Deinstitutionalization: The Data Demythologized

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Many past studies of data on deinstitutionalization have used an overly simplistic and often misleading approach, which has led to a number of "myths" of deinstitutionalization. The authors present data on the changing mental health service system collected by the Division of Biometry and Epidemiology of the National Institute of Mental Health, and they analyze the data to reveal trends that disprove a number of the commonly accepted myths. Through their analysis they show that outpatient care has not replaced inpatient care, that public institutions, particularly state mental hospitals, have not been replaced by community-based facilities, and that private resources have not replaced public ones as the bearer of the cost of caring for the mentally ill. They conclude that the availability and quality of mental health services and the effect of these services on patients and their communities are difficult issues for future research.

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According to Bachrach (1,2), deinstitutionalization is a philosophy, a process, and a fact. As a philosophy, it reflects a liberal humanitarian ideology committed to community-based noninstitutional care for the mentally ill and, in particular, the chronic patient. As a process, deinstitutionalization describes the ongoing change, readjustment, and redefinition in function of all components of the mental health service delivery system. Deinstitutionalization is not merely an emptying of the state hospitals; it is also the attempt to develop a multimodal pluralistic system of community care. As a fact, deinstitutionalization is commonly taken to mean the dramatic reduction in the census of the state mental hospitals and the equally dramatic emergence of programs and facilities to transform both the nature and locus of psychiatric care.

This paper is concerned chiefly with the "facts" of deinstitutionalization reflected in the data that describe the changes in the treatment of the severely mentally ill over the past 25 years. The data, collected by the Division of Biometry and Epidemiology of the National Institute of Mental Health, describe trends in psychiatric admissions, resident patient census, discharges, patient care episodes, and bed counts in mental health facilities.[1]

In the past, this information often has been examined in an overly simplistic and often misleading fashion. That sort of analysis has contributed to and perpetuated several misconceptions about deinstitutionalization that may reflect a wish to substantiate an opinion rather than explain a complex phenomenon. Both academia and government have a significant investment in demonstrating the success of deinstitutionalization and in nurturing the community mental health movement. They were important initial sponsors of the movement and have supported the development of the current system of services.

Recently Borus (3) identified several myths or fantasies about deinstitutionalization. He suggested alternative explanations for these misconceptions but did not offer many data to support his conclusions. In this paper we will reexamine and reinterpret the data related to three of these myths of deinstitutionalization:

- That outpatient care, to a great extent, has replaced inpatient care.
- That inpatient care has shifted away almost entirely from the state mental hospital to other less institutional facilities.
- That the cost of providing mental health services has shifted

[1] Data in this paper were provided by the Division of Biometry and Epidemiology of the National Institute of Mental Health. Specific citations are provided whenever possible; otherwise, the source should be considered to be unpublished data from NIMH.

from the public to the private sector.

Review of the many statistics describing the transformation of the mental health services system after World War II reveals several trends, the interpretation of which challenge and even contradict commonly accepted analyses of the data (3). In contrast to the mythology, the "reality" of deinstitutionalization reveals:

- That the rate of inpatient care episodes has remained stable while the rate of outpatient care has expanded twelvefold.
- That a majority of inpatient and residential days of care continue to take place in state mental hospitals and other institutional settings such as nursing homes and board-and-care facilities.
- That there generally has been a shift from use of one type of public facility to another and from one source of public support to another, with no decline in public expenditures.

The mythology of deinstitutionalization

Since World War II, mental health services have evolved from a system in which large public mental institutions served as the chief provider of psychiatric services. Today we find a pluralistic system of public and private, inpatient and outpatient, and institutional and community-based care, and a markedly increased availability of mental health services in general. A number of forces have shaped these developments, including the introduction of effective psychopharmacologic agents, psychosocial and legal reforms in the approach to institutionalization and treatment, and change in both public- and private-sector resources and support. The increasing cost of mental health services has also been a factor in promoting deinstitutionalization (1–6).

The emergent pattern of mental health services, featuring a mix of community-based services, is widely attributed to a "shift in the locus of treatment." This is a critical concept because of the undue emphasis it places on where care is provided and the lack of emphasis it places on who receives what level, modality, and quality of care. This misplaced emphasis fails to recognize the multitude of problems that have developed in institutions attempting to reduce their inpatient population and ignores the changes in the communities now receiving former psychiatric inpatients. Furthermore, it is presumed that this shift has in fact been successfully achieved; deinstitutionalization is regarded as a completed fact.

The data used to support the mythology of deinstitutionalization are purported to detail the shift in the locus of the care of the mentally ill, describing a move from inpatient to ambulatory facilities, and from the public to private sector. The underlying but unstated assumption is that the same patients are receiving the same services, but in different settings with different providers. That may not be the case.

Instead, the evidence suggests that whole new classes of previously untreated patients are now using services that were not available ten to 20 years ago, and that the deinstitutionalized patient has failed to receive adequate community care. The shift in the locus of care is more accurately a shift in the focus, or relative emphasis, of care. Policies focusing primarily on community-based care have encouraged the expansion of new mental health services that have not adequately served the needs of chronic patients (6–8).

The data fail to demonstrate the absolute shift in the locus of treatment that is regarded as the hallmark of deinstitutionalization. What emerges instead is the reality of deinstitutionalization—an expanding mental health services system in which the relative role of public inpatient institutions has diminished dramatically while their absolute role has endured, albeit somewhat altered.

Myth 1: outpatients replace inpatients. The first myth is based on the observation that, in 1955, 77 percent of all episodes of mental health care were on an inpatient basis, but by 1975 only 28 percent of total episodes were in inpatient settings. Although this observation is correct, percent distributions are misleading and do not reflect the number or rate of episodes of care (see Table 1).

It is widely accepted that between 1955 and 1975 outpatient care expanded rapidly while inpatient care remained relatively stable. During this period, particularly from 1965 to 1975, outpatient clinics and community mental health centers were established and expanded. This new availability of services accounts for most of the twelvefold increase in outpatient care episodes. However, while ambulatory services grew dramatically, the rate of inpatient care episodes remained relatively stable, at about 800 to 850 per 100,000 population (See Table 1).

Some of the growth in outpatient care represents the aftercare of discharged hospital patients. Yet most outpatients today have had no prior inpatient experience and have not shifted their locus of care; they simply have availed themselves of new services. Our clinical experience fails to support belief in the ready substitution of ambulatory services for hospitalization. Outpatient services, however, may permit a reduction in the length of hospitalization, contributing to the decline in inpatient days of care since 1955. Without question, outpatient services have become a major part of the mental health service system, but there is no evidence that episodes of outpatient care have replaced episodes of inpatient care, particularly for the chronic and severely disturbed patient.

Although the rate of all inpatient episodes remained relatively stable during the period of 1955 to 1975, there were significant changes in the distribution of inpatient episodes in various types of facilities, as Table 1 shows. However, these changes do not indicate the demise of the state mental hospital or the end of institutional care. Instead,

Table 1
Number, percent distribution, and rate per 100,000 population of inpatient and outpatient care episodes in selected mental health facilities in the U.S., by type of facility, in 1955, 1965, 1971, 1975, and 1977[1,2]

Year	Total all facilities	Inpatient services						Outpatient services		
		All inpatient services	State and county mental hospitals[3]	Private mental hospitals	General hospital units (non-VA)	VA inpatient services	CMHCs[4]	All outpatient services	CMHCs[4]	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	165,237	565,696	214,264	246,891	4,618,276	1,584,968	3,033,308
1971	4,038,143	1,721,389	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	—	1,071,000	—	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	100.0	28.4	9.0	2.9	8.9	3.4	4.2	71.6	27.2	44.4
1975	100.0	27.9	9.3	2.6	8.8	3.3	3.9	72.1	24.7	47.4
1971	100.0	42.6	18.5	3.1	13.4	4.4	3.2	57.4	15.4	42.0
1965	100.0	59.4	30.5	4.8	19.7	4.4	—	40.6	—	40.6
1955	100.0	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

[1]To present trends on the same set of facilities during this period the following have been excluded: private psychiatric office practice; all psychiatric services offered by federal agencies other than the Veterans Administration (such as the Public Health Service, Indian Health Service, Department of Defense, and Bureau of Prisons); inpatient services at multiservice facilities not shown in this table; all partial care episodes; and outpatient episodes at VA hospitals.

[2]Source (except for 1977): Provisional Data on Patient Care Episodes in Mental Health Facilities, National Institute of Mental Health, Rockville, Md, 1977. Source for 1977 data: unpublished provisional data from the National Institute of Mental Health.

[3]Includes estimates of episodes of care in residential treatment centers for emotionally disturbed children.

[4]Federally assisted CMHCs only.

they describe the changing role and function of inpatient facilities.

Myth 2: the end of institutions. The fall of the state mental hospital has been proclaimed because of the decline in the resident census of state and county mental hospitals from 559,000 in 1955 to approximately 138,000 in 1980. Yet this decline to one quarter of the previous census does not mean the demise of the state mental hospital because, as the census fell, admissions increased. Even today these institutions continue to provide 64 percent of all inpatient days of psychiatric care (unpublished data, 1977, Division of Biometry and Epidemiology, NIMH).

The myth continues that the availability of community-based private and public outpatient and inpatient facilities (particularly community mental health centers and general hospitals) has caused this declining census and the diminished role of the state mental hospital. The resultant "shift in the locus of care" away from large public institutions implies that most former state mental hospital patients are treated or even cared for in community alternatives. However, in large measure the data do not support this claim or its implications (7–9).

It is true that chronic patients spend less time in institutional settings. Total inpatient days of psychiatric care have steadily declined. In addition, there have been marked changes in the overall pattern of inpatient care since 1955; data describing many of these changes can be found in Tables 1 and 2. In sum,

- The resident patient census of state and county mental hospitals fell dramatically while admissions to these facilities continued to increase. In other words, fewer patients received long-term custodial care in state and county hospitals, but the number of short-term inpatient care episodes increased.
- The number of beds in, and the admissions to, psychiatric units of general medical hospitals increased during this same period. However, based on survey data, there is no evidence that many or most of these patients were former or potential state and county hospital patients (9). On the other hand, general hospitals, especially public hospitals, do treat a segment of the chronic mentally ill population.
- The Veterans Administration experienced a marked increase in the provision of mental health services to its population, as shown in Table 1. The expansion of the VA probably has absorbed from

Table 2
Number of resident patients, total admissions, net releases, and deaths in state and county mental hospitals in the U.S., 1950–1980[1]

Year	Number of hospitals	Resident patients at end of year	Admissions[2]	Net releases[3]	Additions[2]	Discontinuations[4]	Deaths[4]
1950	322	512,501	152,286	99,659	—	—	41,280
1951	322	520,326	152,079	101,802	—	—	42,107
1952	329	531,981	162,908	107,647	—	—	44,303
1953	332	545,045	170,621	113,959	—	—	45,087
1954	352	553,979	171,682	118,775	—	—	42,652
1955	275	558,922	178,003	126,498	—	—	44,384
1956	278	551,390	185,597	145,313	—	—	48,236
1957	277	548,626	194,497	150,413	—	—	46,848
1958	278	545,182	209,823	161,884	—	—	51,383
1959	279	541,883	222,791	176,411	—	—	49,647
1960	280	535,540	234,791	192,818	—	—	49,748
1961	285	527,456	252,742	215,595	—	—	46,880
1962	285	515,640	269,854	230,158	—	—	49,563
1963	284	504,604	283,591	245,745	—	—	49,052
1964	289	490,449	299,561	268,616	—	—	44,824
1965	290	475,202	316,664	288,397	—	—	43,964
1966	298	452,089	328,564	310,370	—	—	42,753
1967	307	426,309	345,673	332,549	—	—	39,608
1968	312	399,152	367,461	354,996	—	—	39,677
1969	314	369,969	374,771	367,992	—	—	35,962
1970	315	337,619	384,511	386,937	—	—	30,804
1971	321	308,983	402,472	405,601	474,923	501,123	26,835
1972	327	274,837	390,455	405,348	460,443	472,282	23,282
1973	334	248,518	377,020	387,107	442,530	454,719	19,899
1974	323	215,573	374,554	389,179	434,345	448,203	16,597
1975	313	193,436	376,156	384,520	433,529	442,096	13,401
1976	300	170,619	—	—	413,559	421,461	10,922
1977	298	159,523	—	—	414,703	415,314	9,716
1978	284	153,544	—	—	406,407	404,031	9,080
1979	280	145,616	—	—	406,259	404,300	7,830
1980	275	137,810	—	—	398,451	395,165	7,108

[1]Sources:
1950–55 and 1960–74: NIMH, Patients in Mental Institutions
1956–59: NIMH Mental Health Statistics. Current Reports, Table A, (Series MHB-H-7, January 1963)
1965–73: NIMH, Statistical Note 112, Table 1
1965–66: NIMH, Mental Health Statistics, Current Facility Reports, Table 4
1967–68: NIMH, Statistical Note 60, Table 5
1969: NIMH, Statistical Note 77, Table 5
1970–73: NIMH, Statistical Note 106, Table 4
1965–1973: Deaths, NIMH Current Facility Reports or Statistical Notes showing provisional data for state and county mental hospitals
1974: NIMH, Statistical Note 114, Table 1
1975: NIMH, Statistical Note 132, Table 1
1976: NIMH, Statistical Note 153, Table 4
1977–1980: Unpublished provisional estimates from the Survey and Reports Branch, Division of Biometry and Epidemiology, National Institute of Mental Health

[2]Both admissions and additions include admissions and readmissions; data on additions (reported only since 1971) also include returns from leave.

[3]Net releases are found by adding together the resident patients at the beginning of the year and the admissions and then subtracting the deaths and resident patients at the end of the year.

[4]Before 1975 an increase or decrease in the patient population can be measured by the ratio of net releases to admissions; after 1975 it can be measured by the ratio of discontinuations plus deaths to additions. A ratio of more than 1 indicates a decreasing population, and a ratio of less than 1 an increasing population.

the state and county mental hospitals some of the demand for services.

- Community mental health centers accepted a substantial burden of inpatient and ambulatory mental health services, as indicated in Table 1. However, in some states, old state and county inpatient facilities have taken on inpatient treatment services for community mental health centers. Far from changing the locus of care, this situation has resulted only in changing the name of facilities.
- Admissions to private psychiatric hospitals increased toward the end of the period of 1955 to 1975 after remaining stable for many years. This increase may reflect improvement, albeit limited, in psychiatric coverage by third-party payers. Regardless, it is unlikely that the increase is accounted for by treatment of former state hospital patients.

Thus the notion that there was a dramatic shift of severely disturbed inpatients from large institutions to other hospital inpatient facilities is not confirmed by the data. Although there is evidence of simultaneous contraction and expansion of various facility types during the period of 1955 to 1975, this change does not necessarily reflect an actual shift in the locus of care for a particular type of patient. It has yet to be demonstrated that treatment of the former state hospital patient outside of the institution accounts for the majority of the expansion of the non-state-hospital inpatient facilities.

Of all the organized health care settings, only the nursing home can be demonstrated clearly to have become a substitute for the long-term custodial care function of the state and county mental hospital (5,10–12).

Myth 3: private resources replace public services. The third myth is that deinstitutionalization would cost less than institutionalization. In fact, it may well be that community-based care is just as expensive as institutional care (13).

Deinstitutionalization itself probably has not saved resources. Moreover, the introduction of Social Security benefits, including Supplemental Security Income (SSI), Medicare, and Medicaid, has, in many cases, only shifted portions of the financial burden for psychiatric care from local and state governments to the federal government.

Thus costs have shifted from one public resource to another and not from public to private resources. The federal entitlement programs did lead to an infusion of public dollars into private sector facilities (such as general hospitals and nursing homes), but the presumed shift in fiscal liability from the public sector to the private sector is difficult to substantiate and seems more apparent than real.

Although patient care episodes and days of inpatient care in state and county mental hospitals have decreased, there has been a concomitant increase in inpatient episodes in other public sector facilities, chiefly the community mental health centers and VA facilities, as Table 1 shows. When we compile estimated annual expenditures, as in Table 3, we find little or no evidence that total public expenditures for direct services have decreased as a result. At best, expenditures have remained stable in state and county hospitals from 1971 to 1975. Recent unpublished NIMH data indicate that this trend persists today.

The process of deinstitutionalization

Given the difficulties in data interpretation, what can be accurately stated about deinstitutionalization? As a process, deinstitutionalization has involved changes in treatment patterns, as well as admission and discharge policies in the state mental hospital. The interaction of multiple forces has profoundly affected the rate of admissions, length of stay, mortality, and rate of discharge of thousands of mental patients.

State mental hospitals have gained control over the admission of potential chronic patients. Referral to more "appropriate" community settings is now feasible, and the state hospital has become one of many possible treatment options. For example, the admissions rate of the elderly to state hospitals fell by 46 percent between 1971 and 1975 (10). Yet there also appears to be a core of some 100,000 resident patients for whom there is no alternative to state hospital treatment. The state facility has remained the place of last resort for patients who are either too disturbed or too disturbing to be placed in the currently available types of residential alternatives (14).

Deinstitutionalization itself probably has not saved resources. Moreover, the introduction of Social Security benefits, including Supplemental Security Income, Medicare, and Medicaid, has, in many cases, only shifted the financial burden for psychiatric care to the federal government.

The treatment pattern of the state hospital also has changed dramatically. The major influence in decreasing the resident census probably was the general reduction in the length of stay, which resulted in fewer long-stay patients. This trend actually began before 1955 and was reinforced by changing attitudes, the use of neuroleptics, and early aftercare efforts (4–6). However, it was not until 1970 that discharges actually exceeded admissions (see Table 2).

By the late 1970s, 400,000 admissions a year (two-thirds of them readmissions) could move through the state hospitals with little increase in the number of long-term residents. Reduced length of stay has meant that virtually all new admissions are released after a few months in the hospital. The residential census decreased slowly during the 1960s, but by 1970 the decline was approximately 10 percent a year. The deaths of elderly patients played a major role in reducing the resident populations of state hospitals through the 1960s, and alone accounted for 20 to 40 percent of "releases" until the early 1960s, when community placement became increasingly possible.

Lastly, hospital discharge policy has changed dramatically as alternatives have become available for the long-term care of the chronic mentally ill. Intermediate care facilities, especially nursing homes, have so proliferated that between 1969 and 1973 the nursing home resident population age 65 years or over with chronic mental disorders increased by more than 100 percent, while the number of residents in this age group in all types of psychiatric hospitals fell by 30 to 40 percent (10). Medicaid and Medicare funding of nursing home care made possible this large scale release of chronic patients; in 1974 approximately 85,000 nursing home residents had been transferred directly from a mental hospital (11–12). Consequently, the resident population age 65 years or over in state mental hospitals decreased from 158,000 in 1955 to 39,000 in 1979 (15).

The fact of deinstitutionalization

The "careers" of chronic mental patients have changed dramatically in the era of deinstitutionalization. The state mental hospital is no longer the permanent home of the chronic patient. Of an estimated 1.7 to 2.4 million chronic mentally

Table 3
Estimated annual expenditures of selected mental health facilities in the U.S. in 1971, 1973, and 1975[1]

Type of facility	Constant dollars, 1971 base (in millions)		
	1971	1973	1975
Freestanding outpatient psychiatric clinics	$ 209	$ 281	$ 321
General hospital psychiatric services	373	420	473
VA psychiatric services	500	582	532
Federally funded CMHCs	294	437	591
State and county mental hospitals	2,311	2,403	2,426
Total all facilities	3,687	4,123	4,343

[1]Source: Unpublished data from the Division of Biometry and Epidemiology, National Institute of Mental Health

ill Americans, approximately 150,000 have been residents of psychiatric hospitals for one year or longer, 750,000 reside in nursing homes, and 800,000 to 1,500,000 live at home or in a variety of community residences, including board-and-care homes (11). Patients in the community continue to use inpatient psychiatric resources in the public and private sector, but length of stay has decreased and use of ambulatory services has increased.

The well-documented decline in the role of the state mental hospital in the care of the elderly and the related growth of the nursing home for such patients represents an example of a true shift in the locus of care. Of the 1.3 million nursing home residents in 1977, approximately 250,000 had a primary psychiatric diagnosis and 100,000 had secondary psychiatric disorders. Another 400,000 residents were found to suffer from senility without psychosis (11). Clearly, a large proportion of current nursing home residents would have been state mental hospital patients before deinstitutionalization. However, many observers consider this shift to nursing-home care to be not deinstitutionalization, but reinstitutionalization—a new custodialism replete with its own failures and shortcomings (10,16–18).

The data demystified

Quantitative data such as those presented here answer our questions about trends in the numbers, rates, kinds, and patterns of services for the mentally ill. They do not answer the equally important and more difficult questions about availability and quality of these services and about their impact on the lives of the chronic mentally ill and on their communities. These second-order questions remain as the challenge for future research.

However, before addressing issues of quality and impact we need to define precisely the structure and function of the mental health services system; deductions and impressions from trends are insufficient and misleading. We must be able to distinguish a shift in patient populations and treatment settings from a shift in ideology and emphasis. Furthermore, we need to differentiate the substitution of one service for another from the expansion of new services, and to appreciate the multidimensional nature of chronic mental illness, deinstitutionalization, and the functions of multipurpose institutions.

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