH) and the primary care/outpatient medical' (PC/OPM) sectors collectively referred to as the general medical practice (GMP) sectors. As previously noted, some overlap or joint care occurs between the SMH and GMP sectors.

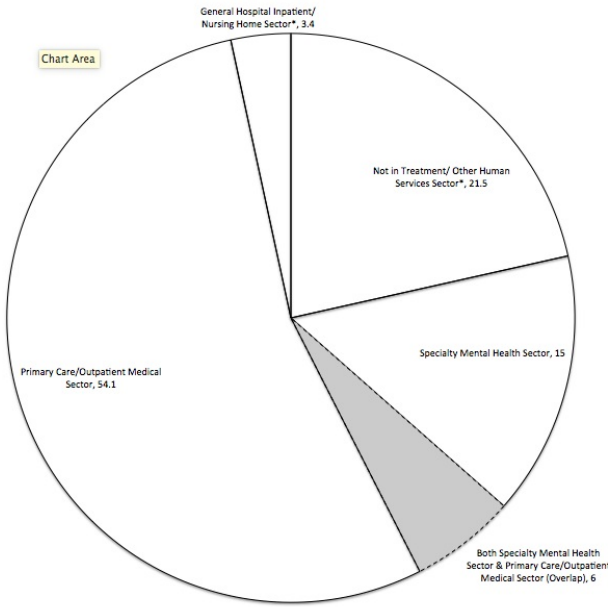

Figure 35-1
Estimated Percent Distribution of Persons with Mental Disorder, by Treatment Setting—United States, 1975

Note: Data relating to sectors other than the specialty mental health sector reflect the number of patients with mental disorder seen in those sectors without regard to the amount or adequacy of treatment provided.

*Excludes overlap of an unknown percent of persons also seen in other sectors.

SOURCE: Reprinted by permission from "The De Facto U.S. Mental Health Services System," by D. A. Regnier, I. D. Goldberg, and C. A. Taube, Archives of General Psychiatry, 35 (1978):685-693.

In addition to the general medical and specialty mental health sectors, mental health services also are provided in other human service settings, such

as family service agencies and other social welfare organizations. This sector will be referred to as the other human services (OHS) sector. Although there is not yet accurate data on the amount of service provided by facilities in these sectors, it is assumed that the remaining 21 percent of persons with mental disorders are either treated in this sector or receive no mental health services at all (see figure 35-1).

This definition of mental health services includes only the direct patient treatment services of the specialty mental health sector and a limited number of general medical practice services. Data on most of these services in the SMH sector are routinely collected by the NIMH and are relatively more comprehensive than data obtained from the remaining sectors. In contrast, mental health services in the GMP sectors include only initial screening and diagnostic services to identify persons with mental disorders in their settings. Hence, information on the number of persons receiving services in these settings should be interpreted with these limitations in mind, which preclude the gathering of data on the type, amount, or quality of services provided in any of these settings.

Recent Trends in the Service System

The mental health services system is an amalgam of historical trends of recent and distant origin, which continue to influence its form and functions.

Understanding these trends is a prerequisite for effective planning and improvement of mental health care.

Declining Role of the State Mental Hospital

State and county mental hospitals have undergone significant changes since 1955, when the resident population in these facilities began to decline—a decline that has continued to the present. Between 1955 and 1978, the number of residents fell from an all-time high of 559,000 to 149,000. During this period, inpatient modalities of state hospitals, which had accounted for 49 percent of the total inpatient and outpatient episodes[2] in the country, fell to a low of 9 percent of all episodes (see table 35-1). Clearly, the locus of care had shifted.

The decline in the resident population of state mental hospitals is related to many factors, including:

1. Increased availability and use of alternate care facilities for the aged.
2. Increased availability and use of outpatient and aftercare facilities.
3. Development and use of psychoactive drug treatment.
4. Gradual reduction in the length of stay for admissions.

5. Greater use of community mental health centers and their affiliation with state mental hospitals.

6. Development of effective screening procedures to prevent inappropriate admissions.

7. Changes in state legislation regarding commitment and retention in facilities.

8. Deliberate administrative efforts to reduce the inpatient population.

These highly interrelated factors affected the rates for admission, readmission, and duration of stay, thereby affecting the number and composition of the inpatient population. While the resident population began diminishing in 1955, the annual number of additions (that is, admissions, readmissions, and returns from leave) to state mental hospitals increased yearly until 1971. Since 1971 the number of additions has declined.

The phenomenon of the "revolving door" of readmissions to state and county mental hospitals has elicited considerable concern in recent years. While the number of total admissions fell between 1972 and 1975 (in part, because of declining new admissions), the number of readmissions in 1975 was just slightly higher than the 1972 figure and remained at a high level of almost 70 percent for all admissions. The high number of readmissions might at first seem to be readily explained by the growth in the number of released

mental hospital patients who constituted the population theoretically "at risk" for readmission. However, the readmission rate per 1,000 released patients rose from 174 to 197 between 1969 and 1975 (see table 35-2). Thus, other factors were involved. One factor was a shift from the use of long-term leave status to outright patient discharge, so that people needing rehospitalization were counted as readmissions rather than as returns from leave. Another possible factor, requiring further study, was a tendency to release some patients without assurance that adequate alternate care arrangements had been made. It is important to remember, however, that the high readmission rate to state and county mental hospitals in 1975 was not appreciably different from that to other inpatient facilities; for example, 61 percent of the total discharges from general hospital psychiatric units had received prior inpatient psychiatric care.

Changing Locus of Inpatient Care

The rate of total inpatient episodes per 1000,000 population increased from 795 in 1955 to 842 in 1977 (see table 35-1). However, psychiatric case register data indicate that, when these episodes are unduplicated, the rate per 100,000 population of persons hospitalized has shown a slight decrease in recent years. Thus, the declining role of the state mental hospital over the past two decades has resulted in a shift to alternate inpatient psychiatric settings, such as general hospital psychiatric units, which have taken over inpatient care functions.

Table 35-1. Number and Percent Distribution and Rate per 100,000 Population of Inpatient and Outpatient Care Episodes, in Selected Mental Health Facilities, by Type of Facility—United States, 1955, 1965, 1971, 1975, and 1977.*

Year	Total All* Facilities	All Inpatient Services	Inpatient Services Of: State & County Mental Hospitals	Private Mental** Hospitals	Gen. Hosp. Psychiatric Service (non-VA)	VA Psychiatric Inpatient Services	Federally Assisted Comm. Men. Health Cen.	Outpatient Psychiatric Services Of: All Outpatient Services	Federally Assisted Comm. Men. Health Cen.	Other
					Number of patient care episodes					
1977	6,392,979,	1,816,613	574,226	184,189	571,725	217,507	268,966	4,576,366	1,741,729	2,834,637
1975	6,409,447	1,791,171	598,993	165,327	565,696	214,264	246,891	4,618,276	1,584,968	3,033,308
1971	4,038,143	1,720,389	745,259	126,600	542,642	176,800	130,088	2,316,754	622,906	1,693,848
1965	2,636,525	1,565,525	804,926	125,428	519,328	115,843	—	1,071,0000	—	1,071,000
1955	1,675,352	1,296,352	818,832	123,231	265,934	88,355	—	379,000	—	379,000
					Percent distribution					
1977	100%	28.4	9.0	2.9	8.9	3.4	4.2	71.6	27.2	44.4
1975	100%	27.9	9.3	2.6	8.8	3.3	3.9	72.1	24.7	47.4
1971	100%	42.6	18.5	3.1	13.4	4.4	3.2	57.4	15.4	42.0
1965	100%	59.4	30.5	4.8	19.7	4.4	—	40.6	—	40.6
1955	100%	77.4	48.9	7.3	15.9	5.3	—	22.6	—	22.6
					Rate per 100,000 population					
1977	2,964	842	266	85	265	101	125	2,122	808	1,314
1975	3,033	847	283	78	268	101	117	2,185	750	1,435
1971	1,977	843	365	62	266	87	64	1,134	305	829
1965	1,376	817	420	65	271	60	—	559	—	559
1955	1,028	795	502	76	163	54	—	233	—	233

*In order to present trends on the same set of facilities over this interval, it has been necessary to exclude from this table the following: private psychiatric office practice; psychiatric service modes of all types in hospitals or outpatient clinics of federal agencies other than the VA (e.g., Public Health Services, Indian Health Services, Department of Defense, Bureau of Prisons, etc.); inpatient services modes of multiservice facilities not shown in this table; all partial care episodes; and outpatient episodes of VA hospitals.

**Includes estimates of episodes of care in residential treatment centers for emotionally disturbed children.

SOURCE: Unpublished provisional data from the National Institute of Mental Health (1977).

TABLE 35-2. Readmission index and percent change for state and county mental hospitals: United States, 1969, 1972, and 1975.

	INDEX YEAR			PERCENT CHANGE	
COMPONENT OF RE-ADMISSION INDEX	1969	1972	1975	1969-72	1972-75
Net live releases in 3 years prior to index year	995,834	1,188,104	1,179,977	19-3	-0.7
Number of readmissions during the index year	173,245	217,468	232,272	25-5	6.8
Readmission index (readmissions in index year per 1,000 net live releases in previous 3 years)	174.0	183.0	196.8	5.2	7.5

SOURCE: Unpublished data from the Division of Biometry and Epidemiology, National Institute of Mental Health.

Because of the greater use of inpatient settings that have an active treatment focus, the length of inpatient care and the number of psychiatric beds have declined. Between 1971 and 1977, the total number of inpatient days decreased 40 percent, from 153 million to 91 million (see table 35-3), and the rate per 1,000 population decreased 43 percent, from 750 to 424. Between 1971 and 1977, the number of beds in inpatient psychiatric facilities declined from 471,800 to 298,783, a 37 percent decrease (see table 35-3). The corresponding rate of inpatient psychiatric beds per 100,000 population dropped 38 percent, from 225.6 to 138.9. Much of this decrease in the number of beds during this period reflects changes within state and county mental hospitals, where the number of beds decreased 49 percent between 1971 and 1977.

TABLE 35-3. Inpatient days of care and inpatient beds in mental health facilities, percent distribution and percent change according to type of facility: United States, 1971, 1973, 1975, and 1977.

TYPE OF FACILITY*	YEAR								PERCENT CHANGE
	1971	1973	1975	1977	1971	1973	1975	1977	1971-77
	Number of inpatient days				Percent distribution of inpatient days				Inpatient days
All facilities	153,104,652	125,905,826	104,907,588	91,432,227	100.0%	100.0%	100.0%	100.0%	-40.3
Psychiatric hospitals	137,697,251	109,302,017	86,709,598	72,633,469	89.8	86.8	82.6	79.4	-47.3
State and county hospitals	119,200,126	92,210,109	70,584,014	57,206,390	77.7	73.2	67.2	62.6	-52.0
Private hospitals	4,220,216	4,107,499	4,400,522	4,791,906	2.8	3.3	4.2	5.2	13.5
VA hospitals**	14,276,909	12,984,409	11,725,062	10,635,173	9.3	10.3	11.2	11.6	-25.5
Nonfederal general hospital psychiatric units	6,826,260	6,990,253	8,349,412	8,434,691	4.5	5.6	8.0	9.2	23.6
Residential Treatment centers for emotionally disturbed children	6,355,745	6,337,926	5,900,112	6,545,570	4.2	5.0	5.6	7.2	3.0
Community mental health centers	2,225,396	3,275,630	3,948,466	3,818,497	1.5	2.6	3.8	4.2	71.6
	Number of inpatient beds***				Percent distribution of inpatient beds***				Beds***
All facilities	471,800	391,813	331,134	298,783	100%	100%	100%	100%	-36.7
Psychiatric hospitals	418,535	335,881	274,206	234,512	88.8	85.6	82.8	78.5	-44.0
State and county hospitals	361,578	280,277	222,202	184,079	76.7	71.4	67.1	61.6	-49.1
Private hospitals	14,412	15,369	16,091	16,637	3.1	3.9	4.9	5.6	15.4
VA hospitals**	42,545	40,235	35,913	33,796	9.0	10.3	10.8	11.3	-20.6
Nonfederal general hospital psychiatric units	23,308	24,518	28,706	29,384	4.9	6.3	8.7	9.8	26.1
Residential Treatment centers for emotionally disturbed children	19,348	19,023	18,029	20,071	4.1	4.9	5.4	6.7	3.7
Community mental health centers	10,609	12,391	10,193	14,816	2.2	3.2	3.1	5.0	39.7

*Excludes multiservice mental health facilities not elsewhere classified, which represents 1 percent or less of the inpatient days and beds for each of the years.

**Includes VA neuropsychiatric hospitals and psychiatric inpatient units of VA general hospitals.

***Counts on number of beds are obtained as of December 31 for each of the years.

SOURCE (inpatient days): Unpublished estimates from the Division of Biometry and Epidemiology, National Institute of Mental Health.

SOURCE (beds, 1971-75): National Institute of Mental Health, Division of Biometry and Epidemiology, *Statistical Notes 98, 118,* and *144.*

SOURCE (beds, 1977): Unpublished estimates from Division of Biometry and Epidemiology, National Institute of Mental Health.

If changes in the number of beds in various inpatient facilities are taken as an indication of shifting loci of care, some interesting patterns can be seen. There was a net decrease in the number of psychiatric beds between 1971 and 1977 for all psychiatric facilities, largely as a result of the drop in the number of state mental hospital beds from 361,578 to 184,079. Despite this net decrease, some facilities increased the number of beds during the same period. For example, beds in private psychiatric hospitals rose from 14,412 to 16,637. Even more dramatically, nonfederal general hospital psychiatric unit beds increased from 23,308 to 29,384. These changes are but one indication of the growing role being assumed by these settings in inpatient psychiatric care.

Growth in General Hospital Psychiatry

There was a 26 percent increase in beds in psychiatric units of nonfederal short-term general hospitals between 1971 and 1977. This increase contrasts markedly with the decrease in state hospital beds and exceeds the 9 percent overall increase for general hospital beds for the same period. The increase in the number of general hospital psychiatric unit beds reflects a 45 percent increase in the number of new units between 1971 and 1977.

As of January 1978, nonfederal general hospitals maintained 844

inpatient psychiatric units, 300 outpatient psychiatric services, and 166 day treatment programs for psychiatric patients. Veterans Administration general hospitals added another 100 inpatient psychiatric units, 102 outpatient psychiatric services, and 56 day treatment programs (see table 35-4) The nonfederal general hospital separate psychiatric services accounted for 20 percent of the episodes in all specialty mental health facilities in 1977.

TABLE 35-4. Number of Mental Health Facilities and Service Modalities—United States, January 1978.

TYPE OF FACILITY	NUMBER OF FACILITIES	NUMBER OF SERVICES		
		INPATIENT	OUTPATIENT	DAY TREATMENT
Total, all facilities	3,751	2,433	2,439	1,581
Nonfederal psychiatric hospitals	487	487	183	184
State and county hospitals	298	298	121	104
Private hospitals	189	189	62	80
VA psychiatric services*	137	122	128	68
Neuropsychiatric hospitals	22	22	21	9
General hospitals	110	100	102	56
Nonfederal general hospitals	925	844	300	166
Public hospitals	173	159	78	35
Nonpublic hospitals	752	685	222	131
Residential treatment centers for emotionally disturbed children	375	375	62	114
Federally funded CMHC's	563	563	563	563

Freestanding outpatient clinics	1,160	—	1,160	389
Public	397	—	397	135
Nonpublic	763	—	763	254
Other mental health facilities	104	42	43	97

*Total includes information for five VA freestanding psychiatric outpatient clinics that are not shown separately. Five of the clinics had outpatient services and three had day treatment.

SOURCE: Unpublished data from the Division of Biometry and Epidemiology. National Institute of Mental Health.

The overall role of general hospitals in providing mental health services is much larger, however, than that of their specialty psychiatric services. For example, discharges from nonfederal general hospital psychiatric units numbered 552,437 in 1977, whereas discharges with a primary p7sychiatric diagnosis from all hospital units numbered 1,625,000. Therefore, there were more than an additional 1 million discharges with a primary psychiatric diagnosis from general hospitals over and above those discharged from specialty psychiatric inpatient units. In addition to the 1.6 million discharges with a primary diagnosis of mental disorder, an additional 1.1 million discharges in nonfederal short-stay hospitals had a secondary psychiatric diagnosis (see table 35-5).

Organized outpatient mental health services may be categorized by their organizational location as follows:

1. Freestanding outpatient clinics that are not administratively part of or affiliated with an inpatient psychiatric facility.

2. Outpatient services affiliated with psychiatric hospitals, both public and private.

3. Outpatient psychiatric services of general hospitals.

4. Outpatient psychiatric services of other mental health facilities, such as residential treatment centers for emotionally disturbed children, outpatient services of federally funded community mental health centers, and clinics of the Veterans Administration.

Of the total 2,439 outpatient mental health services in the United States as of January 1978, approximately 183 (8 percent) were affiliated with psychiatric hospitals; 402 (16 percent) were affiliated with general hospitals (nonfederal and Veterans Administration); 1,160 (48 percent) were freestanding psychiatric services; 563 (23 percent) were affiliated with federally-funded community mental health centers; and 131 (5 percent) were affiliated with other types of mental health facilities. Dual affiliation with a general hospital and a community mental health center are counted with the latter (see table 35-4).

Additional information on the volume of services in each of the facility types is presented in table 35-6. This table reflects additions to facilities, that is, admissions, readmissions, and transfers during the year. When combined

with data in table 35-1, it is possible to determine the percent of episodes beginning in the year. It is also possible to determine where the increase in outpatient mental health services has occurred in the past decade. Ninety-four percent of the absolute increase of 1,008,160 outpatient additions between 1971 and 1977 was about equally distributed between two types of outpatient settings; freestanding outpatient services and outpatient services of community mental health centers (see table 35-6).

TABLE 35-5. Distribution of Discharges, Excluding Newborns, from Nonfederal Short-stay Hospitals, According to Whether or not Primary or Secondary Diagnosis was a Mental Disorder— United States, 1977.

DIAGNOSIS	NUMBER OF DISCHARGES
All discharges	35,902,000
Discharges with a mental disorder	2,763,000
Primary diagnosis of mental disorder	1,625,000
Primary only	1,128,000
Primary and one or more secondary	497,000
Secondary only	1,139,000

Source: Unpublished data from the National Center for Health Statistics Hospital Discharge Survey.

Table 35-6. Admission to Mental Health Facilities and Percent Change, According to Service Mode and Type of Facility—United States, 1971 and 1977

Type Of Facility	SERVICE MODE								
	Inpatient			Outpatient			Day Treatment		
	Number Of Admissions		Percent Change	Number Of Admissions		Percent Change	Number Of Admissions		Percent Change
	1971	1977	1971-77	1971	1977	1971-77	1971	1977	1971-77
Total, all facilities	1,269,029	1,588,964	25.2	1,378,822	2,386,982	73.1	75,545	171,118	126.5
Nonfederal psychiatric hospitals	494,640	552,854	11.8	147,383	146,797	-0.4	18,448	14,530	-21.2
State and county hospitals	407,640	414,703	1.7	129,133	107,127	-17.0	16,554	10,637	-35.8
Private hospitals	87,000	138,151	58.8	18,250	39,670	117.4	1,894	3,899	105.9
VA psychiatric services*	134,065	183,461	36.8	51,645	123,893	139.9	4,023	6,978	73.5
Nonfederal general hospital psychiatric units	519,926	552,437	6.3	282,677	225,765	-20.1	11,563	13,260	14.7
Government hospital psychiatric units	215,158	135,460	-37.0	139,077	99,543	-28.4	4,291	3,480	-18.9
Private hospital psychiatric units	304,768	416,977	36.8	143,600	126,222	-12.1	7,272	9,780	34.5
Residential treatment centers for emotionally disturbed children	11,148	15,152	35.9	10,156	18,155	78.88	994	3,147	216.6
Federally funded CMHCs	75,900	257,347	239.1	335,648	876,121	161.0	21,092	102,493	385.9
Freestanding outpatient clinics	—	—	—	484,677	889,589	83.9	10,642	21,149	98.7
Government	—	—	—	273,358	340,953	24.7	7,737	8,059	4.2
Private	—	—	—	211,319	548,636	159.6	2,905	13,090	350.6
Other mental health facilities	33,350	27,713	-16.9	66,636	106,662	60.1	8,783	9,561	8.9

*Includes Veterans Administration neuropsychiatric hospitals and Veterans Administration general hospitals with separate psychiatric modalities.

SOURCE: Unpublished data from the Division of Biometry and Epidemiology, National Institute of Mental Health.

Increasing Role of Nursing Homes in Care of Mentally Ill

One of the major factors contributing to the decline in the size of the state mental hospital resident population has been the growth of the nursing home industry. Under the Medicare and Medicaid programs, the cost of caring for the mentally ill aged shifted from primarily state support to primarily federal support. These financing changes permitted nursing homes to flourish and assume responsibility for long-term care of many chronically mentally ill aged. Between 1954 and 1976, the number of nursing homes increased by about 210 percent, from about 6,500 to 20,185, and the number of nursing home beds grew by almost 730 percent, from 170,000 to 1,407,000. As Redick observed:

> In 1960, 615,000 or about 4 percent of persons 65 years of age and over were ... in institutions; by the 1970 census, this number had increased to and represented 5 percent of all persons 65 and over. At both time periods, over 90 percent of the elderly in institutions were either in mental hospitals or homes for the aged and dependent, but the proportions of elderly in each of the two types of institutions showed a significant shift over the 10-year interval. Between 1960 and 1970, the percentage of institutionalized elderly in mental hospitals decreased from about 30 percent to 12 percent, whereas the proportion in homes for the aged and dependent increased from 63 to 82 percent, [p. 1]

Between 1969 and 1973, the number of nursing home residents sixty-five years of age and over with a chronic mental disorder increased more than 100 percent, from 96,000 to 194,000, while the number of residents sixty-five years of age and over in all types of psychiatric hospitals decreased by 37 to

40 percent (see table 35-7). The net benefit of this trend for the mentally ill elderly has been questioned. Studies of the care provided for these individuals in nursing homes have suggested that "re-institutionalization" rather than a deinstitutionalization to a less restrictive environment has resulted. As an example of the impact of financing on the locus and quality of care, this phenomenon has important implications for national health insurance planning.

Growth in Federally Funded Community Mental Health Centers

One aspect of the growth in community-based mental health care has been the development of federally funded community mental health centers. The number of community mental health centers grew from 205 in 1969 to 563 in 1977 and, as noted, earlier, the outpatient services of these centers and of freestanding outpatient clinics accounted for 94 percent of the absolute increase in outpatient episodes between 1971 and 1977. In 1977, federally funded community mental health centers accounted for 31 percent of the total inpatient and outpatient episodes (see table 35-1).

Table 35-7. Resident Patients 65 Years of Age and Over in Psychiatric Hospitals or Residents 65 Years of Age and Over with Chronic Condition of Mental Disorder in Nursing Homes and Percent Change, According to Type of Facility—United States, 1969 and 1973.*

TYPE OF FACILITY	NUMBER OF RESIDENTS		PERCENT CHANGE
	1969	1973	1969-73

State and county mental hospitals	111,420	70,615	-36.6
Private mental hospitals	2,460	1,534	-37.6
VA hospitals**	9,675	5,819	-39.9
Nursing homes***	96,415	193,900	101.0

*Includes mental illness (psychiatric or emotional problems) and mental retardation but excludes senility.

** Includes Veterans Administration neuropsychiatric hospitals and general hospital inpatient psychiatric services.

***Data on residents with chronic condition of mental disorder used rather than data on residents with primary diagnosis of mental disorder at last examination, since latter data were not available by age in 1969.

SOURCES: Selected publications and unpublished data from the Division of Biometry and Epidemiology, National Institute of Mental Health; A. Sirrocco, "National Center for Health Statistics: Chronic conditions and impairments of nursing home residents, United States, 1969," Vital and Health Statistics, Series 12, No. 22, DHEW Pub. No. (HRA) 74-1707, Health Resources Administration, Washington, D.C.: U.S. Government Printing Office, December 1973; and unpublished data.

The growth in the number of community mental health centers (CMHCs), which reached 763 in 1979, has resulted in a reorganization of existing facilities and an absolute increase in the number of persons served by organized mental health facilities. CMHCs generally are not newly created but rather are formed by the affiliation of existing community resources—usually general hospital psychiatric services and freestanding outpatient and day treatment programs; for example, 528 CMHCs in 1975 encompassed 2,000 affiliated facilities. General hospital psychiatric services have formed a major base for the development of CMHCs as have state- or county-operated and/or

supported outpatient services. The state role in the development of CMHCs is demonstrated by the fact that 29 percent of the funding for CMHCs in 1977 was provided by state governments, an amount equal to that provided by the federal government.

In recent years, CMHCs have accounted for the major part of the growth in day treatment services, which were virtually nonexistent twenty years ago. Between January 1972 and January 1978, the number of day treatment programs increased by 60 percent. CMHCs accounted for 268 (45 percent) of the 592 new day treatment programs; freestanding outpatient psychiatric clinics accounted for 243 (41 percent); and residential treatment centers for children accounted for 54 (9 percent).

The numerical increase in day treatment programs has been greatest in CMHCs, which also sponsor the largest programs, averaging 182 annual admissions per program versus 75 annual admissions for other settings. Because of this growth, the CMHC day treatment programs now account for more than half of the annual admissions to day treatment services.

Despite dramatic increases in the numbers of day care programs and admissions to them, day treatment still remains relatively unused in the total spectrum of mental health resources. Of the 6.9 million patient-care episodes in mental health facilities during 1977, only 3.2 percent were in day treatment

services.

Growth of Private Sector in Providing Mental Health Services

During the early development of mental health services, public programs were the predominant mode of service delivery. However, this dominance has been eroding at a rapid pace in recent years. (The growth in psychiatric services in general hospitals has already been noted.) Similarly, private psychiatric hospitals have grown from 151 in 1968 to 189 in 1977 and have assumed an increasing role in inpatient care. While national trend data are not available, there has probably been a significant increase in the number of people under care of private practitioners. The number of people seen privately by psychiatrists and psychologists has been estimated to be almost 1.3 million, or 20 percent of the total number of people seen in 1975 in the specialty mental health sector. Indeed, when the number of people seen in all private settings (both organized and private office settings are combined), the resultant number represents about half of the people under care in all specialty mental health settings during 1975.

Providing Mental Health Services in the Health Sector

Of the total number of people affected by mental disorders in 1975, about 19 million, or more than 60 percent, were estimated to have had

contact with a general medical professional during the year. Only about 6 percent of the total were estimated to have been seen also in the specialty mental health sector during the year (see figure 35-1). Since approximately 76 percent of the noninstitutionalized population visits a physician in one or more settings during a year, this finding is not surprising. However, it does underscore the importance of the health sector as part of the treatment system for the mentally ill.

Special surveys of general practitioners and internists have shown that about 15 percent of their patients are recognized as being affected by a mental disorder during periods of one month to one year, a figure reasonably consistent with the overall annual prevalence of mental illness in the population as a whole. Lower rates were found in industrial clinic settings, and somewhat higher rates were found in hospital outpatient departments.

The rates of mental disorder found in these studies were higher than those routinely reported within the general health sector. For example, in 1975, the National Ambulatory Medical Care Survey determined that only 5 percent of visits to general practitioners, internists, and pediatricians resulted in a diagnosis of mental disorder. It is believed that such underreporting results from several factors: (1) Organic illnesses are frequently the problems most presented and constitute the major focal point within nonpsychiatric office practice; (2) some non-psychiatrist physicians are unable to recognize

certain types of mental illness; and (3) many non-psychiatrists prefer to avoid a mental disorder diagnosis whenever an alternative is available, perhaps to assure that treatment will be covered by health insurance.

In a more recent study, mental health professionals examined a sample of general medical practice patients with a standardized psychiatric interview protocol. Results showed that 26.7 percent of adult patients (eighteen years and over) could be predicted to have a Research Diagnostic Criteria (RDC) diagnosis of mental disorder in one year. These findings indicate that higher percentages of general medical practice patients may be found to have bona fide mental disorders when more precise measures are used. However, the percent of these disorders that are mild and self-limited and that do not require specific “mental health services” has not yet been determined.

A study of general medical physicians in England found that 67 percent of their patients with identified mental disorder received some form of treatment directly from the physician. Another 5 percent were referred for specialty mental health care, and 28 percent received no mental health treatment in the year. There is wide variation, however, in what is defined as “treatment” within general health care settings. Some of the U.S. general medical practice studies found that psychotropic drugs were prescribed for 60 to 80 percent of patients with identified mental disorders, and that “supportive therapy” was provided for up to 96 percent.' It is also obvious

that some types of treatments used for patients with identified mental disorders were used for other patients as well. For example, a 1973 survey of visits to office-based physicians revealed that an antianxiety or sedative agent was prescribed in 12 percent of these visits, although only 5 percent of such visits were for mental disorder.

Even if physicians in general medical practice neither recognize nor treat all of the mental disorders of their patients, it is clear that these physicians provide a substantial share of the total volume of mental health services in the United States. Of all visits to office-based physicians resulting in a primary diagnosis of mental disorder, 47 percent were attributed to nonpsychiatric physicians, and 53 percent were attributed to psychiatrists. Likewise—although non-psychiatrists acknowledged use of a "psychotherapy-therapeutic listening" service in only 2 percent of their visits, compared with 73 percent of psychiatrists' visits, by sheer weight of numbers non-psychiatrists accounted for as many as 46 percent of visits and 27 percent of the total time devoted to such therapeutic listening treatment by office-based physicians.

Geographic Location of Services

By almost any measure one chooses to use, specialty mental health resources are unevenly distributed geographically. Whether one looks at a

national, regional, or local community level, resources tend to be clustered in certain areas, while other areas are essentially underserved or unserved. This uneven distribution results in limited or difficult access to mental health services for many who need them.

In general, mental health resources, whether facilities or personnel, tend to be clustered regionally in the Northeast and in urban rather than suburban or rural areas. Until quite recently, the location of service facilities and personnel had been planned with little consideration to local service needs and resources. The development of community mental health centers represents an effort at the federal level to complement state and local efforts to encourage more rational and equitable resource allocation and distribution, although these goals are not easily reached.

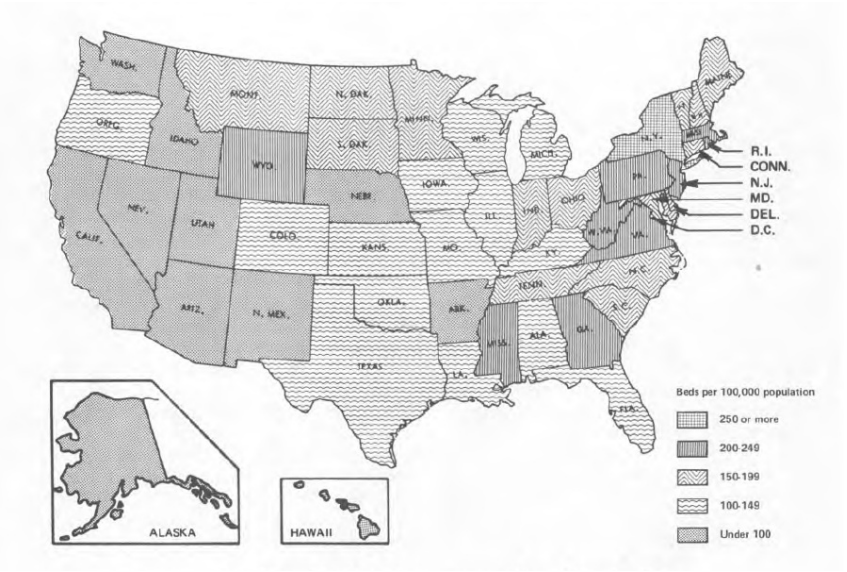

Figure 35-2.
Total Psychiatric Beds per 100,000 Population by State-United States, January 1976

Examination of how psychiatric beds are distributed nationally will illustrate some of the current problems of resource distribution. The adequacy of a community's inpatient psychiatric care resources cannot be judged solely by its bed-to-population ratio. However, using this and other measures, it is apparent that there are vast inequities in the distribution of beds and other resources, which remain unrectified.

Psychiatric beds are distributed reasonably equally when the bed rate per 100,000 is considered by the state (see figure 35-2). However, psychiatric

beds are more unevenly distributed by the state than are general hospital beds. Particular types of psychiatric inpatient facilities show different degrees of uneven bed distribution; beds in psychiatric units in general hospitals are most evenly distributed, while beds in state and county mental hospitals are most unevenly distributed.

Compared with urban areas, rural areas and suburban areas have a relatively low rate of community-based psychiatric beds per population. Rural psychiatric hospital bed ratios compared with urban area bed ratios are also relatively low, while psychiatric bed ratios in locales outside urban areas (but not rural) are very high, reflecting the historical tendency to locate psychiatric hospitals outside of populated areas.

One of the many objectives of the community mental health center program has been to increase the geographic accessibility of mental health care to the nation's population. In 1975, however, twelve years after passage of the community mental health care center legislation, 104 of the 1,542 geographic catchment areas in the United States still had no mental health services, 647 still had no community-based inpatient mental health service, and 334 had inpatient and outpatient mental health services but no day care or emergency services. The primary reasons for this omission are as follows:

1. Funds to support the development of CMHCs in all needed catchment areas have been limited.

2. Development of and planning for mental health services are difficult for those areas with scarce resources, and such planning may not be given highest priority by some communities.

3. Some areas are so sparsely populated that it would not be cost effective to provide a full range of services to them.

Remedies for this situation have been proposed, most recently by the President's Commission on Mental Health, but these barriers to service development may not be easily overcome. Implementation of the Mental Health Systems Act, which is now being developed by Congress, would provide the greatest potential for ameliorating the current maldistribution of services.

Manpower Supply and Distribution

Concern has frequently been voiced over the adequacy of the manpower supply to meet the current and future service needs of the mentally ill. The issue becomes particularly acute considering the possibility that national health insurance, by eliminating some financial barriers, may increase the demand for services. At present, it is extremely difficult to say, except at a very general level, whether there are or are likely to be enough of the right people, with the right skills, in the right places, to respond appropriately to mental health service needs and demands. To answer these questions requires information not yet available regarding such issues as:

1. Who needs what services where?

2. What types of persons are best suited to provide various types and levels of care for particular kinds of individuals and disorders?

3. How do caregivers spend their time in various organizational settings?

4. How do various types of caregivers affect those they treat?

5. What kinds of human resources are needed (and for how long) to provide adequate treatment for various disorders?

6. What incentives can effectively alter manpower distribution patterns to make them more equitable?

7. How are the supplies of various types of manpower and other resources changing?

The issue is particularly complex because the characteristics of both the specialty mental health and the general health manpower system must be understood.

Almost two-thirds of those with mental disorders have contact with only the general health sector during a given year; it is thus critical that the need and demand for manpower in treating mental disorders be analyzed in this larger context. However, if examination is confined to the core disciplines

providing mental health services (that is, psychiatry, psychology, social work, and mental health nursing), some idea of the general supply of personnel in these fields can be obtained, as well as an idea of how these individuals are distributed nationally in various service settings. Such figures, although crude, do suggest that however adequate or inadequate the current supply may be nationally, there is considerable geographical maldistribution that stands in need of correction.

There has been a substantial growth in the core disciplines during the past thirty years, as noted by Kole:

> Membership of the American Psychiatric Association increased from about 12,000 in 1963 to about 23,000 in 1976; of these, 17,000 are estimated to be providing patient services in various settings, a ratio of 1:13,000 to the general population in 1976. Membership of the American Psychological Association increased from 21,000 in 1963 to 44,500 in 1977. Of these, approximately 23,000 are considered by the Association to be health care providers; approximately 81 percent of these providers have doctorate degrees and 17 percent have master's degrees, with many of the latter working toward the doctorate. The supply of social workers increased from an estimated 105,000 in 1960 to 195,000 in 1974 with perhaps 70,000 having an MSW degree or higher; about 26,000 full-time equivalent social workers were employed in mental health facilities in 1976, with 73 percent of these at the MSW level or above. In 1976, about 39,000 full-time equivalent nurses worked within organized mental health facilities; these include the entire range of training from associate degree nurses to those holding doctorate degrees. The number of mental health nurses with master's degrees or higher has increased from less than 20 in 947 approximately 11,000 in 1976. [p. 12]

As of January 1978, there were 469,038 filled staff positions (excluding

private practitioners) in specialty mental health facilities in the United States. Of that total, 31 percent were staff not engaged in patient care. Of the professional staff, 26 percent were registered nurses, 13 percent were psychiatrists, 3 percent were other physicians, 13 percent were psychologists, 18 percent were social workers, 6 percent were physical health professionals, and 23 percent were other mental health professionals. Of the other staff engaged in patient care, 12 percent were licensed practical or vocational nurses, and 88 percent were mental health workers. Fulltime staff worked an average of 39.6 hours per week, part-time staff worked 16.7 hours, and trainee staff worked 22.3 hours.

More than half of the total full-time equivalent staff of specialty mental health facilities worked in state and county mental hospitals. These hospitals deployed relatively large numbers of staff for work other than patient care and employed mental health workers with less than a bachelor's degree. Professional staff engaged in patient care in state and county mental hospitals were not as predominant, accounting for one-third of the full-time equivalent staff positions.

A study of the distribution of mental health manpower in mental health facilities has reported several aspects of uneven manpower distribution. First, urban areas rather than rural areas tended to attract concentrations of manpower and services. Such urban-rural manpower differences were

particularly great regarding psychiatrists, social workers, and registered nurses. Although there were urban-rural disparities in the supply of psychologists, the disparities were not as great. Paraprofessionals tended to be more evenly distributed. The urban-rural manpower disparity holds even when poverty areas are compared. For psychiatrists, psychologists, social workers, and registered nurses, the highest mean number of manpower hours per 100,000 catchment area population in a poverty area was found in urban poverty areas, while the lowest manpower levels were in rural poverty areas.

From a regional perspective, the Northeast was relatively well supplied with mental health manpower, while the South, particularly the west south central and east south central regions, was poorly supplied. Certain states were outstanding either for their notably high rates of mental health manpower (for example, New York, Massachusetts, Vermont, and the District of Columbia) or for notably low rates (for example, Alabama, Alaska, and Mississippi).

Although this study was limited to manpower in mental health facilities, similar distribution patterns may exist for mental health personnel in private practice and in other care settings such as schools, industrial clinics, and other human service settings.

Summary

A review of the key points of this chapter provides an overview of the current mental health service system. Some trends and issues of particular importance for future planning are as follows:

1. About 15 percent of Americans are estimated to have mental disorders within any one-year period.

2. Most receive care from a variety of resources, but primarily such care comes from the general health, not the specialty mental health service system.

3. As many as 22 percent of those with mental disorders in a given year may receive no diagnostic assessment or treatment from either service system.

4. The specialty mental health service system, once largely geared toward long-term inpatient care in public facilities, is becoming increasingly oriented toward short-term and outpatient care in the private sector.

5. The length of stay in specialty mental health inpatient facilities has decreased appreciably, as has the number of inpatient beds.

6. The locus of inpatient care of the mentally ill is shifting from state and county mental hospitals to several other settings, particularly nursing homes and psychiatric inpatient units of general hospitals.

7. The growth of community mental health centers has provided new service resources and has had a profound effect on

outpatient care (particularly day care), but has not yet achieved its full potential in creating more equitable geographic distribution of services and personnel.

8. Mental health personnel, like mental health facilities, are unevenly distributed geographically, with rural areas notably low in mental health service resources.

Obviously there is still much work to be done to assure that all Americans have access to appropriate, convenient, effective mental health care when it is needed. Considerable work is also required to reduce the need for mental health services through prevention. Such preventive efforts must be firmly grounded in laboratory-based and epidemiologic studies of the conditions that contribute to mental disorder; for example, risk factors. The more that is understood about the origins of mental illness and how to control it, the less reliance there will be on an extensive and expensive treatment system. Thus, future mental health planning must consider not only how to make mental health care more accessible and equitable for those with mental disorders, but also how to keep people mentally healthy.

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Notes

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2 "Patient care episodes" are defined as the number of residents in inpatient facilities at the beginning of the year (or the number of persons on the rolls of noninpatient facilities) plus the total admissions to these facilities during the year (that is, new admissions, readmissions, and returns from long-term leave). This index, therefore, provides a duplicated count of persons and is not equal to a true annual-prevalence rate or the annual prevalence rate for treated mental disorder, which would require unduplicated person counts.