

# Mental Health Services in the Public and Private Sectors

BY LORRIN M. KORAN, M.D.

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*Analysis of data on mental health service providers indicates that in 1971 the private sector accounted for 34% of inpatient days, 86% of outpatient visits, 44% of expenditures by source of funds, and 51% of expenditures by receipt of funds. The author believes that mental health professionals must familiarize themselves with the economic interests influencing national health insurance proposals and with public policy making processes if they are to help preserve appropriate roles for the public and private sectors in mental health service delivery.*

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THIS ARTICLE is an attempt to provide more complete estimates of the volume of mental health services in the public and private sectors than have previously been available. Sharfstein and associates (1) have given the most extensive estimates to date. They limited their attention, however, to the public and private practice of psychiatry and did not consider mental health services rendered by other medical or mental health professionals in various settings. Moreover, as I will illustrate below, their estimate of outpatient visits to private psychiatrists was far too low. With national health insurance under debate and the extent of coverage of services for mentally disordered patients still unclear, a more complete estimate of the role of the private sector may benefit public policymakers and the public interest.

In 1975, Sharfstein and associates concluded that "there are no clear data available to permit adequate assessment of or definitive conclusions about the current relative roles of [psychiatry in] the public and private sectors, however defined, in the provision of mental health services" (1, p. 47).

The authors encountered several problems in their research. The exact numbers of psychiatrists in private practice and of persons under their care were not known. Moreover, some private practice psychiatrists also engage in part-time salaried practice in a public facility. In both the public and private sectors, the data

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on annual admissions and patient care episodes in mental health facilities were contaminated by duplications, i.e., patients treated in more than one setting in a year or treated more than once a year in the same setting. Finally, because public facilities receive private dollars (e.g., patient fees) and private facilities receive public dollars (e.g., Medicare), the boundary between the public and private sectors is blurred.

The analysis that I will present circumvents these problems in several ways. First, better estimates of the number of outpatient visits to private psychiatrists are now available. Second, the measures used to describe the volume of care—inpatient days, outpatient visits, and expenditures—do not depend on unduplicated counts of patients. Third, the boundary between the public and private sectors has been clarified by examining expenditures for mental health services by both recipients of funds and source of funds.

In order to build on the data assembled by Sharfstein and associates, I have examined mental health services delivered in 1971, the year they studied. A few of their estimates have been changed because better data are available. In addition, I have included data on services rendered by practitioners and facilities they did not study. No data are available, however, regarding some kinds of facilities, e.g., general medical clinics. Units of care have been apportioned according to the public or private ownership of the particular type of facility. For example, Sharfstein and associates assumed all federally funded community mental health centers (CMHCs) were in the public sector; in fact, only 45% were publicly owned (2). (However, 80% of CMHC funds were derived from government sources [3].)

## THE MEASURES

### *Inpatient Days*

Sharfstein and associates' estimate of inpatient days in residential treatment centers for emotionally disturbed children has been distributed according to the proportions of publicly and privately owned beds (4) (see table 1). Because CMHCs and residential treatment centers for disturbed children account for very small proportions of inpatient days, the redistributions do not result in substantial differences in the overall analysis. Estimates have been added for the number of inpatient days spent by mentally disordered persons in halfway houses, nursing homes, and personal care

**TABLE 1**  
**Volume of Mental Health Care in the Public and Private Sectors in 1971\***

Sector	Inpatient Days		Outpatient Visits	
	Number (thousands)	Percent	Number (thousands)	Percent
<b>Public</b>				
General hospital psychiatry units	2,178	0.8	1,219	1.8
Federally funded CMHCs	1,001	0.4	1,519	2.2
Halfway houses	160	0.1	—	—
Residential treatment centers for emotionally disturbed children	153**	0.1	—	—
Nursing and personal care homes	8,835	3.1	—	—
Freestanding outpatient clinics	—	—	3,206	4.6
State and county mental hospitals	95,584	33.9	2,171	3.1
Veterans Administration psychiatric hospitals	11,945	4.2	1,182	1.7
Public institutions for the mentally retarded	66,065	23.4	—	—
Federally employed internists and general practitioners	—	—	429***	0.6
<b>Total</b>	<b>185,921</b>	<b>66.0</b>	<b>9,726</b>	<b>14.0</b>
<b>Private</b>				
General hospital psychiatric units	4,794	1.7	1,661	2.4
Federally funded CMHCs	1,224	0.4	1,857	2.7
Halfway houses	1,768	0.6	—	—
Residential treatment centers for emotionally disturbed children	6,225	2.2	—	—
Nursing and personal care homes	77,781	27.6	—	—
Freestanding outpatient clinics	—	—	4,043	5.9
Private mental hospitals	4,293	1.5	506	0.7
Private practice psychiatrists	—	—	18,320	26.5
Private practice psychologists	—	—	2,757	4.0
Private practice internists and general practitioners	—	—	30,234	43.8
<b>Total</b>	<b>96,085</b>	<b>34.0</b>	<b>59,378</b>	<b>86.0</b>
<b>Total</b>	<b>282,006</b>	<b>100.0</b>	<b>69,104</b>	<b>100.0</b>

\* Data are from Sharfstein and associates (1) unless indicated otherwise in table or text.

\*\* 2.4% of government-owned beds multiplied by inpatient days from Sharfstein and associates.

\*\*\* 1.42% of outpatient visits to private practice internists and general practitioners (10).

homes and by mentally retarded individuals in public institutions for the mentally retarded.

In 1971, halfway houses serving the mentally disordered had 6,170 beds, with an occupancy rate of 85.6%. Only 8.3% of the beds were in government-owned halfway houses (5).

There were 1,073,000 residents in nursing and personal care homes in 1971 (6). The average daily census is assumed to have been 5% less than this. According to preliminary tabulations from the National Center for Health Statistics (NCHS) 1973–1974 nursing home survey, 9.64% of residents had a primary diagnosis of mental disorder and 13.64% had a primary diagnosis of senility (7). Thus 23.28% of all inpatient days and expenditures in these homes have been attributed to mental disorders. This is a conservative estimate (7); if one includes both primary and other diagnoses, 18.65% of residents were impaired by mental disorders other than senility and 58.34% were senile. Only 10.2% of beds in nursing and personal care homes were in government-owned homes (8).

In 1971, public institutions for the mentally retarded had an average daily census of 181,000 persons, or 65,065,000 inpatient days per year (6).

#### Outpatient Visits

Sharfstein and associates rejected as too high an

APA task force estimate (9) of outpatient visits to private practice psychiatrists (8,000 private psychiatrists each with 55 patient visits per week for 48 weeks yielded 21.12 million visits, of which Sharfstein and associates estimated 6.21 million were in private mental facilities, resulting in an estimate of 14.91 million outpatient visits). They chose instead to increase by 50% an NCHS estimate based on a household survey. The increase was to correct for "hesitancy about reporting psychiatric care in a household interview" and yielded an estimate of 6.56 million outpatient visits. Despite the 50% increase, this estimate is almost certainly too small by a factor of 2.5 or more. For example, a national survey of physicians conducted in the fall of 1970 by the American Medical Association indicated that 10,907 psychiatrists (not including 1,182 child psychiatrists) whose major professional activity was "office-based practice" conducted an average of 34.1 office visits per week and worked an average of 47.9 weeks, yielding 17.8 million office visits per year (10). Approximately 1.4% of these visits may have been to federally employed physicians, since 1.4% of all "office-based" physicians were in federal employ. If these visits are subtracted, the estimate of office visits is 17.55 million. If we consider all psychiatrists with patient care activities (N=20,570), the estimate of office visits would have to be raised, and Sharfstein and associates' esti-

mate would be too small by a factor of much more than 2.5.

Fortunately, data are now available from a one-year (May 1973–April 1974) NCHS survey of 1,700 office-based, patient care physicians, including psychiatrists (11). This survey estimated 20.3 million office visits to office-based psychiatrists, which has been discounted 5% per year back to May 1971 to correct for increases in the number of psychiatrists. This discounting yields 18.32 million visits, which accords very well with the AMA survey estimate noted above.

The estimate of the number of office visits to clinical psychologists in private practice is based on an American Psychological Association survey, which indicated that there were 1,688 psychologists in full-time private practice in 1971 (7). Psychologists in part-time private practice (N=3,579) are not included in this analysis. Assuming that the 1,688 psychologists had the same average number of office visits per week (34.1) and worked the same number of weeks (47.9) as the office-based psychiatrists in the AMA survey noted above, the number of office visits is 2.757 million.

It is a bit more difficult to estimate the proportion of office visits to nonpsychiatric physicians that represent care for mental disorders, since the estimate depends largely on how the term "mental disorders" is defined. Estimates in the literature range from 5% to 47.6% (12–14). Ten percent has been taken as a conservative estimate of the proportion of office visits to internists and general practitioners that represent care for mental disorders. Patients with medical or surgical problems and unrelated or secondary psychiatric disorders are not included in this estimate. I have used the estimates of the number of office visits to internists and general practitioners in the 1973–1974 NCHS survey of office-based physicians. Unfortunately, the survey report did not break out visits to internists and general practitioners by diagnosis. Mental disorders, however (diagnosed according to the eighth revision of the *International Classification of Diseases, Adapted for Use in the United States*), accounted for 4.5% of office visits to all physicians, including surgical specialists. However, surgical specialists would be expected to care for fewer patients with mental disorders than internists and general practitioners, and this may partially account for the lower NCHS figure. Office visits to internists and general practitioners have been discounted 5% per year back to 1971 to account for increases in the number of physicians and physician visits.

#### Expenditures

Except where noted, data on expenditures in 1971 by source and by recipient of funds have been derived from table 1 in *The Cost of Mental Illness—1971* (7) (see tables 2 and 3). It was necessary, however, as indicated in table 3, to separate some of the figures in this study into public and private expenditures with the help of data on patient days, facility or bed own-

**TABLE 2**  
Expenditures for Mental Health Care in 1971, by Source of Funds

Source	Total Expenditure* (thousands)	Percent of Total
<b>Federal government</b>		
Medicare and disability insurance	231,960	2.6
Medicaid	550,001	6.2
Other	964,687	11.0
Total	1,746,648	19.8
<b>State and local government</b>		
Medicaid	542,202	6.1
Other	2,618,333	29.7
Total	3,160,535	35.8
<b>Private sources</b>		
Fees	2,652,217	30.0
Insurance	1,058,380	12.0
Other	216,850	2.4
Total	3,927,447	44.4
<b>Total</b>	<b>8,834,630</b>	<b>100.0</b>

\* Dollar figures are derived from *The Cost of Mental Illness—1971* (7, table 1).

ership, or patient diagnoses from NIMH and other sources. Only expenditures for direct care services and drugs have been included.

#### DISCUSSION

The addition of mental health service providers and facilities that Sharfstein and associates did not include leads to conclusions about the relative roles of the public and private sectors that differ considerably from theirs. As table 1 indicates, 34% of inpatient days occurred in the private sector, rather than the 12% estimated by those authors. Another striking difference is the estimated proportion of outpatient visits that occurred in the private sector: 86% versus 53%. Clearly, a more complete enumeration of mental health service providers and facilities suggests a much larger role for the private sector.

As table 1 indicates, the vast majority of inpatient days in the private sector takes place in nursing and personal care homes. Almost 60% of the cost of this care is paid for by private dollars (7). Federally funded CMHCs may currently account for a somewhat greater proportion of inpatient days in both the private and public sectors, since 536 CMHCs were operational by mid-1975, compared with 295 in 1971. In the public sector, the vast majority of inpatient days takes place in state and county mental hospitals and public institutions for the mentally retarded. Almost 90% of the cost of care in state and county mental hospitals is paid for by public dollars (7).

The large number of inpatient days accounted for by nursing and personal care homes reflects in part a shift in the locus of care for mentally disordered elderly patients from state and county mental hospitals to these facilities. For example, between 1963 and 1969 the percentage of mentally disordered patients aged 65

**TABLE 3**  
**Expenditures for Mental Health Care in 1971, by Recipients of Funds**

Recipient	Total Expenditure* (thousands)	Public Sector		Private Sector	
		Amount (thousands)	Percent	Amount (thousands)	Percent
State and county mental hospitals	2,695,964	2,695,964	100.0	—	—
Other public mental hospitals (includes St. Elizabeths, federal prison psychiatric hospitals, and Veterans Administration psychiatric hospitals)	412,646	412,646	100.0	—	—
Private mental hospitals	281,348	—	—	281,348	100.0
General hospitals (includes 10% of Veterans Administration inpatient expenditures)	927,746	305,228	32.9**	622,518	67.1
CMHCs	284,955	128,230	45.0	156,725	55.0
Freestanding outpatient clinics (includes campus and military clinics)	481,219	295,477	61.4	185,742	38.6
Nursing and personal care homes	1,443,553***	147,242	10.2	1,296,311	89.8
Halfway and rehabilitation facilities	194,916	186,196	95.5†	8,720	4.5
Special programs for children (includes school programs and residential treatment centers)	303,915	123,282	41.0	180,633	59.0
Private practice psychiatrists	833,117	—	—	833,117	100.0
Private practice psychologists	79,336	—	—	79,336	100.0
General medical practice (includes private and federal internists and general practitioners)	358,325	27,065	7.6	331,260	92.4
Psychotherapeutic drugs	537,590	—	—	537,590	100.0
Total	8,834,630	4,321,330	49.0	4,513,300	51.0

\*Totals and subtotals are derived from *The Cost of Mental Illness—1971* (7, table 1).

\*\*Based on annual patient days in non-Veterans Administration government general hospitals plus 10% of annual patient days in Veterans Administration hospitals (4).

\*\*\*23.28% of all costs for nursing homes (7).

†This is an overestimate, since some rehabilitation funds are used to pay private practitioners and private facilities.

or more in long-term institutions who resided in nursing and personal care homes rose from 52.7% to 74.8% (15). Many of these people may not be receiving active treatment for their mental disorders, especially in personal care homes that do not have nursing services. It may be that those who are not receiving active treatment would not benefit from it and that these homes therefore represent a more economical and humane way of providing custodial care than state mental hospitals. It may be, but this remains to be demonstrated (16).

Outpatient visits in the public sector, as shown in table 1, are rather evenly distributed across several facilities. In the private sector, internists and general practitioners account for more visits than do psychiatrists. Even if the estimated proportion of visits to internists and general practitioners for treatment of mental disorders is decreased from 10% to 4.5% (the NCHS survey figure for all physicians), these physicians would account for almost as many outpatient visits (15.075 million) as do psychiatrists (18.320 million). It should not be assumed, however, that the units of mental health care given by nonpsychiatric physicians are the same as or as effective as units of mental health care given by psychiatrists. About 77% of the cost of mental health care rendered by general practitioners and internists is paid for by private dollars (7). For psychiatrists in private practice, this estimate is 98%, which is undoubtedly an over-estimate, since no allow-

ance was made for Medicaid payments to private psychiatrists (7).

Some recent national health insurance proposals have severely limited outpatient psychiatric services provided by psychiatrists but not those provided by nonpsychiatric physicians (17). This limitation probably reflected concern about the cost of long-term psychoanalysis (especially for individuals who are functioning well socially), a treatment nonpsychiatric physicians do not administer. Hiatt has discussed the need to limit access to expensive medical/surgical treatments in order to preserve finite resources for other treatments (18). The same argument may apply to long-term psychoanalysis, but a blanket limitation on all forms of outpatient care given by psychiatrists is neither medically justifiable nor economically necessary (19).

Of the estimated \$8.8 billion expended on mental health services in 1971, about 20% came from federal sources, about 36% from state and local government sources, and about 44% from private sources (see table 2). Private sources pay for a larger percentage of all medical/surgical services than of mental health services; in fiscal year 1971, private sources accounted for about 64% of expenditures for all medical/surgical services (20). Although the exact percentages vary with the particular costs included and excluded, the greater participation of public dollars in paying for mental health services may stem partly from the large

public expenditures in state and county mental hospitals. Since the enactment of Medicare and Medicaid, however, federal and state percentages of expenditures for medical/surgical services have been increasing (20).

As is shown in table 3, expenditures for mental health services are received almost equally by the public and private sectors. More than half of the dollars expended in the public sector are received by state and county mental hospitals. In the private sector the largest recipients are nursing and personal care homes, followed by private psychiatrists and general hospitals. Private psychiatrists account for more dollars but fewer visits than internists and general practitioners, primarily because the psychiatric fee was assumed to be \$35 per visit, whereas the fees for general practitioner and internist visits were assumed to be the follow-up office visit fees in these specialties (about \$6.30 and \$9.30 respectively) (7, 10).

In summary, with regard to mental health services in 1971, the private sector accounted for 34% of inpatient days, 86% of outpatient visits, 44% of expenditures by source of funds, and 51% of expenditures by receipt of funds.

#### CONCLUSIONS

As Sharfstein and associates noted, the volume of services (however measured) delivered by the public and private sectors is not the most important issue. They believe "a balanced mix of the two is essential" (1, p. 47). The most serious issues are making mental health (and general health) care accessible to all citizens, controlling costs without unwisely circumscribing services, and improving insurance coverage for mental disorders. Answers to these questions have been explored recently (17, 19, 21). A few additional points should be made, however.

Hall has questioned the effectiveness of mental health services: "Another problem for insurers is the failure of mental health professionals to document the effectiveness of various kinds of treatment. . . . For most physical conditions, this problem has largely been overcome . . ." (17, p. 1,083). Hall seems unaware that the effectiveness of medical and surgical treatments is constantly being tested and debated in the medical literature (22). These tests and debates create medical progress. Yet treatments with as yet uncertain benefits, such as coronary artery bypass surgery (23), certain drug treatments of cancer (24), and care in coronary care units (18) are not denied insurance coverage. If insurance coverage for medical and surgical treatments were limited to treatments for which incontrovertible evidence of effectiveness existed, a great many treatments would not be covered. In any case, the effectiveness of many pharmacological treatments in psychiatry is not in question (25-28), and evidence for the effectiveness of psychotherapy is accumulating (29-31). Insurers and public policy makers,

however, must be helped to understand that "effectiveness" does not mean "cure." Even today, physicians can hope only "to cure sometimes, to relieve often, to comfort always."

Hall also stated that "mental health professionals in general have failed to provide the degree of cooperation and unanimity that many other health professionals have developed with reference to diagnosis (17, p. 1,087). That physicians other than psychiatrists often disagree regarding diagnostic criteria and findings, or diagnoses in particular patients, is not widely known or acknowledged (32, 33).

Muller and Schoenberg (21) have analyzed the economic interests shaping the future provision of mental health services by the public and private sectors. Mental health professionals must familiarize themselves with these economic interests and with the principles of influencing public policy making processes (34) to prevent insurance benefit packages, both private and federal, from determining patterns and modes of mental health care that conform poorly to past actuarial experience (19) and to their professional judgments about the best ways to care for their patients.

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## Utilization of Prepaid Services by Patients with Psychiatric Diagnoses

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*The authors document and discuss the utilization of psychiatric services in a rural group practice before and after the institution of a prepaid health plan. They found that the utilization of psychiatric services increased dramatically during the first year of the plan's operation. The increase in outpatient utilization continued throughout the 3 years studied, but inpatient utilization decreased after the first year and later reached a level lower than that seen before the plan was instituted. One possible reason for the decline in inpatient utilization is that increased outpatient care prevents hospitalization.*

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THE INCREASED COVERAGE for psychiatric illness now provided by a variety of health insurance plans has caused considerable debate over the utilization of these services. Only incomplete data are available,

and much of these are from experience in the pioneering prepaid groups of the 1960s. Goldensohn and associates (1) reported on a demonstration project conducted by the Health Insurance Plan of Greater New York from 1965 through 1968. They found that when mental health services were introduced into an existing prepaid medical practice the average annual consultation rate was 11 per 1,000 enrollees. They also reported a treatment rate of 7.5 per 1,000 enrollees. That is, 11 per 1,000 had a one-time consultation and 7.5 per 1,000 applied for treatment. This study reported inpatient experience for an 11-month period only. Dur-

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