

Dissemination of Assertive Community Treatment Programs

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Objective: The study sought to estimate the number of programs in the U.S. for severely mentally ill adults that used the assertive community treatment model and to describe variations in characteristics of the intervention across programs. **Methods:** Assertive community treatment programs identified by state mental health authorities completed a 12-item survey. The survey included questions on caseload, composition of the treatment team, nature of services, and structure of service provision. **Results:** A total of 303 of 340 programs (89 percent) identified by states responded to the survey. More than 75 percent provided most of their services in the field, delivered medications, included medical staff on the assertive community treat-

ment team, and had caseload ratios of less than 20 consumers for each provider. **Conclusions:** Assertive community treatment programs have disseminated quite unevenly across 33 states, with the highest concentrations of programs in midwestern and eastern states. (*Psychiatric Services* 46:676-678, 1995)

Randomized controlled trials of assertive community treatment conducted in three continents have reported generally positive results (1-3). Widespread dissemination of the assertive community treatment model might be expected, as documentation of the effectiveness of the approach dates back to the 1970s. This paper reports results of a survey that examined the dissemination and characteristics of assertive community treatment programs throughout the United States.

Methods

The assertive community treatment programs included in the survey were identified by the directors of state mental health authorities, who in turn had been identified by the National Association of State Mental Health Program Directors. Letters were mailed to the directors in October 1992 requesting information on programs that met the following definition of assertive community treatment: multidisciplinary teams of mental health professionals who share a common and limited caseload and provide comprehensive care in the community for adults with long-term psychotic illnesses. The directors were asked to provide the name of the program and the name, address, and telephone numbers of contact persons for any programs in their state that met the description, regardless of whether the program was state operated.

A one-page, 12-item survey and a stamped, self-addressed return envelope were subsequently mailed to each of the programs identified by the directors. The survey requested information on whether the work was done by individual providers or by a team who shared a common caseload, the number of consumers cared for by the program, and the number of providers involved in the program on a full-time basis. The survey asked whether services were provided 24 hours a day, seven days a week, with team members taking all calls, and whether team members delivered medications to consumers' homes on a daily basis if needed.

Other questions in the survey included whether consumers could "graduate" from the program to less intensive interventions or could be discharged from the program, whether teams included a psychiatrist and a nurse, and whether teams arranged for or directly managed consumers' funds. The survey also asked the average percentage of the teams' services that were provided in the community, rather than in an office or facility, and what percentage of the services were directly provided, rather than brokered, by team members.

Ten of the 12 program characteristics examined in the survey corresponded to items in a survey of assertive community treatment programs by McGrew and associates (4). We added the items on medication delivery and financial management. Respondents were also asked if they were aware of similar programs in their state. Any programs identified by respondents were also surveyed.

Response frequencies, means, medians, and ranges were computed for each item. The ratio of providers to consumers was computed for each program.

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Table 1
Assertive community treatment programs (N=303) that responded to a survey on program characteristics, by state

State	N of responding programs	Response rate (%) ¹
Alabama	4	100
Alaska	2	100
Arizona	5	100
Arkansas	1	100
California	3	100
Connecticut	6	100
Delaware	11	92
Florida	4	57
Idaho	6	100
Illinois	7	70
Indiana	7	88
Kentucky	1	100
Maryland	14	88
Massachusetts	2	67
Michigan	86	97
Minnesota	1	100
Missouri	8	100
Montana	3	100
New Hampshire	10	91
North Dakota	6	75
Ohio	5	100
Oklahoma	1	50
Oregon	1	100
Pennsylvania	3	25
Rhode Island	6	86
South Carolina	6	86
South Dakota	2	100
Tennessee	4	100
Texas	1	100
Vermont	9	90
Virginia	3	60
West Virginia	0	0
Wisconsin	67	83
Wyoming	3	60
Unknown	5	na

¹ Percentage of programs, identified by the state authority, that responded to the survey

Results

A total of 340 assertive community treatment programs were identified in 34 states. No programs were identified in Colorado, Georgia, Hawaii, Iowa, Kansas, Louisiana, Maine, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Utah, or Washington. The directors in these states wrote or called the researchers to say that there were no such programs in the state at that time.

Survey responses were received

from 303 programs, for an 89 percent response rate. As Table 1 shows, 16 states had a 100 percent response rate, ten states had response rates between 75 percent and 99 percent, six states had response rates between 50 percent and 74 percent, and one state had a 25 percent response rate. One state, West Virginia, had a zero percent response rate. The average response rate among programs identified by state mental health directors was 84 percent. Five survey responses were received from programs without identification of their location.

In 45 percent of the responding programs, teams shared a common caseload. The mean number of consumers in the responding programs was 180; the median number of consumers was 50. The mean number of full-time providers was 10.9, and the median was 5.1. The responding programs had a mean of 16.5 consumers for each provider.

Seventy-one percent of the programs provided services 24 hours a day, and 80 percent of the programs delivered medications. Consumers could graduate to other programs in 57 percent of the responding programs, and they could be discharged in 89 percent of the programs.

In 88 percent of the programs, a psychiatrist was a member of the team, and in 88 percent, a nurse was a team member. Financial management services for consumers were provided in 82 percent of the programs. The mean proportion of services delivered in the community was 75 percent, and the median was 76 percent, with a range among programs from 0 to 100 percent. Fifty-five percent of the programs reported that all services to consumers were directly provided by program staff and were not brokered. Thirty-nine percent reported that most services were directly provided by staff, and 3 percent reported that some services were directly provided.

Discussion and conclusions

This survey identified programs with a broad range of characteristics, highlighting differences in types of staff, ratios of clinicians to clients, shared versus individual caseloads, night and weekend services, avail-

ability of medication delivery, amount of services delivered in the community, management of patient funds, direct provision versus brokerage of services, and provision of lifetime versus time-limited services.

Variations on the original model of assertive community treatment have arisen as the model has been disseminated throughout the United States. Efforts to measure variation in implementation of the model include the work of McGrew and colleagues (4), Brekke and Test (5), and Jerrell and Hargreaves (6). McGrew and associates developed a 17-item instrument to measure the similarity of new assertive community treatment programs to the original model. The instrument differentiated between four generations of implementation over time in 18 assertive community treatment programs in Indiana and Illinois; programs that were more similar to the original model tended to be more effective in reducing the number of days per year consumers spent in the hospital (4).

Variations are often related to factors such as access to complementary local resources, the program's location, or budget considerations. For example, the availability of mobile crisis teams may reduce the need for the assertive community treatment team to provide 24-hour services. Consumers may have access to other resources besides the team for managing their finances. In rural areas, in which the population is widely dispersed, 24-hour direct services by team members may not be practical or safe. Local budget constraints may prevent teams from maintaining fixed caseloads.

We consider the following six characteristics examined in our survey as essential to favorable outcomes for assertive community treatment in any setting: shared caseloads, a provider-to-consumer ratio less than or equal to 1 to 20, daily delivery of medications if needed, inclusion of medical personnel among team staff, provision of more than 60 percent of the team's services in the community, and direct provision rather than brokering of services by team members. Of the 303 programs that responded to our survey, 100 programs (33 per-

cent) in 17 states met these criteria. Of these criteria, all but medication delivery correspond to items in the instrument developed by McGrew and associates (4), although that instrument included a provider-to-consumer ratio of 1 to 10 or less.

A striking finding of this survey is that almost half of the assertive community treatment programs are located in the two midwestern states of Wisconsin and Michigan. A second concentration exists in the eastern states. Local leadership and the consultation activities of a few individuals are likely major factors accounting for the uneven dissemination of programs among the states. In states with extensive dissemination, the state mental health authorities have emphasized and promoted the development of these services, have used Medicaid's option for coverage of rehabilitation strategically to finance program development, and have promulgated program standards and certification to promote consistency (7). Obviously, major obstacles to dissemination exist where these programs challenge revenues from traditional clinical practices (8).

This preliminary attempt to survey the spread of assertive community treatment is limited by the nature of the survey instrument and the failure to survey programs that are not state sponsored, including programs developed by the Department of Veterans Affairs, large municipal mental health agencies, and private agencies. Imprecise assessment of certain characteristics, such as the shared clinical caseloads, was problematic. For example, limited survey follow-up suggested that the number of programs in which teams shared caseloads may have been underreported due to different interpretations of this variable. Some programs reported that consumers were assigned to individual case managers who had clinical recordkeeping responsibilities but that the entire team worked with all consumers in the caseload.

Despite these limitations, this study provides useful preliminary information about the nature of assertive community treatment services

in the United States. Future surveys should address other program variables such as desired outcomes specified by the program and evaluation methods; specific admission eligibility criteria, including case mix by diagnosis, functional status, and history of service utilization; the degree to which states use standards to define the structure and function of assertive community treatment; and various financing mechanisms.

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