

Service System Performance and Integration: A Baseline Profile of the ACCESS Demonstration Sites

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Objective: Networks of agencies at the 18 demonstration sites in the Access to Community Care and Effective Services and Supports (ACCESS) program for homeless persons with serious mental illness were surveyed to profile baseline levels of systems performance and integration as part of a longitudinal evaluation of systems change and client outcomes. **Methods:** Interviews were conducted with a representative from each of 875 agencies in the 18 service networks. Information was obtained about the perceived performance of the service system and the extent of systems integration as measured by client referrals, funds exchanges, and information sharing between agencies. Measures consisted of two multi-item scales assessing the accessibility and coordination of services for the target population in each community and four indexes of interagency relationships. **Results:** Services at baseline for homeless mentally ill persons at the program sites were rated as relatively inaccessible, and the coordination of services between agencies was rated as even more problematic. Interagency ties were largely based on client referrals and information exchanges, with very few instances of funding transfers in the form of contracts or grants. On average, at baseline agencies that had received an ACCESS grant were better connected to their local service network than were other agencies. **Conclusions:** Consistent with the premise of the ACCESS demonstration, services for persons who are homeless and mentally ill in urban America are fragmented and not very accessible. The longitudinal design of the evaluation will allow for an assessment of efforts to improve services and systems integration and of the effects of these improvements on client outcomes. (*Psychiatric Services* 48:374-380, 1997)

Human services in most American communities are organized into distinct categorical service sectors, each with its own ideology, interventions, and funding streams (1). Although some communication between sectors may exist, the common perception is one of frag-

mentation and lack of connection between sectors. In providing services to persons with relatively modest or short-term needs, compartmentalization of services may be efficient and desirable. However, in serving persons with multiple and long-term needs, including persons who are

homeless and who also have a serious mental illness, communication barriers between providers within and between sectors retard effective care (2).

Lack of communication within and between service sectors is the main issue addressed by the Access to Community Care and Effective Services and Supports (ACCESS) initiative, a national demonstration program sponsored by the Center for Mental Health Services (A paper that describes the ACCESS program in more detail [3] begins on page 369 of this issue). ACCESS seeks to improve services, at both the client level and the community level, for persons with serious mental illness and co-occurring substance abuse disorders. At the client level, the program seeks to fund improvement and expansion of existing services, such as outreach and case management. In the ACCESS program, these activities are referred to as service enhancement strategies. At the community level, ACCESS funds are used to foster and develop interagency cooperation between several service sectors, including mental health, substance abuse, housing, entitlements or income support, and primary health care. These activities are referred to as systems integration strategies.

Two communities in each of nine states were selected to receive cooperative grant funding for five years, 1993 to 1998. One community was to implement the service enhancement strategy alone and the other to imple-

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ment both the service enhancement and systems integration strategies. An evaluation of the demonstration is assessing whether systems integration leads to improvements in clients' quality of life over and above what can be accomplished by enhancing services alone (3).

This paper describes the approach used in the ACCESS evaluation to assess levels of systems integration and presents a profile of the 18 demonstration sites at baseline in 1994. Results from two additional data collections in 1996 and in 1997 will help determine whether integration improves over the five-year demonstration and, in concert with data on client-level outcomes, whether systems improvements lead to improvements in the quality of life of enrolled clients. (A paper describing evaluation of client-level data [4] begins on page 387 of this issue.)

Methods

In measuring the systems-level attributes and systems performance ratings for the ACCESS demonstration sites, we used an approach to data collection and analysis based on social networks (5–8). Community agencies serving persons who are homeless and who have serious mental illness are viewed as members of a network linked by the referral or exchange of clients, funds, and information (9–12). By enumerating the number and variety of these interagency linkages or ties, the organization of the service network can be described and compared both across sites and across time. The objectives of this research are to characterize the integration or “connectedness” of service delivery arrangements, to identify areas where coordination may be improved, and, ultimately, to assess the effectiveness of alternative service delivery models.

Network analytic methods can assess different levels of systems organization and performance at the client, program, agency, and overall systems level using the same concepts and measurement techniques. In the study reported here, we used these methods to develop baseline profiles of ACCESS grantee agencies and their local service systems.

Network boundaries

To make between-site comparisons meaningful, criteria for inclusion and exclusion of agencies were developed and applied across all sites. Priority for inclusion was given to agencies or service units that provided the five core services that are identified in the ACCESS initiative—mental health care, substance abuse treatment services, housing, entitlements and income support, and primary health care. State and regional agencies that had only funding, regulatory, or administrative roles were excluded from the networks. Also excluded were interagency coalitions that did not provide core services directly, agencies or service units that provided only shelter or housing without on-site supportive services, and those that provided only concrete services to meet basic human needs, such as food pantries, soup kitchens, and agencies distributing clothing and blankets. One- or two-person volunteer operations, such as those with a van distributing coffee and sandwiches, were also excluded.

In three states, the community that was implementing the services enhancement strategy and the community that was implementing the systems integration strategy were located in different neighborhoods of a single city (Philadelphia, Chicago, and Seattle). In Chicago, the two sections of the city in the program are served by relatively distinct service agency networks, which we identified based on membership and planning forums created by the state mental health authority to tie together local contract agencies. In Philadelphia and Seattle, the two demonstration sites are served by many of the same organizations, so a single network of agencies was identified for data collection. Therefore, 18 ACCESS sites consisting of 16 interagency networks were included in these analyses.

Identification of respondents

A single respondent was identified for each agency in the network. We sought respondents who occupied boundary-spanning roles (13), that is, persons who were knowledgeable about the working relations of their own agency with other community agencies.

In small agencies, agency directors were usually selected. In large organizations, which operated several distinct programs serving homeless persons with serious mental illness, a program director, clinician, or administrator was selected and asked to report for the subunit rather than the entire agency. Overall, 29 percent of respondents were agency directors, 52 percent were program directors, and 19 percent were clinicians, administrators, or other staff. Respondents were asked to provide information about their agency or program as a whole rather than their personal involvements. Respondents were encouraged to consult other staff when needed, and in about 10 percent of the interviews, two or more agency staff participated. Previous studies confirm that these procedures yield reliable information about interagency relationships (14).

Initially, 920 organizations and programs, including the agencies that received the ACCESS grants, were identified in 18 sites. Later, we learned that 25 agencies had either closed or merged. Only 20 agencies refused to participate. Ultimately, we obtained information from 875 of these agencies or programs for a 98 percent response rate from the universe of open and eligible agencies. The size of the final networks ranged from 32 to 82 agencies or programs with an average of 55 across sites.

Data collection

Interviews with respondents from the participating agencies were conducted between July and December 1994 by local research teams. Each team consisted of two to six interviewers and one on-site supervisor. All members of the research teams attended a two-day training session before beginning interviews.

Interviews generally lasted from an hour to an hour and a half. Interviewers requested descriptive information about the agency or program, such as the services it provided and its staffing pattern and caseload; its involvement with the local ACCESS project; and the extent of exchanges of clients, information, and funds between the respondent's agency and each of the other agencies in the net-

Table 1

Mean scores on items measuring accessibility and coordination of services for homeless persons with serious mental illness at 16 ACCESS service networks¹

Item	Mean	SD
Accessibility of services²		
Avoids excessive waiting lists or delays in scheduling	2.41	1.03
Keeps "red tape" to a minimum in enrolling clients	2.38	1.03
Places services in accessible locations	3.03	1.01
Offers services during evenings and weekends	2.24	0.99
Provides services at reasonable costs	3.37	1.14
Makes clients feel welcome and at ease	2.85	1.12
Gives priority to services for homeless persons with serious mental illness	2.53	1.06
Establishes grievance procedures for clients	2.32	1.19
Prevents providers from "creaming" best-functioning patients, leaving low-functioning or difficult patients underserved and at risk	2.28	1.08
Coordination of services³		
Uses a common intake form for all agencies	1.59	0.95
Creates opportunities for joint planning among agencies	2.44	1.08
Fosters a "big-picture" understanding of the service system and the roles and responsibilities of agencies	2.19	0.93
Ensures that agencies have timely access to client records in ways that do not violate confidentiality	2.51	1.04
Ensures meaningful discharge planning between state mental hospitals and community mental health agencies	2.49	1.27
Develops computerized client record and information systems that link agencies	1.70	0.97

¹ Rated on 5-point Likert-type scale ranging from 1, very well, to 5, very poorly

² Alpha=.87

³ Alpha=.74

work. Respondents were asked to rate the current performance of the local service system in meeting the needs of the ACCESS target population.

Measures

Systems performance was rated using two multi-item instruments that were used in the evaluation of the Robert Wood Johnson Foundation Program on Chronic Mental Illness (9). The instruments measure perceived accessibility (nine items) and perceived coordination (six items) of services for homeless persons with serious mental illness (see Table 1). Respondents were asked to rate the performance of the local system on each of the 15 items using a 5-point Likert-type scale ranging from 1, very well, to 5, very poorly. Table 1 also shows the mean score on each item for the 16 sites in the demonstration program.

Only data from respondents who answered at least 50 percent of the items in each instrument were included in the analysis. Chronbach's alphas for the two instruments were .87 and .74, indicating good reliability.

In the analyses reported below, the relationship between the instruments was assessed using Pearson product-moment correlations. Differences between sites with service enhancement interventions and those with systems integration interventions were assessed using two-sample *t* tests.

Interagency linkages were assessed using responses to questions about the working relationships between the respondent's agency or program and the other organizations in the services network. Data about three critical resource exchanges—referrals of clients, funds transfers, and information sharing—were collected. Respondents answered the following three questions using a 5-point Likert-type scale ranging from 0, none, to 4, a lot: To what extent does your organization send clients to or receive clients from this other agency specifically related to homeless persons with a serious mental illness? To what extent does your organization send funds to or receive funds (including grants and contracts) from this other agency? and To what extent does your

organization send information to or receive information from this other agency for coordination, control, planning, or evaluation purposes concerning homeless individuals with a serious mental illness? In all, six distinct relationships involving these data are possible—two types (send or receive) for each of three contents (clients, funds, information).

Interagency linkages at each site were analyzed separately. Only confirmed ties, that is, relationships that were independently acknowledged by respondents from both the sending and the receiving agency, were included in the analysis. For each of the six possible types of relation, the five possible Likert-type responses were dichotomized and arrayed in a 0-or-1 data matrix in which 1 represented the existence of a relationship between the sending agency and the receiving agency and 0 indicated no relationship. A summed $N \times N$ matrix, in which *N* denoted the number of agencies in a given site, was created by adding the corresponding cells in the six matrices. Cell values in this summed matrix can range from 0 to 6, with higher numbers indicating higher levels of interagency linkage.

The level of both systems integration and agency-specific integration can be distinguished using these data matrices. Data from the full matrix can be used to describe the pattern of exchanges among agencies as a complete network. Data from a single matrix row can be used to characterize relations between a specific agency, such as the agency at the site that received the ACCESS grant, and the other agencies in the network. The two types of integration are not necessarily correlated. For example, an ACCESS grantee may be well connected to other agencies in a poorly integrated system, or a highly integrated system might have a poorly connected ACCESS grantee agency, especially at baseline or project start-up. The degree of correlation between the two levels of integration at the different ACCESS sites is an empirical question that is addressed in this paper.

To examine patterns of integration on a site-by-site basis, we computed four measures (10) from the summed

matrices for the overall system and the ACCESS grantee agency:

Organizational ties. This measure determines the average number of agencies or programs with at least one relationship with another local organization. Values can range from 0 to N, with N denoting the total number of agencies at a given site. The measure describes the extensiveness of ties, that is, the number of distinct organizations connected through resource exchanges.

Service ties. This measure consists of the average number of distinct relations between an agency and other local organizations. Values from which these averages are computed can range from 0 to 6, reflecting the two types of interagency relations (send or receive) and the three types of contents of exchanges (clients, funds, and information). This measure denotes the volume of ties between agencies, that is, the number of distinct contents or resource exchanges.

Tie strength. Tie strength is represented by the ratio of the average number of service ties to the average number of organizational ties. Values range from 1 to 6, with higher numbers reflecting more types of links—both sending and receiving—and more types of content of those links within a given relationship. Relationships with multiple links or contents are stronger or more substantial than those with only a single link or type of content. For example, two agencies that refer clients and information as well as exchange funds through purchase of service contracts or through grants have a stronger relationship than two agencies linked by only a single type of exchange.

Network strength. This measure determines the proportion of agencies or programs in the network that have multiple ties. Values range between 0 and 1. The measure describes the scope of strong or multi-stranded ties in the network and is computed both for the overall service system and for the grantee agency in relation to other organizations.

Pearson product-moment correlations were used to assess the relationships within and between system and agency-specific measures. To ensure that a meaningful evaluation of the

Table 2

Ratings on measures of system accessibility and coordination for ACCESS demonstration sites at baseline (August to December 1994)¹

Site	Program strategy	Access- ibility	Coordi- nation	Combined rating
Connecticut				
Bridgeport	Systems integration	2.69	2.49**	2.60
New Haven	Service enhancement	2.57	2.09	2.37
Illinois				
Chicago, Edgewater-Uptown	Systems integration	2.79	2.07	2.49
Chicago, Lincoln Park-Near North	Service enhancement	2.60	2.14	2.45
Kansas				
Sedgwick County	Systems integration	2.89	2.49	2.75
Shawnee County	Service enhancement	2.88	2.48	2.76
Missouri				
St. Louis	Systems integration	2.39	1.78	2.16
Kansas City	Service enhancement	2.81**	2.29***	2.61***
North Carolina				
Mecklenburg County	Systems integration	2.49	2.22	2.36
Wake County	Service enhancement	2.74	2.10	2.49
Pennsylvania ²		2.61	2.15	2.44
Philadelphia, West Philadelphia, Center City	Systems integration			
	Service enhancement			
Texas				
Fort Worth	Systems integration	2.41	1.90	2.20
Austin	Service enhancement	2.41	1.95	2.24
Virginia				
Richmond	Systems integration	2.34	1.86	2.15
Hampton-Newport News	Service enhancement	3.03***	2.94***	3.07***
Washington ²		2.53	2.10	2.34
Seattle, Uptown	Systems integration			
Seattle, Downtown	Service enhancement			
Mean		2.64	2.19	2.47
Standard deviation		0.21	0.29	0.25
Median		2.61	2.12	2.45

¹ Rated on 5-point Likert-type scale ranging from 1, very well, to 5, very poorly

² The state has two ACCESS grantee agencies, but only one service system was identified.

** $p < .05$, for the difference between the site implementing the systems integration strategy and the site implementing the service enhancement strategy

*** $p < .01$, for the difference between the site implementing the systems integration strategy and the site implementing the service enhancement strategy

ACCESS initiative is conducted, it was desirable that the sites where service enhancement strategies will be implemented and those where systems integration strategies will be implemented not differ on baseline measures, as determined by two-sample t tests.

Results

Systems performance

Table 2 shows scores on the accessibility and coordination indexes for 16 sites. (Seattle and Philadelphia do not have separate service networks). As the two measures are highly intercorrelated ($r = .85$, $p < .001$), a composite based on the sum of the two measures is also presented.

The average accessibility score for the 16 sites (mean = 2.64) was greater than the average coordination score (mean = 2.19), but both fell below the scales' midpoint score of 3, which defines adequate performance. This difference suggests that services for persons who are homeless and have serious mental illness tend to be perceived as barely accessible in most cities and that the coordination among agencies providing these services is seen as more problematic. In general, scores fell in a tight band around the averages so both indexes have small standard deviations. This pattern implies similarity across sites.

Differences existed between sites

Table 3

Ratings of measures of interagency ties for ACCESS demonstration sites at baseline (August to December 1994)

Site	Program strategy	N agencies ¹	Overall system				Access grantee agency			
			Mean N service ties	Mean N organizational ties	Mean tie strength ²	Network strength ³	Mean N service ties	Mean N organizational ties	Mean tie strength ²	Network strength ³
Connecticut										
Bridgeport	Systems integration	51	46.5	19.8	2.34	.28	77	29	2.66	.44
New Haven	Service enhancement	49	40.0	18.4	2.18	.25	55	22	2.50	.33
Illinois										
Chicago, Edgewater-Uptown	Systems integration	61	37.6	15.3	2.46	.19	50	18	2.78	.28
Chicago, Lincoln Park-Near North	Service enhancement	32	26.6	11.1	2.39	.27	32	13	2.46	.35
Kansas										
Sedgwick County	Systems integration	55	56.8	23.2	2.45	.31	129	40	3.23	.60
Shawnee County	Service enhancement	41	53.6	20.0	2.68	.41	83	28	2.96	.69
Missouri										
St. Louis	Systems integration	46	51.9	21.1	2.46	.36	73	30	2.43	.58
Kansas City	Service enhancement	51	50.1	19.2	2.61	.30	103	36	2.86*	.66
North Carolina										
Mecklenburg County	Systems integration	47	37.4	15.4	2.43	.26	85	31	2.74	.59
Wake County	Service enhancement	49	41.2	17.3	2.38	.25	65	24	2.71	.44
Pennsylvania ⁴		82	54.4	22.9	2.38	.21				
Philadelphia, West	Systems integration	—	—	—	—	—	68	28	2.43	.28
Philadelphia, Center City	Service enhancement	—	—	—	—	—	117	39	3.00**	.44**
Texas										
Fort Worth	Systems integration	62	58.5	24.1	2.43	.30	110	37	2.97	.56
Austin	Service enhancement	62	57.2	25.0	2.29	.28	128	44	2.91	.62
Virginia										
Richmond	Systems integration	61	39.4	17.1	2.30	.20	34	19	1.79	.23
Hampton-Newport News	Service enhancement	49	42.6	17.8	2.39	.26	72	23	3.13***	.44**
Washington ⁴		77	78.8	34.7	2.27	.31				
Seattle, Uptown	Systems integration	—	—	—	—	—	47	22	2.14	.22
Seattle, Downtown	Service enhancement	—	—	—	—	—	107	44	2.43	.46***
Mean		55	48.3	20	2.40	.28	80	29	2.67	.46
Standard deviation		13	12.1	5	0.12	.06	30	9	0.36	.15
Median		51	48.3	20	2.39	.28	75	29	2.73	.44

¹ Total number of agencies=875² The ratio of mean number of service ties to mean number of organizational ties³ The proportion of agencies that have multiple ties⁴ The state has two ACCESS grantee agencies, but only one service system was identified.* $p < .10$, for the difference between the site implementing systems integration and the site implementing service enhancement** $p < .05$, for the difference between the site implementing systems integration and the site implementing service enhancement*** $p < .01$, for the difference between the site implementing systems integration and the site implementing service enhancement

implementing integration strategies and those implementing enhancement strategies in some states. In Missouri and Virginia, significant between-site differences were found for the accessibility and coordination ratings and for the combined rating (in Missouri, $t=2.48$, $df=79$, $p<.05$; $t=3.42$, $df=82$, $p<.01$; $t=2.94$, $df=$

73, $p<.01$; respectively; in Virginia, $t=4.06$, $df=81$, $p<.01$; $t=6.57$, $df=91$, $p<.01$; $t=6.02$, $df=77$, $p<.01$; respectively). It is noteworthy that in these two states, the performance of the sites where integration strategies will be implemented was lower than that of the enhancement sites in this baseline evaluation.

The integration and enhancement sites in Connecticut differed significantly on the coordination index ($t=2.61$, $df=91$, $p<.05$). Sites in Kansas, North Carolina, Texas, and Illinois (the city of Chicago) showed no significant differences on these baseline measures of systems performance.

Interagency linkages

Less than 1 percent of the organizational links involved funding exchanges, indicating almost no contracting, purchases of service, or sharing of funds between agencies. Most agencies reported receiving their funds directly from state or federal agencies, other third parties, or client fees. Another 34 percent of the organizational links involved client referrals only, 15 percent information exchanges only, and 51 percent both client referrals and information exchanges.

Table 3 summarizes the extent of interagency ties. The mean score on the organizational ties index was 20 across sites, with a range from 11.1 in the Lincoln Park–Near North area of Chicago to 34.7 in Seattle. These scores reflect the number of agencies in each network that are linked together, averaged across the six types of relations. The mean score on the service ties index was 48.3, with a range from 26.6 in the Lincoln Park–Near North area of Chicago to 78.8 in Seattle. These service tie scores indicate the extent to which linkages involve the six combinations of types of relations (sending and receiving) and types of content (clients, information, and funds).

The mean score on the measure of tie strength was 2.40, with a range from 2.18 in New Haven to 2.68 in Shawnee County, Kansas. The mean score indicates that any interagency linkage involves about two and a half of the six possible exchanges. The mean score on the network strength index at the systems level was .28, with a range from .19 in Edgewater-Uptown Chicago to .41 in Shawnee County, Kansas. This result suggests that, on average, the overall systems are not densely connected; only 28 percent of the relationships between agencies involve two or more ties.

Agencies that are ACCESS grantees had significantly higher scores on the measures of tie strength and network strength, suggesting that they are better connected to other agencies in their network than is the overall system. The mean score on the measure of tie strength of ACCESS grantees in the various sites was 2.67, with a range from 1.79 for the AC-

CESS grantee in Richmond to 3.23 for the ACCESS grantee in Sedgwick County, Kansas. The low level of tie strength of the grantee agency in Richmond was due to the fact that the agency's outreach and case management team was not yet operational at the time of data collection and thus that agency had no incoming or outgoing client referrals. The grantee agencies' mean score on the measure of network strength was .46, with a range from .22 in uptown Seattle to .69 in Sedgwick County. Thus ACCESS grantee agencies, on average, had multiple ties with almost half (46 percent) of the organizations in their network.

At the overall systems level, no significant differences between sites implementing integration strategies and those implementing enhancement strategies were detected on any of the four network indexes. At the grantee agency level, significant differences in tie strength between the two types of sites were found for three states—Missouri ($t=1.86$, $df=64$, $p<.10$), Pennsylvania ($t=2.12$, $df=65$, $p<.05$), and Virginia ($t=4.88$, $df=40$, $p<.01$). For each state, the grantee agency at the enhancement site had a higher tie strength. For grantee agency network strength, significant differences between the two types of sites were found for three states—Pennsylvania ($z=2.13$, $p<.05$), Virginia ($z=2.34$, $p<.01$), and Washington ($z=3.14$, $p<.01$). Again, in each state, the grantee agency at the enhancement site had stronger network relations.

Correlations between performance and agency linkages

The systems performance measures discussed above are ratings of the service system ecology in which the different ACCESS programs are situated. They depict the perceived opportunity structure and environmental challenges facing ACCESS grantee agencies as their staff seek to enhance services and integrate systems of care on behalf of persons who are homeless and who have serious mental illness. ACCESS grantee ties are an indication of how well connected core service agencies are within these networks.

Are perceptions of systems performance correlated with ACCESS grantee linkages? The correlation between perceived systems performance (combined scale) and the tie strength of the ACCESS grantee agency was .61 ($p<.01$). This moderately strong positive correlation indicates that sites perceived as having high systems performance tend also to have ACCESS grantee agencies with multiple ties.

Discussion and conclusions

One of the main findings of this study is that at the ACCESS demonstration sites located in 15 of the largest U.S. metropolitan areas, services for persons who are homeless and who have serious mental illness are perceived as inaccessible and poorly coordinated. This finding supports a key assumption of the ACCESS demonstration program, namely, that services in urban America for this target population are fragmented and unintegrated. If all sites were high functioning at baseline, the ACCESS demonstration would be hard pressed to show any impact. However, because even the best-rated systems are seen as merely adequate, the ACCESS demonstration is well positioned to test the hypothesis that increased integration will improve client outcomes.

A second finding is that interagency linkages largely consist of client referrals and information exchanges, with very few funding relationships. Most agencies have their own sources of funding and support and are not dependent on each other for fiscal viability. Under these circumstances, agencies act more autonomously in their interagency relationships and pursue their own interests rather than collective goals (12, 15). In this environment, ACCESS grantee agencies face considerable challenges in creating incentives for agencies to collaborate in building systems of care.

A third finding is that ACCESS grantee agencies, on average, are better connected to the local service network than are other agencies in the network. Grantee scores on measures of organizational ties, service ties, and tie strength are higher than

those for the overall service networks in which they are located. These initial data, obtained at an early stage of the demonstration when ACCESS case management and outreach services were just coming on line in most of these communities, are encouraging. The findings suggest that the grantees had made considerable strides in connecting with local key service providers during a time marked by competing administrative and programmatic goals including staff recruitment, hiring, training, and the many other details involved in implementing a new program.

A fourth finding is that there are some differences in the indicators of service systems performance, systems integration, and grantee integration between sites that are implementing service enhancement strategies and those implementing systems integration strategies. The differences vary by indicator. On overall systems performance, or accessibility and coordination, analysis showed significant differences between the two types of sites in Missouri and Virginia. On tie strength, a group of high-performing sites and a group of low-performing sites were identified. In three states—Missouri, Virginia, and Pennsylvania—the enhancement sites exceeded the integration sites in tie strength. Overall, the results suggest a positive correlation between systems performance and ACCESS grantees' interagency linkages so that grantee agencies with higher measures of linkage tend to be located in systems with higher performance ratings.

These site-by-site differences will have to be factored into longitudinal analyses. A second wave of performance and network data was gathered between February and August 1996, about 18 months after the first wave, and a third wave of data will be obtained beginning in late 1997, about 18 months after the second wave. These three waves of data will allow us to examine causal sequences in the relationship between systems performance and grantee linkages. Ultimately, in collaboration with studies of clients' outcomes (3,4), the evaluation will test whether systems inte-

gration promotes better client outcomes.

These findings illustrate the utility of a network approach to assessing service systems integration. We used the idea of a services network to characterize the complex web of interagency relationships that ACCESS grantee agencies must develop, manage, and sustain to achieve their goals. Network methods can assess multiple levels of relations within interagency systems.

As longitudinal data become available, both macro- and microsystem linkages will be examined. For example, close linkages among a small group of key service providers may produce better client outcomes than efforts to link up the entire service network. Alternatively, as reported in the literature on vocational and dual diagnosis services (16,17), integrated services provided by a single agency may outperform those involving multiple agency linkages. The ACCESS demonstration will allow comparisons among some of these alternative arrangements. By pursuing such questions, the policy and practice implications of the ACCESS demonstration will be distilled and disseminated widely to stakeholders at the federal, state, and local levels. ♦

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