Administration and Policy in Mental Health
Vol. 21, No. 4, March 1994

WHAT IS A CMHC? A COMPARATIVE ANALYSIS BY VARYING DEFINITIONAL CRITERIA

Trevor R. Hadley, Ph.D., Dennis P. Culhane, Ph.D., Noel Mazade, Ph.D., and Ronald W. Manderscheid, Ph.D.

ABSTRACT: Using definitions of a community mental health center (CMHC) derived from the original federal legislation, amendments that expanded the range of required services, and alternative conceptions of what constitutes a CMHC, the authors identify organizations that match those definitions in the National Institute of Mental Health Inventory of Mental Health Organizations. A distribution by organizational type is reported with a discriminant analysis applied to explore potential differences.

With the passage of the Omnibus Budget Reconciliation Act (OBRA) of 1981 (*Public Law [PL] 97-35*), categorical federal funding for community mental health centers (CMHCs) and other mental health and substance abuse services was eliminated. Although a combined Alcohol, Drug Abuse and Mental Health Services (ADAMHS) Block Grant replaced this funding stream and gave states greater discretion in the allocation of federal funds, OBRA had the effect of subsequently reducing the overall level of federal support, especially for CMHC services (Drolen, 1990). Coincident with this shift in funding, both a traditional survey of CMHCs and a separate reporting category for "CMHCs" in the National Institute of Mental Health's (NIMH) Inventory of Mental Health Organizations (IMHO) were eliminated. Instead, CMHCs in the current IMHO report as "multiservice mental health organizations," "outpatient clinics," "freestanding partial care organizations," "psychiatric hospi-

Trevor Hadley and Dennis Culhane are with the Center for Mental Health Policy and Services Research, University of Pennsylvania. Noel Mazade is Executive Director of the National Association of State Mental Health Program Directors Research Institute. Ronald Manderscheid is Chief, Survey and Analysis Branch, of the U.S. Center for Mental Health Services.

Address for correspondence: Trevor R. Hadley, Ph.D., Center for Mental Health Services and Policy Research, 3600 Market St., 7th Floor, Philadelphia, PA 19104-2648.

tals," or as entities within a general hospital. These changes, along with reductions in the number of required services provided by CMHCs, have led some to question whether CMHCs continue to meet the mandate of their 1963 enabling federal legislation *(PL 88-164),* or whether they exist as a separately identifiable service entity among the many organizations that comprise the community-based system of care for persons who have a mental illness (Biegel, 1982; Okin, 1984). While the effects of Block Grant financing on the operations of federally funded CMHCs deserve separate attention (Drolen, 1990; Estes & Wood, 1984; Hadley & Culhane, in press), this paper applies varying criteria to define a CMHC from data in the 1988 IMHO. The purpose of this analysis is to determine the number and distribution of providers that could presently be construed as "CMHCs," and to explore systematic differences among organizations in those definitional groups and among those organizations that offer varying complements of services.

WHAT IS A CMHC?

The "Original" Definition

The passage of the Community Mental Health Centers Act of 1963 *(PL 88-164),* and the subsequent amendments in 1965 *(PL 89-105)* required CMHCs to provide five essential services to a defined geographical ("catchment") area: inpatient, outpatient, partial hospitalization, emergency, and consultation/education. By 1981, 761 CMHCs were established with federal grants for construction and/or staffing and/or operations (Hadley & Culhane, in press). However, due to rescindment of the Mental Health Systems Act in 1981 and the fact that many CMHCs "graduated" from their initial eight-year federal funding obligations, CMHCs are now no longer required to provide the original five services. Nevertheless, by applying the "original" definition of a CMHC to the 1988 IMHO data, it is possible to determine the approximate number of specialty mental health providers who offer this range of service, and who could thus be considered a "CMHC."

Providers who reported having inpatient (IP) episodes of care, outpatient (OP) episodes, partial care (PC) episodes, and emergency (ER) visits in 1988 were identified in the IMHO (Table 1). Since information regarding the provision of consultation/education services is not collected through the IMHO, this service category has been excluded from the identification procedure. Based on these criteria, 498 facilities could be classified as CMHCs, though all reported to the IMHO as either psychiatric hospitals, general hospitals, or multiservice mental health organizations (Table 1). This number is significantly less than the 761 centers that were funded under the "original" 1963 mandate *(PL 88-164),* suggesting that many of the original centers reduced their range of services following the regulatory and funding changes

TABLE 1
CMHC Distribution by Facility Type by Varying Definitional Criteria

	TOTAL	*Psych. Hosp.*	*RTC*	*Multi-Serv.*	*Gen. Hosp.*
1. Original Federal Definition (IP OP PC ER)	498	110	0	199	189
2. Conversion Definition (IP OP PC ER RS KIDS ELDER D&A)	135	43	0	92	0
3. Alternative Definitions:					
a) Outpatient w/ at least one other	1971	224	25	1273	449
b) Ambulatory Core Definition					
i.) OP + PC (with or without ER)	405	0	0	398	7
ii.) (OP + PC) >2X (IP + RS)	847	45	6	681	115
iii.) Total	1252	45	6	1079	122

Source: IMHO, 1988

initiated by OBRA in 1981. However, it should be noted that the definition employed here is actually more stringent than the 1963 definition, since in the present case an agency must be a direct provider of these services rather than being able to coordinate them with other providers. Moreover, a cross-match of the 498 facilities identified here as meeting the "original" criteria with the actual 761 CMHCs funded by the federal government and reporting to the 1988 IMHO (N = 638), reveals that only 33.5% (N = 167) of the identified facilities were actually ever funded by the federal government as CMHCs.

The "Conversion" Definition

Amendments to the CMHC Act in 1975 *(PL 94-63)* authorized an expansion of funded catchment areas, added to the range of services required of CMHCs, and mandated that services be made available 24 hours a day, 7 days a week. Conversion grants were made available to some CMHCs to assist them in complying with these expanded obligations. Under this new "conversion" definition, CMHCs were required to provide the original five services and to add by 1977 the following: follow-up services for state hospital discharges, children's services, services for the elderly, transitional halfway houses, day treatment, screening for the courts, and alcohol and drug abuse services. Since many CMHCs would confront financial and management burdens by complying with these new requirements, an additional two-year extension was granted in 1978. Some centers were also exempted from the expansion, and new centers were granted three years to meet the standard (Sharfstein, 1979). However, by 1981, with the passage of OBRA and the rescindment of the Mental Health Systems Act, all of the newly mandated services were dropped—with the exception of screening for the courts—and inpatient services were no longer required.

Nevertheless, by applying the "conversion" definition for a CMHC to the 1988 IMHO data, it is possible to determine the number of facilities that offered this much broader set of services to be considered theoretically "conversion" CMHCs. To do so, facilities were identified that reported emergency visits, inpatient episodes, outpatient episodes, partial care episodes, residential services (includes halfway houses), and that served elderly people, children, and persons with a primary diagnosis of substance abuse. Data for consultation/education, follow-up services, and screening for the courts are not available in the IMHO, and day treatment is included under the category of "partial care." After applying these criteria, 135 facilities were identified as "conversion CMHCs," all of which reported as "multiservice mental health organizations" or "psychiatric hospitals" to the IMHO (Table 1). A cross-match of these 135 facilities with the 761 federally funded centers that reported in the 1988 IMHO (N = 638) revealed that 50% (N = 68) of the identified "conversion CMHCs" were in fact originally funded as CMHCs under P.L. 88-164.

Alternative Definitions

Given the decreasing specificity by which federally funded (or previously federally funded) CMHCs can be identified, and given the proliferation of facilities that call themselves "community mental health centers" though they never were recipients of federal funds for that purpose (*National Council of Community Mental Health Centers Directory,* 1991), alternative criteria are needed for identifying a "CMHC." Two such sets of criteria were developed and analyzed in this study.

Definition 1: "Outpatient Plus One Other Service." Any alternative definitions of a CMHC considered for this study required that a CMHC be primarily ambulatory in focus, and provide some additional services beyond outpatient services, thereby distinguishing it from an "outpatient clinic." The least restrictive definition would be that a CMHC must provide "outpatient plus one other service."

This definition was applied to the 1988 IMHO data by selecting those facilities that reported outpatient episodes of care plus at least one of the following: inpatient episodes, residential care (residential services or residential treatment), emergency visits, or partial care episodes. Applying this definition yielded a total of 2,428 facilities that could be considered "CMHCs" (Table 1).

Definition 2: "Ambulatory Core." Similarly, a range of definitions of a CMHC could conceivably be established from the least restrictive definition of "outpatient plus one other service" portrayed above, to outpatient plus some other pre-defined set of services. However, rather than detailing all of the possible combinations of service types and their distributions, we shall offer another, more restrictive definition, yet one that seems to reflect best the prototypic service profile of a CMHC. Specifically, the authors propose that a CMHC be considered as having a core set of ambulatory services consisting of at least outpatient *plus* partial care services (with or without emergency services). To the degree that the facility provides inpatient or residential services, these services should be secondary to the ambulatory core.

Such facilities could be identified in the 1988 IMHO: (A) by selecting those facilities that provide either outpatient and partial care exclusively; or outpatient, partial care and emergency services, and (B) adding to that group facilities whose total outpatient and partial care episodes exceeds their inpatient and residential care episodes by a ratio of greater than two. The criterion of having an ambulatory core ratio greater than two times that of the inpatient and residential components was used to operationalize the "primacy" of the ambulatory core. This procedure yields a total of 1,252 facilities that could be classified as CMHCs, though they reported as "multiservice mental health organizations," "general hospitals," "psychiatric hospitals," and "residential treatment centers" in the 1988 IMHO (Table 1).

DIFFERENCES AMONG THE DEFINITIONAL GROUPS

Comparing the "Originals" with the "Ambulatory Core"

Given differences in the number and distribution of facilities that were identified by applying the varying definitional criteria, in what other ways might these facilities differ? For example, do the "original" CMHCs serve different patient groups, or receive their funds from relatively different sources, than the broader "ambulatory core" group? Does either group have more or less professional or medical staff? We hypothesize that the centers identified by the original definition, which may provide substantial inpatient or residential services, would be less dependent on public funds and more likely to be reimbursed from private sources since they heavily utilize inpatient services and have a medical orientation. These facilities are also hypothesized to be larger than the "ambulatory core" group due to their inpatient capacity.

An exploratory analysis was designed to answer these questions and to examine other differences that might appear between the "original" and "ambulatory core" groups. To accomplish this, the "original" definition group was separated from the "ambulatory core" group, and a discriminant analysis was conducted using the following constructs:

1. Service mix: Emergency visits as a proportion of total episodes of care, and presence/absence of case management services. (Since the groups were distinguished *a priori* according to inpatient, outpatient, residential, and partial care services, these variables were excluded).
2. Payer mix: Percentage of reported revenues from (not billings to) Medicare, client fees/insurance, Medicaid, and state government (exclusive of Medicaid).
3. Client mix: Percentage of male clients, percentage of clients with a primary diagnosis of mental illness, percentage of clients with a primary diagnosis of substance abuse, percentage of clients under 18 years of age, and percentage of clients between 18 and 64 years of age.
4. Staffing profile: Percentage of psychiatrists, percentage of staff with master's degrees and above, total staff as a percentage of average daily census, and percent of expenditures on salaries.
5. Size: Total expenditures and total episodes of care.
6. University affiliation: Presence or absence of a university affiliation.
7. Ownership: A 1–3 scaling of ownership type from for-profit, to not-for-profit, to state-owned. While not truly representing an ordinal scale, one was simulated to represent "profit orientation."

Since the definitional groupings obtained from the IMHO represent an approximation of the universe of specialty mental health providers in the United States, discriminant analyses based on the entire population would produce an inflated estimate of the discriminant model's effectiveness. To

correct for this bias, it is necessary to sample from the population for the purpose of producing the model, and to sample a different group to test the model's predictive accuracy.

To accomplish this, a random number between 0.000 and 2.000 was assigned to each of the facilities in both the original and ambulatory core groups. The half with a value less than or equal to 1.000 was selected for inclusion in the discriminant procedure (n = 696). The discriminant model was then tested on the unselected cases (or the half with a value greater than 1.000) to assess the model's predictive accuracy. A stepwise method was used for variable inclusion.

Results from a discriminant analysis are essentially comparable to those from multiple regression (Klecka, 1980). The standardized and unstandardized canonical discriminant function coefficients are usually interpreted in a similar fashion to the Beta and B weights in a regression analysis. However, to guard against misinterpretation of effects, the relative discriminating importance of variables should be further assessed by examining the correlations between the variables and the discriminant function, and by examining the univariate F-ratios.

The discriminant procedure entered 11 variables into the equation in the following order (Table 2): percent revenues from Medicare, total expenditures, percentage of revenues from client fees/insurance, percentage of psychiatrists on staff, total episodes, percentage of master's and above staff, university affiliation, percentage of revenues from the state, total staff as a percentage of average daily census, percentage male clients, and emergency visits as a proportion of total episodes of care (equivalent $F = 74.732$, $df = 11{,}684$, $p < .0001$). The classification test (Table 2) on the unselected cases revealed that the definitional groups could be distinguished with 86.5% accuracy using this model. However, the discriminant procedure was better at predicting member-

TABLE 2
Classification-test Results for the "Original" Versus Ambulatory Core Discriminant Analysis, Applied to the Sample Not Used in the Model's Derivation

		Predicted Group Membership	
Definitional Type	*N*	*Original*	*Ambulatory Core*
Original	224	161 71.9%	63 28.1%
Ambulatory Core	452	28 6.2%	424 93.8%
Correctly classified: 86.5%			

ship in the ambulatory core group than in the original group, suggesting that as many as one in four of the "original" definitional group appears as a member of the "ambulatory core" group.

The standardized canonical discriminant function coefficients reveal that two of the payer mix variables—Medicare (standardized coefficient = .612) and client fees/insurance (.564)—are the most important in distinguishing between the groups, with both payers comprising a greater proportion of the reported revenues among the "original" group than among the ambulatory core group. The mean values and univariate *F*-ratios in Table 3 demonstrate more

TABLE 3
Means and Univariate F-rations for Variables Tested in the Discriminant Procedure Comparing the "Original" and "Ambulatory Core" Groups

	Original $\bar{x}$	*Ambulatory Core* $\bar{x}$	*F*	*p*
Services				
[a] Emergency visits/Total episodes	0.626	0.573	0.218	0.6401
Case Management (presence/absence)	0.79	0.815	1.235	0.2666
Payor Mix				
[a] Medicare	0.122	0.013	683.15	0.0001
Client fees/Insurance	0.271	0.098	433.92	0.0001
Medicaid	0.162	0.141	8.577	0.0035
[a] State	0.294	0.467	121.31	0.0001
Client Mix				
[a] %Male	0.466	0.47	0.907	0.341
%MI	0.804	0.855	32.13	0.0001
%Substance abuse	0.066	0.071	0.972	0.324
%Midage	0.684	0.699	3.33	0.068
%Young	0.22	0.219	0.008	0.927
Staffing Profile				
[a] %Psychiatrists	0.036	0.011	173.17	0.0001
[a] %Masters and above	0.225	0.259	17.15	0.0001
[a] Total Staff/Census	0.236	0.08	120.63	0.0001
%Expenditures on salary	0.664	0.657	0.979	0.322
Size				
[a] Total Expenditures	$9.7M	$3.0M	105.36	0.0001
[a] Total Episodes	4128	2678	40.2	0.0001
[a] University Affiliation	0.609	0.451	30.87	0.0001
Ownership (for profit/not for profit/state)	2.16	2.29	16.85	0.0001

[a]Entered discriminant function equation.

clearly the magnitude of this difference, and the relatively greater dependence of the "ambulatory core" group on revenue from state sources and Medicaid. The standardized coefficient for "percent psychiatrists" (.381) is also relatively high and shows a moderately strong correlation (r = + .359) with the discriminant function. On average, there are more than three times as many psychiatrists on staff at "original" sites than at the ambulatory core sites. The relationship is just the opposite in the case of the master's-level staff and above (standardized coefficient = − .164), with relatively more such staff represented among the ambulatory core group (perhaps compensating for fewer psychiatrists). However, total staff as a percentage of average daily census (standardized coefficient = .112), also a discriminating variable, reveals that there are significantly more staff at the original sites than the ambulatory core, although this difference may be related to a greater inpatient capacity among the original group. Finally, the other relatively powerful discriminating variables are related to size. The original group has more episodes of patient care (standardized coefficient = .323) and more total expenditures (.300) than the ambulatory core group, both of which had moderate correlations with the discriminant function (r = + .216 and + .294 respectively). The remaining variables—emergency visits, percent male, and university affiliation—while entering the discriminant equation, had relatively low coefficients (.056, .063, .145 respectively), weak correlations with the discriminant function (r = − .008, − .046, .147 respectively), and in the case of emergency visits and percent male, were not significantly different according to the univariate *F*-ratios.

The Ambulatory Core: Inpatient Providers vs. All Others

A similar analysis was designed to explore differences within the ambulatory core group, between those agencies that provide inpatient services and those that do not. Discriminant analysis was used with a stepwise method for variable inclusion to determine what variables from the same constructs listed above maximally discriminate between providers with these different service configurations. A random number assignment procedure was again used to generate the model using half of the population as a sample and to test the model on a sample comprised of the remaining half of the population.

Interestingly, the results are similar. Again, 11 variables entered the equation in the following order: percent revenues from Medicare, total number of episodes of care, percent revenues from client fees/insurance, percentage of staff who are psychiatrists, total expenditures, percentage of revenues from state sources (exclusive of Medicaid), university affiliation, percentage of expenditures spent on staff salaries, total number of staff as a proportion of census, proportion of staff with master's-level degrees and above, and emergency visits as a proportion of total episodes (equivalent F = 53.03, df = 11,606; $p < .0001$). The classification test predicted group membership with 86.6% accuracy (Table 4). However, the model was much better at predicting

TABLE 4
Classification-test Results for the Inpatient Versus Non-inpatient Providers Among the "Ambulatory Core" Group, Applied to the Sample Not Used in the Model's Derivation

		Predicted Group Membership	
Service Type	*N*	*Inpatient*	*Non-inpatient*
Inpatient provider	163	102	61
Percent		62.6%	37.4%
Ambulatory Core	442	20	422
Percent		4.5%	95.5%
Correctly classified: 86.61%			

group membership among non-inpatient providers than among inpatient providers, 37% of whom were misclassified as non-inpatient providers.

The standardized canonical discrimination function coefficients and the univariate *F*-ratios (Table 5) again reveal that two of the payer sources appear to be most important in the prediction model: Medicare (standardized coefficient = .670) and client fees/insurance (.549). Both payer sources account for a significantly higher proportion of the revenues among the inpatient providers, suggesting that the provision of inpatient services is related to maximizing access to these funding sources. Alternatively, the state (standardized coefficient = .222) is a more significant revenue source for the non-inpatient providers, although there was no significant difference in the proportion of revenues from Medicaid. The next largest standardized coefficient is related to facility size, with inpatient providers treating nearly two times the number of patient care episodes of non-inpatient providers (standardized coefficient = .318). Similarly, the variable for total expenditures (standardized coefficient = .233) was included in the discriminant procedure, with inpatient providers having budgets on average twice as large as noninpatient providers. Both size variables have moderately strong correlations with the discriminant function (r = +.270 and +.294 respectively). The percentage of staff who are psychiatrists (standardized coefficient = .292) was a relatively strong predictor of inpatient provision, with inpatient providers having four times the representation of psychiatrists on staff. This variable's importance in the discriminant procedure is highlighted by its strong correlation with the discriminant function (r = +.425). The remaining variables that entered the discriminant equation—emergency visits, masters and above staff, total staff as a proportion of census, percent expenditures on staff and university affiliation—all had relatively small standardized discriminant function coefficients (.070, −.085, .091, .121 and .130 respectively), relatively weak correlations with the discriminant function (r = +.017, −.038, +.072, −.020, and +.113 respectively)

TABLE 5
Means and Univariate F-ratios for Variables Tested in the Discriminant Procedure Comparing Inpatient and Non-inpatient Providers Among the "Ambulatory Core" Group

	Inpatient $\bar{x}$	*Non-inpatient* $\bar{x}$	*F*	*p*
Services				
[a] Emergency visits by total episodes	0.581	0.584	0.0006	0.9805
Case Management (presence/absence)	0.792	0.817	0.9847	0.3212
Payor Mix (%)				
[a] Medicare	0.094	0.011	461.09	0.0001
Client fees/Insurance	0.212	0.093	235.052	0.0001
Medicaid	0.144	0.141	0.131	0.717
[a] State	0.317	0.47	79.787	0.0001
Client Mix				
[a] %Male	0.511	0.473	33.647	0.0001
%MI	0.852	0.856	0.239	0.6244
%Substance abuse	0.076	0.072	0.545	0.4606
%Midage (18–64)	0.704	0.699	0.2406	0.6239
%Young (<18)	0.198	0.219	5.919	0.0151
Staffing Profile				
[a] %Psychiatrists	0.044	0.011	205.315	0.0001
[a] %Masters and above	0.258	0.261	0.074	0.7855
[a] Total Staff/Census	0.108	0.076	12.418	0.0004
%Expenditures on staff	0.668	0.659	1.354	0.245
Size				
[a] Total Expenditures	$6.9M	$3.07M	54.12	0.0001
[a] Total Episodes	5149	2678	75.136	0.0001
[a] University Affiliation	0.598	0.449	21.882	0.0001
Ownership (for profit/not for profit/state)	2.26	2.29	1.026	0.3113

[a]Entered discriminant function equation.

and three of those variables (percent master's and above, percent expenditures on staff, emergency visits) had univariate *F*-ratios that were not significant at the .05 level.

DISCUSSION

A total of 498 facilities were identified in the IMHO that could fit the "original" CMHC definition since they directly provided the required services established by the original enabling federal legislation (P.L. 88-164). This

number would appear to be high, given that over 10 years have passed since the passage of OBRA in 1981, and given that many of the original 761 federally-funded CMHCs did not provide all required services but coordinated such services through agreements and contracts with other providers. However, as was noted, only 167 of those 498 facilities identified by the "original" definition were, in fact, among the original federally funded CMHCs, meaning that there are more facilities providing this expanded set of services that were *never* recipients of federal funds for this purpose than there are facilities that were funded to provide this range of services and indeed still do so.

The finding that only 135 facilities could be identified as "conversion CMHCs" suggests that the expansion requirements passed in 1975 were never really operationalized by the field. Clearly, facilities with a less encompassing range of services are much more prevalent at present. For example, a total of 2,428 facilities met the definition of "outpatient plus one other service," and 1,252 met the definition of having the "ambulatory core" services of outpatient and partial care as primary relative to the provision of inpatient and residential services. Thus, a new multiservice entity appears to have emerged that fits the prototypical service profile of a CMHC, although most of these facilities have never been specifically funded by the federal government for that purpose.

Discriminant analyses were designed to explore potential differences between these definitional groups and between those with varying service configurations. A comparison of the traditional CMHC type (the "original" definition group) with this emergent multiservice entity (the "ambulatory core" group) revealed that the original group tends to be larger, they rely more on psychiatrists, and they receive relatively more funding from Medicare and client fees/insurance. By contrast, the "ambulatory core" group of facilities are smaller, rely more on nonmedical professional staff, and their fiscal support is more likely to come from state government sources and Medicaid. These results clearly suggest that the "original CMHC definition" facilities are serving a different clientele than the ambulatory core facilities. Because of historical federal incentives, the former facilities are still more oriented toward serving traditional patients who have private funds or receive entitlements to federal insurance. The latter facilities are more oriented toward the current public client whose care is paid by the state or federal insurance benefits for the medically needy. It should also be noted that another distinguishing characteristic of CMHCs based on the original definition is that such facilities were required to serve a defined geographic area (catchment area). The importance of this factor is not evaluated in any of these analyses since data are not readily available; however, it should be explored in further work.

These same distinguishing variables—size, relative use of medical staff, and sources of revenue—are found when the "ambulatory core" group is subdivided into those that provide only outpatient and partial care services, versus those facilities where such services predominate over inpatient and residential

care, with the latter sharing the discriminating characteristics of the "original" definition facilities (larger, more medical staff, more private funding). Such results are to be expected since the inpatient providers are a subset of the "original CMHC definition" facilities. Thus, this subset overlaps with both the original CMHC group and the ambulatory core group, and they appear to be trying to respond to both clientele and fiscal incentives. The discriminant procedure had the greatest relative difficulty in correctly classifying this overlap group.

Based on the findings presented here, it is difficult to say which facility types are more adaptive than the others. The facilities seem to split along the same lines that have divided private and public mental hospitals in that both types are addressing a different portion of the mental health treatment need. The "original" group and the "ambulatory core" subgroup that provides inpatient services both appear more responsive to clients who receive relatively more attractive inpatient reimbursement through private pay and Medicare, while the emergent multiservice "ambulatory core" facilities (especially those that do not provide inpatient services) appear to be more responsive to the new patient and service priorities of State Mental Health Agencies.

The differentiation of service providers found in this study is a result both of increased awareness of the necessity of and the market for a wider range of services for persons with mental illness, and of categorical funding and limits on eligibility for certain publicly and privately paid services. Whereas in the past the public mental health system was composed primarily of state hospitals and CMHCs, the system now includes distinct groups of SMHA operated systems, general hospital psychiatric services, multiservice organizations and single service agencies. This variety has, in turn, made more services available to a greater number of clients and increased the options for persons who suffer from severe mental illnesses.

This study's results similarly reveal that the emphasis on targeting public mental health services primarily or even exclusively to persons who have a severe and persistent mental illness has led to the development of an ambulatory provider network responsive to this priority. However this differentiation of providers and clients, largely by payer source, may stimulate considerations of whether the public system should maintain such exclusive policies. By reinforcing a dual system of care, one for the severely and persistently mentally ill supported primarily by public funds, and one for persons with less severe disorders supported primarily by private funds, the public system may encourage the undertreatment of patient subgroups that do not fit neatly within either service system. Some would therefore argue that the mandate for the public mental health system should be expanded to include an epidemiologically-defined pool of persons whose conditions may deteriorate to severe levels of disability without early intervention. Further research is thus needed to determine who is not being served or is underserved as a result of the shifting

priorities of state mental health agencies and to assess the effects of differential access to treatment on the course of mental disorders.

Finally, the differentiation of providers, services and client groups by payer raises other concerns. Because of the increase in the number and diversity of providers, the continuity of care has been disrupted and has complicated the transfer of clients across agency and funding boundaries (Hadley, Schinnar, & Rothbard, 1992). This differentiation also potentially inflates the management costs of the care system by duplicating administrative activities and requiring considerable energy and effort on the part of managers to coordinate funding and care. The emergence of single-stream funding and other managed care networks represent initial attempts to deal with this problem, though research is needed to document their effectiveness.

REFERENCES

Beigel, A. (1982). Community mental health centers: A look ahead. *Hospital and Community Psychiatry, 33,* 741-745.

Drolen, C.S. (1990). Community mental health: Who is being served? What is being offered? *Community Mental Health Journal, 17,* 191-199.

Estes, C.L., & Wood, J.B. (1984). A preliminary assessment of the impact of Block Grants on community mental health centers. *Hospital and Community Psychiatry, 35,* 1125-1129.

Hadley, T.R., & Culhane, D.P. (in press). The status of community mental health center 10 years into Block Grant financing. *Community Mental Health Journal.*

Hadley, T.R., Schinnar, A., & Rothbard, A. (1992). Managed care in the public sector. In S. Feldman (Ed.), *Managed mental health services.* Springfield, IL: Charles C. Thomas Publisher.

Jerrell, J.M., & Larsen, J.K. (1986). Community mental health services in transition: Who is benefitting? *American Journal of Orthopsychiatry, 56,* 78-88.

Klecka, W.R. (1980). *Discriminant analysis.* In M.S. Lewis-Beck (Ed.), *Quantitative applications in the social sciences.* Newbury Park, CA: Sage Publications.

Okin, R.L. (1984). How community mental health centers are coping. *Hospital and Community Psychiatry, 35,* 1118-1125.

Sharfstein, S.S. (1979). Community mental health centers: Returning to basics. *American Journal of Psychiatry, 136,* 1077-1079.