Chapter 16

Rural Mental Health Care

CONTENTS

Box

Figure

Tables

Chapter 16
Rural Mental Health Care[1]

INTRODUCTION

Structurally, the mental health care system in the United States exists almost entirely apart from the physical health care system, yet the two systems have many parallels. Like the physical health system, the mental health system is called on to offer preventive services (e.g., educational sessions for parents of difficult children), other primary care services (e.g., therapy for individuals suffering from stress), inpatient services (e.g., for substance abuse treatment), followup and long-term care (e.g., for individuals with chronic mental disorders), and on-site crisis services (e.g., for victims of violence). Mental health professionals comprise a wide variety of social workers, nurses, clinical psychologists, and psychiatrists.

In practice, however, the mental health services available to individuals do not always appear as a coordinated whole, and the distinctions between physical and mental health are often blurred. Family practitioners, for example, are the providers of choice for many individuals with mental health problems. Individuals in many other professions (e.g., the clergy, teachers and school counselors) also provide substantial amounts of mental health care. In rural areas, where the number and scope of providers and services can be very limited, these providers become an integral part of the mental health "system."

This chapter reviews existing data on the comparative mental health status of rural and urban populations. It then describes the major Federal programs supporting mental health care in rural areas and summarizes what is known about the provision of rural mental health services and the availability of rural mental health providers. Finally, the chapter discusses models for linking physical and mental health services.

RURAL MENTAL HEALTH

Mental Health Status

Reliable data on the prevalence of mental disorders in rural residents are scarce. Those available suggest that differences in mental health status between rural and urban residents are slight.

In the 1985 National Health Interview Survey, a slightly smaller proportion of rural (nonmetro) than urban residents reported that they had experienced stress over the past 2 weeks, with women in either setting more likely to report stress than men (table 16-1) (649). Rural residents were also less likely to seek help for a personal or emotional problem, even after accounting for their lower reported stress (see table 16-1).

Using epidemiological data from North Carolina,[2] researchers have found some minor differences in the prevalence of mental health disorders among urban and rural residents. Major depression and anxiety disorders were more prevalent among urban residents, while rural residents were more likely to report cognitive deficits (e.g., memory deficits, disorientation) (92,153). The researchers found no rural/urban differences in rates of antisocial personality or schizophrenia (92). Small studies in other areas have found that rural residents have higher rates of manic-depressive psychosis than urban residents (172) and are more likely to be clinically depressed (140), although the latter finding is not supported by the North Carolina data.

National mortality statistics from 1980 suggest that, after accounting for differences in age, sex, and racial distribution, rural residents have slightly lower suicide rates than do urban residents (0.11 v. 0.12 per 1,000 residents) (626). Observers have reported high suicide rates in some economically distressed rural areas during the past decade (423), but it is not known whether overall rates have increased.

[1]The preparation of this chapter was aided by the assistance of Lou Wienckowski, Rockville, MD.

[2]The National Institute of Mental Health (NIMH) supports ongoing epidemiological research at six sites: Los Angeles, CA; Baltimore, MD; St. Louis, MO; New Haven, CT; Durham, NC; and the State of Colorado. No data from the Colorado site, which includes a rural sample, have yet been published. Of the other sites, only the North Carolina research explicitly has included a "rural" sample. The population in this sample area has increased over however, and since 1983 the "rural" site has been categorized as metropolitan (734).

Table 16-1-Stress Among Metropolitan and Nonmetropolitan Residents

	Percent of population reporting stress					
	All		Men		Women	
	Metro	Nonmetro	Metro	Nonmetro	Metro	Nonmetro
Exposed to mental stress in job (adults) in past year.	16.9	15.2	17.8	15.6	15.9	14.7
Experienced moderate or greater stress within past 2 weeks.	52.7	47.1	50.8	45.4	54.3	48.7
Stress had some effect on health in past year.	44.4	43.2	38.5	36.1	49.7	49.6
Sought help for personal or emotional problem in past year.	11.7	9.2	8.5	6.1	14.5	12.1

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control, National Center for Health Statistics, unpublished data from the 1985 National Health Interview Survey.

Economic crises did apparently increase mental health problems in some rural communities in the 1980s. Beeson and Johnson found that, among households in Nebraska, rates of psychological distress for those in farm communities rose from the lowest in 1981 to among the highest in 1986 (table 16-2) (77). In North Dakota, also heavily dependent on the farm economy, the State Department of Human Services documented substantial increases from 1980 to 1986 in domestic violence (from 950 to 3,450 cases), child abuse (from 1,685 to 3,021 cases), and death by suicide (from 73 to 93 cases) (423). Rural mental health facilities personnel in North Dakota cited depression as the primary mental health problem in their communities (423).

Heffernan and Heffernan found that family stress was a major concern among 42 families they studied that were forced out of farming(245). Nearly all of the adults became depressed upon leaving the farm, and over one-half continued to experience depression. Common behavioral responses included withdrawal from family and friends, increased physical aggression, and increased smoking or drinking. Children were reported to have become more anxious, demanding, aggressive, and rebellious, and their academic performance worsened. Adolescents increased their use of alcohol and became more withdrawn (423).

Alcohol and Drug Abuse

Drug abuse is less common in rural than in urban areas. Use of and dependence on marijuana, cocaine, hallucinogens, PCP,[3] and heroin is less common among rural than urban residents in every age group (92,643). There is some evidence that the popularity of particular substances in rural communities follows urban trends, but at a lower level. For example, a study of a rural middle school in the Rockies showed marijuana use among students was approaching urban rates by the late 1970s (736). In the early 1980s, students at the same school adopted more conservative attitudes toward drugs and exhibited less marijuana use (735,737).

Alcohol dependence, in contrast, is apparently higher among rural than urban residents (92). Rural adults are more likely than urban adults to report bouts of heavy drinking;26 percent of adult rural drinkers reported at least 5 days of heavy drinking in 1985, compared with 24.5 percent of their urban counterparts (649). The pattern is more complex in adolescents; compared with urban teenagers, rural teens are more likely to have used alcohol but are slightly less likely to report days of very heavy drinking (643). Rural residents also report more drinking and driving than urban residents (649).

Local factors can contribute to high substance abuse. In a rural Michigan county with 16 percent unemployment, almost one-fourth of 6th-, 7th-, and 8th-graders surveyed reported occasional marijuana use, and one-fourth reported bouts of sickness from drinking. In both cases the frequencies were significantly higher than national norms (538,539).

FEDERAL PROGRAMS

Direct Federal involvement in the provision of mental health care dates to the Community Mental Health Centers Act of 1963 (Public Law 88-164),

[3]PCP is the common abbreviation for phencyclidine.

Table 16-2—Prevalence of Mental Health Problems Among Nebraska Residents, 1981 and 1986

Scale	Percent of residents in area with mental health problem							
	Farm[a]		Rural[a]		Urban[a]		Large urban[a]	
	1981	1986	1981	1986	1981	1986	1981	1986
Depression	11	21	18	20	11	16	16	15
Anxiety	11	12	16	17	12	12	13	12
Psychosocial dysfunction	7	13	6	11	9	10	9	12
Cognitive impairment	18	15	15	13	14	16	14	14
General psychopathology	12	13	11	14	13	15	17	12
Percent scoring high on three or more scales	6	15	8	11	7	9	8	9
Number of cases	307	244	457	466	457	500	606	650

[a]Categories are based on Census Bureau definitions. "Rural" includes only individuals in communities of fewer than 2,500 residents who do not live on farms.

SOURCE: P.G. Beeson and D.R. Johnson, "A Panel Study of Change (1981-1986) in Rural Mental Health Status: Effects of the Rural Crisis," paper presented at the National Institute of Mental Health National Conference on Mental Health Statistics, Denver, CO, May 1987.

which authorized support for the construction of community mental health centers (CMHCs).[4] The Act required States to be divided into service delivery areas (catchment areas) that each contained 75,000 to 200,000 people. The legislation required that centers provide inpatient, outpatient, and partial hospitalization services; emergency services; and consultation and education services. Congress later expanded the CMHC model to include services targeted to specific populations (e.g., children, the elderly), substance abuse services, screening for courts and other community agencies, and transitional housing and followup care for those leaving inpatient psychiatric facilities (Public Laws 91-211, 94-63, 95-622, and 96-32). By 1981, 768 CMHCs had received grants and 296 of these (38 percent) were located in cities of 25,000 or fewer residents (483).

In 1978, Congress made CMHC funding contingent on collaboration with related agencies, including school systems, child care agencies, courts, social service agencies, and health departments (Public Law 94-63). To facilitate collaboration between physical and mental health services, the National Institute of Mental Health (NIMH) and the Bureau of Health Care Delivery and Assistance (BHCDA)[5] gave each of 58 community health centers—two-thirds of which served rural areas—funds to hire a mental health ''linkage worker" to facilitate collaboration with CMHCs (457). The program was terminated in 1981.

Subsequent mental health legislation in 1980 (Public Law 96-398) stressed services to underserved and unserved populations, including (for the fist time) rural residents. To receive a grant under this legislation, however, rural CMHCs were also required to serve at least one of the other targeted populations (i.e., children, elderly, poor, or chronically mentally ill individuals).

The Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) consolidated most previous mental health programs into a block grant, under which funding was not contingent on providing specific mental health services or targeting services to specific population (see ch. 3). This legislation repealed the collaboration agreement provisions of the 1980 law, cut funding levels by up to 30 percent (51), and eliminated most CMHC reporting requirements. Substance abuse grant funds were subsequently incorporated into the block grant (see ch. 3). Because of the greater perceived substance abuse problem in urban areas, Congress changed the allocation formula for the grant in 1988 to give greater weight to States with larger urban and young adult populations (Public Law 100-690).

Recently, rural issues in mental health legislation have regained visibility. In 1986, NIMH held two Policy Forums on Rural Stress, where participants

[4]Although no special funding or mandates were targeted for rural areas, NIMH had a part-time staff person working on rural mental health issues from 1967 to 1981 (*458*).

[5]Formerly the Bureau of Community Health Services.

reported high rates of suicide, depression, and stress in parts of rural America. Congress subsequently passed the Rural Crisis Recovery Program Act of 1987 (Public Law 100-219), which required the Secretary of Agriculture to provide one-time funding for programs to develop educational, retraining, and counseling assistance for farmers and rural families adversely affected by the farm crisis.[6]

Congress also appropriated $1.2 million to NIMH in September 1987 to establish Rural Mental Health Demonstrations (Public Law 99-591). These were designed to help States promote comprehensive health, mental health, and human services in rural communities and to fund rural mental health programs to address problems resulting from the farm crisis. The law specified that only States most adversely affected by the farm crisis would be eligible for funding. Thirteen States were identified,[7] and four-Iowa, Minnesota, Nebraska, and South Dakota--each received $300,000 for a period of 18 months to develop comprehensive rural mental health programs (see box 16-A).

Legislation in 1988 (Public Law 100-690) required that 15 percent of Federal funds appropriated under the block grant be set aside for rural mental health demonstration projects. Since NIMH was already spending an equivalent amount of demonstration money on rural projects, the legislation had little immediate impact on federally funded efforts (547).

Unlike the general mental health programs, the Community Support Program (CSP), launched in 1977, is designed specifically to assist States and local communities develop comprehensive systems of care for adults with seriously disabling mental health problems (580). Its goal is to provide emergency care while helping the individual reintegrate into the community (by linking the individual with formal long-term support-e. g., food stamps, CMHC services-and enhancing informal supportive networks of families and friends). The program does not specifically target rural areas, but several rural communities have CSP projects and may benefit from its focus on integrated care, consumer involvement, and community outreach.

BHCDA and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) recently signed an interagency agreement to provide funding to primary care agencies for substance abuse programs (343). The 3-year grant program began July 1, 1989 and disbursed $9 million to nonprofit primary care providers to develop plans to work with substance abuse treatment providers. Although the program might be highly appropriate to rural areas, due to the large number of grant requests all awards were made to urban recipients (343).

In early 1990, NIMH established an Office of Rural Mental Health Research to coordinate and administer relevant research and demonstration studies (141,641). This office will administer a newly advertised research effort that will include grants to rural mental health research centers (640).

SERVICES IN RURAL AREAS

Availability

Mental Health Services

Recent information on mental health service delivery in rural areas is minimal. Since the consolidation of programs into the block grant in 1981, States have not been required to keep records or report back to the Federal Government in any detail about the population served in CMHCs or the services clients receive. NIMH collects only summary information through two biennial surveys of mental health care facilities (6.38).

Based on the survey data, researchers have documented dramatic differences between rural and urban areas in the availability of local inpatient mental health services. Almost two-thirds of metro counties (63 percent) had some kind of inpatient services in 1983, but only 13 percent of nonmetro counties had facilities that offered such services (table 16-3) (705). Service availability among nonmetro counties also varied enormously. Among nonmetro counties with urban populations (by the Census definition) of more than 20,000, 54 percent had inpatient mental health services. In stark contrast, only 7 percent of the 2,110 nonmetro counties with smaller urban populations had inpatient services (705).

[6]This law built upon Public Law 99-198, which was less specific and did not actually require the Secretary of Agriculture to support outreach and other mental health services.

[7]The 13 States were Colorado, Georgia, Iowa, Kansas, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Vermont. and Wisconsin.

Box 16-A—The Rural Mental Health Demonstrations

The four Rural Mental Health Demonstrations were designed to assist States in developing comprehensive mental health, health, job retraining, and employment services to rural communities. Although all included State and local components, they had very different emphases. An evaluation of the four demonstration projects was completed in January 1990 (147).

Iowa's State component included:

- interagency collaboration (e.g., with a State interagency rural crisis effort);
- knowledge development (e.g., a survey of the special services being provided by CMHCs to rural populations, a mental health needs assessment based on a survey of rural Iowans);
- training programs (e.g., workshops for school counselors and mental health and allied professionals); and
- technical assistance (e.g., to the Agricultural Extension Service's rural outreach and counseling program).

At the local level, Iowa placed professionals or paraprofessionals directly in the communities served by five CMHCs to develop comprehensive outpatient, consultation, and education services (734).

Minnesota's State program included:

- an interagency State Advisory Committee (which included both mental health and agriculture officials);
- technical assistance to the local demonstration efforts; and
- the development of a videotape on the problems of rural women, which was used at a teleconference to test the value of teleconference technology for holding meetings among dispersed groups.

At the local level, the State funded outreach coordinators at three CMHCs, who implemented consultation and education activities in their catchment areas (e.g., a "peer helper" program at a local high school) (734).

Nebraska's project included:

- the development of educational materials (e.g., a pamphlet on stress management for rural adults, a teacher's guide to a curriculum for fifth graders on the emotional aspects of rural life);
- a contract with Interchurch Ministries of Nebraska to provide training and evaluation support to that group's paraprofessional crisis hotline and field counseling efforts;
- a conference on rural mental health; and
- a data collection and literature review effort to appraise strategies for services integration.

The local direct service component of the project included two nontraditional models of mental health care: a ''circuit-riding' mental health professional who rotated among three primary care physicians' offices, and a mental health professional located in a central "Ag Action Center' who provided services to distressed farmers (734).

South Dakota's project differed from those in the other three States in that all but one CMHC in the State participated. State-level activities were limited to:

- the development of educational materials (e.g., a directory of State human service resources for rural families and a pamphlet and two videotapes on rural mental health topics); and
- the development of materials to assist the CMHCs in designing their local projects (e.g., a needs assessment survey and a survey of public service providers on awareness of CMHC services).

The local projects at the 10 participating CMHCs included educational activities aimed at the general public (e.g., stress workshops); consultation and education activities for area human service providers (e.g., workshops for educators and law enforcement professionals to help them understand and recognize mental health problems of rural adolescents); establishment of peer support groups; and direct service outreach efforts (e.g., purchase of a mobile office) (734).

General acute-care community hospitals are the most common providers of inpatient mental health services (216). Nonetheless, rural acute-care community hospitals have fewer short-term psychiatric inpatient beds than do urban hospitals (averaging 1.5 v. 5.9 beds per hospital, respectively), and the relationship holds true for hospitals of every size category (625).

The availability in rural areas of comprehensive mental health services is much more difficult to determine. The little existing evidence suggests that rural areas not only are less likely than urban areas to have services, but where services exist they are narrower in scope. In a study of CSP delivery systems, the average number of services available to seriously mentally ill clients was more than 11 in all

Table 16-3-inpatient Mental Health Services and Beds by County Type, 1983

County type	Number of counties	Number (percent) of counties with some inpatient mental health services	Estimated median number of inpatient mental health beds per county		Average number of facilities with some inpatient mental health services per county
			All counties	Counties with services	
All counties	3,137	774 (25)	o	52	2.5
Metro counties	735	466 (63)	29	120	3.5
Nonmetro counties	2,402	308 (13)	o	20	1.3
20,000 or more population	292	158 (54)	11	20	1.3
Adjacent to metro area	147	76 (52)	6	18	1.4
Not adjacent	145	82 (57)	13	20	1.3
2,500 to 19,999	1,325	145 (11)	o	26	1.2
Adjacent to metro area	560	57 (lo)	o	32	1.2
Not adjacent	765	88 (12)	o	20	1.2
Fewer than 2,500	785	5 (<1)		22	1.0
Adjacent to metro area	221	2 (<1)	o	20	1.0
Not adjacent	564	3 (<1)	o	22	1.0

SOURCE: **M.O. Wagenfeld, H.F.** Goldsmith, D. Stiles et al., "Inpatient Mental Health Services in Metropolitan and Nonmetropolitan Counties," Journal of Rural Community Psychology 9(2):12-28, 1988.

four urban areas studies but ranged from 8 to 10 in the four rural study areas (228). Another study of CSP participants found that rural clients were less likely than urban clients to receive needed services (567).

A 1979 study assessing mental health service needs found that central cities, as expected, were more likely than other areas to have available a comprehensive set of services. Catchment areas that included both metro and nonmetro counties also had relatively high rates of comprehensive service availability. Surprisingly, within all-nonmetro catchment areas, the least densely populated areas[8] were actually the most likely to contain a comprehensive set of services (355).

As is the case for inpatient psychiatric care, rural acute-care general hospitals provide fewer outpatient, emergency, and specialty psychiatric services than do their urban counterparts (table 16-4). Psychiatric outpatient services are provided by more than twice as many urban as rural hospitals (14 v. 6 percent, respectively) (625).

Emergency mental health services are particularly crucial in rural areas. Rural residents with serious mental illnesses rely more heavily than do urban residents on crisis services, even after accounting for differences in emergency service availability and need (567). It is likely that the heavier rural usage is related to the lack of other mental health services (567). But like other rural services, emergency mental health services face problems of logistics, staff inconvenience, and costs entailed by covering large distances (390). Providing on-site crisis services may be especially problematic. Rural crisis services also reportedly use fewer techniques for needs assessments, provide less public education about the service, and provide more limited training of crisis workers than do urban crisis services (390).

Observers have reported that, while urban areas have a variety of agencies and organizations offering crisis programs, CMHCs are the principal rural providers of crisis services (390). Acute-care community hospitals play a smaller role in rural areas; compared with almost 32 percent of urban hospitals, only 17 percent of rural hospitals provide psychiatric emergency services on site (625).

Substance Abuse Treatment Services

Alcohol and drug abuse treatment facilities are relatively well represented in rural areas, although rural facilities serve a disproportionately small number of patients. Seventeen percent of all treatment facilities are in nonmetro counties (see table 16-5), but they serve less than 14 percent of all patients (642). Eight percent of the alcohol-only treatment facilities are located in nonmetro counties, but these facilities serve only 5 percent of the total patient population. Possible explanations for these findings are that rural treatment availability is

[8]Nonmetro counties in which less than 50 percent of the population lived in Census-defined urban areas.

Table 16-4-Percent of Community Hospitals Providing Psychiatric Services, by County **Type and Hospital Size,[a] 1987**

Service	Nonmetro 6-24	25-49	50-99	100-199	200-299	Metro 6-24	25-49	50-99	100-199	200-299
Child psychiatric services	0	1.3	5.1	15.8	29.5	0	1.6	5.5	13.1	24.5
Geriatric psychiatric services	1.6	1.7	6.4	16.3	36.4	0	0.8	5.8	17.7	33.6
Psychiatric *emergency* services	7.7	8.0	14.7	27.9	53.8	0	4.9	12.7	32.8	50.1
Psychiatric education	0.5	1.7	6.0	17.1	37.1	4.5	1.6	9.9	18.8	36.4
Psychiatric consultation and liaison	3.8	3.7	10.3	19.4	37.9	4.5	12.3	14.6	27.1	39.4
Psychiatric partial hospitalization	3.8	1.2	4.6	9.1	18.9	0	3.3	4.4	8.7	17.0
Psychiatric outpatient services	2.2	2.8	4.5	9.9	24.2	0	4.1	5.8	12.7	22.6
Chemical dependency outpatient services	3.8	5.3	8.5	14.6	23.5	0	11.5	11.0	20.3	29.1

[a]Hospital size as measured by number of total beds. Specialty psychiatric hospitals and hospitals with more than 300 beds are not included in this table. The number of nonmetro hospitals in the latter category is very small.

SOURCE: Office of Technology Assessment, 1990. Data from the American Hospital Association's 1987 Survey of Hospitals.

Table 16-5—Alcohol and Drug Abuse Treatment Facilities: Location and Facility Orientation, 1987

Location and facility function	Facility type: Alcohol only	Combined alcohol and drug	Total
Large metro areas (population more than 100,000)			
Treatment	1,383	2,479	3,862
Prevention/education	867	2,122	2,989
Other	776	1,522	2,298
Other metro areas			
Treatment	177	752	929
Prevention/education	145	624	769
Other	102	478	580
Nonmetro areas			
Treatment	138	838	976
Prevention/education	118	716	834
Other	67	487	554
subtotal			
Treatment	1,698	4,069	5,767
Prevention/education	1,130	3,462	4,592
Other	945	2,487	3,432
Total (unduplicated count)	2,112	5,336	7,458

SOURCE: U.S. Department of Health and Human Services, Alcohol, Drug, and Mental Health Administration, National Institute of Alcohol Abuse and Alcoholism, unpublished data from the National Drug and Alcoholism Treatment Unit Survey, Oct. 30, 1987.

greater than demand, that rural facilities are smaller than urban ones, or that rural residents are less willing than urban residents to seek help for mental health problems or from local facilities. Rural residents are slightly underrepresented in substance abuse facilities as a whole (642). Mental health centers (e.g., CMHCs) are the most common sites for alcohol treatment in rural communities, accounting for 42 percent of the alcohol treatment caseload (642).

Table 16-6-Percent of Alcohol and Drug Abuse Treatment Facilities Providing Specified Services, by County Type, 1987

Service	Facility location[a]		
	Large metro	Other metro	Nonmetro
Hotline	30.7	42.6	48.4
Outreach services	48.2	53.4	62.8
Early intervention services	44.7	51.4	61.1
Employee assistance program	31.1	40.0	45.6
Teen suicide prevention	8.3	11.7	18.0
Self-help groups	65.7	59.5	57.9
Transportation	18.8	20.3	19.8
Crisis intervention	47.7	60.3	69.8

[a]Large metro = metropolitan areas of more than 100,000 residents; other metro = all other metropolitan areas; nonmetro = all nonmetropolitan areas.

SOURCE: U.S. Department of Health and Human Services, Alcohol, Drug, and Mental Health Administration, National Institute of Alcohol Abuse and Alcoholism, unpublished data from the National Drug and Alcoholism Treatment Unit Survey, Oct. 30, 1987.

Table 16-7—Alcohol Treatment Facilities by Client-to-Counselor Ratios and Location, 1987

Client-to-counselor ratio	Facility location[a]					
	Large metro		Other metro		Nonmetro	
	Number	Percent	Number	Percent	Number	Percent
Inpatient	2,004	100.0	426	100.0	301	100.0
1-4	518	25.8	151	35.4	83	27.6
5-9	1,088	54.3	212	49.8	162	53.8
10 or greater	398	19.9	63	14.8	56	18.6
Outpatient	2,446	100.0	626	100.0	804	100.0
1-4	4151	17.0	110	17.6	107	13.3
5-9	478	19.5	102	16.3	145	18.0
10 or greater	1,553	63.5	414	66.1	552	68.7

[a]Large metro = metropolitan areas of more than 100,000 residents; other metro = all other metropolitan areas; nonmetro = all nonmetropolitan areas.

SOURCE: U.S. Department of Health and Human Services, Alcohol, Drug, and Mental Health Administration, National Institute of Alcohol Abuse and Alcoholism, unpublished data from the National Drug and Alcoholism Treatment Unit Survey, Oct. 30, 1987.

Urban and rural substance abuse treatment facilities have different service patterns (table 16-6) (642). While facilities in urban areas are more likely to offer self-help groups, a larger proportion of rural facilities provide hotline services, outreach services, early intervention services, teen suicide prevention services, and crisis intervention. Compared with urban facilities, rural alcohol treatment facilities have slightly better counselor-to-client inpatient ratios, but worse outpatient ratios (table 16-7)(642).

Rural acute-care hospitals are less likely than equivalently sized urban hospitals to provide alcohol and chemical dependency outpatient services. Only 9 percent of all rural hospitals, compared with 20 percent of urban hospitals, provide outpatient substance abuse services (see table 16-4)(625).

Trends

Two notable changes in mental health services have taken place since the implementation of the block grant. First, CMHCs have tended to emphasize services that can be billed on a fee-for-service basis and are covered by third-party payers (e.g., one-on-one psychiatric therapy). A survey of 36 urban and rural CMHC administrators from 8 States found that they had reduced services and training after the block grant went into effect; one-half had increased billable services and fees to cover the loss of Federal resources (185). A study examining programming innovations in rural CMHCs in 12 Midwestern States concluded that the CMHC directors were so concerned with billable hours and fees-for-service that the relative benefits of case-

Table 16-8-Percent of Rural[a] Community Mental Health Center Directors Who Expended Efforts on Program Innovations, 1988

Program dimension	Effort expended[b]		
	Little or none	Some	Moderate or heavy
Rural development	81	10	13
Support groups (staff facilitated)	76	12	12
Hotline	71	11	17
Media programs	61	18	20
Stimulating self-help groups	59	15	24
Coordinating service	50	21	29
Crisis intervention	48	20	30
Consultation and education	28	24	47

[a]"Rural" mental health centers in this study were: 1) any centers located outside a city of 50,000 or more people and outaide of a metro area, and 2) centers whose catchment areas included large portions outside such areas.
hews add to less than 100 percent because some respondents did not provide data.

SOURCE: J. Mermelstein and P. Sundet, "Factors Influencing the Decision To Innovate: The Future of Community Responsive Programming," Journal of Rural Community Psychology 9(2):61-75, 1988.

finding programs, such as hotlines and support groups, were overlooked as a potential strategy for increasing utilization and income (383). Fewer than one-half of CMHC directors reported expending any significant efforts on support groups, self-help groups, and crisis hotlines, and only a little more than one-half expended any significant efforts on crisis intervention or service coordination (table 16-8).

Second, in accordance with both Federal and State policies, CMHCs have tended to emphasize services for persons with severe and persistent mental illness at the expense of services for the less seriously or less chronically ill. Dowell and Ciarlo found that prevention, education, and consultation services were the first services to be cut after the block grants went into effect (174). Another post-block-grant survey found that all three of the highest ranked priorities of mental health program directors focused on services for the chronically mentally ill (5). Perhaps because of this shift in emphasis, many CMHCs were ill-equipped to deal with the increase in acute mental health problems associated with the farm crisis of the early 1980s (383).

The shift to increased services for seriously mentally ill patients was accomplished by an increase in outpatient and partial hospitalization rather than through an increase in residential and other inpatient care. After adjusting for inflation, State mental health program expenditures on community services increased by 10 percent between 1981 and 1985, while mental hospital expenditures decreased by nearly 5 percent (540).[9] A survey of 71 CMHC clinical directors found that the greatest expansion in services during 1983 and 1984 was in day treatment and partial hospitalization (304).

Rural CMHCs in the 1970s were more dependent than urban ones on Federal support (67), and a recent analysis found no reason to believe that the situation had changed (423). Whatever the trends in their financial support, rural CMHCs seem to have responded through retrenchment rather than through innovation. A survey of State mental health directors surveyed in the mid-1980s found that these directors listed the development of model rural CMHC services as second to last in a list of 62 priorities (5).

Other Issues

One rural service problem is the lack of awareness among rural residents that mental health services exist and can be helpful. Flaskerud and Kviz surveyed 3,057 residents of rural counties in six Midwestern States and found that fewer than one-half knew of available treatment centers and services for mental health and substance abuse problems (193). Fehr and Tyler found that only 40 percent of rural North Dakota survey respondents knew of the mental health clinic that served their catchment area

[9]Unadjusted changes in expenditures during this time were an increase of 50 percent on community services and an increase of 30 percent on hospitals. These figures include both urban and rural areas.

(189). Even in communities where the clinics were located, only 52 percent of residents were aware of services (189).

An initiative in Illinois reported some success in improving awareness of mental health services. This State program used community education, a crisis hotline, and outreach workers with farm experience to reach farm families under stress (119). The program coordinators decided to operate the program separately from the local CMHCs, a feature that initially engendered considerable opposition to the program by some CMHC directors (119).

Transportation for both clients and professionals is a serious rural mental health service issue. Although catchment areas are no longer used for Federal purposes, many States continue to use them for funding and service requirements (105). The average size of a rural catchment area ranges from 5,000 to 17,000 square miles (depending on the definition of rural). The Federal mandate for these areas to comprise at least 75,000 people resulted in such large service delivery areas in some States that other legislative requirements for accessibility and continuity of care became difficult to meet for many of the most rural areas. One catchment area in Arizona, for example, is over 60,000 square miles. One in Montana is 50,000 square miles, and one in Kansas covers 20 counties (13 of which have no town with over 2,500 residents). Some rural distances were so great that continuity of care and followup services were virtually impossible to provide.

Difficulties in obtaining mental health care confidentially can also act as a barrier to services (356), particularly for rural youth. A survey of adolescents in a small town in the Midwest showed a preference for specialized clinics over private physicians' offices for particularly sensitive matters such as contraception and substance abuse (149). Adolescents also prefer not to be accompanied by parents when they seek health care for problems like depression (381).

Other problems for rural mental health service delivery include communication (e.g., high telephone costs), large numbers of patients who cannot or will not pay for care, difficulty in recruiting and retaining mental health professionals, and a lack of suitable service models (458).

RURAL MENTAL HEALTH PERSONNEL

Mental Health Professionals

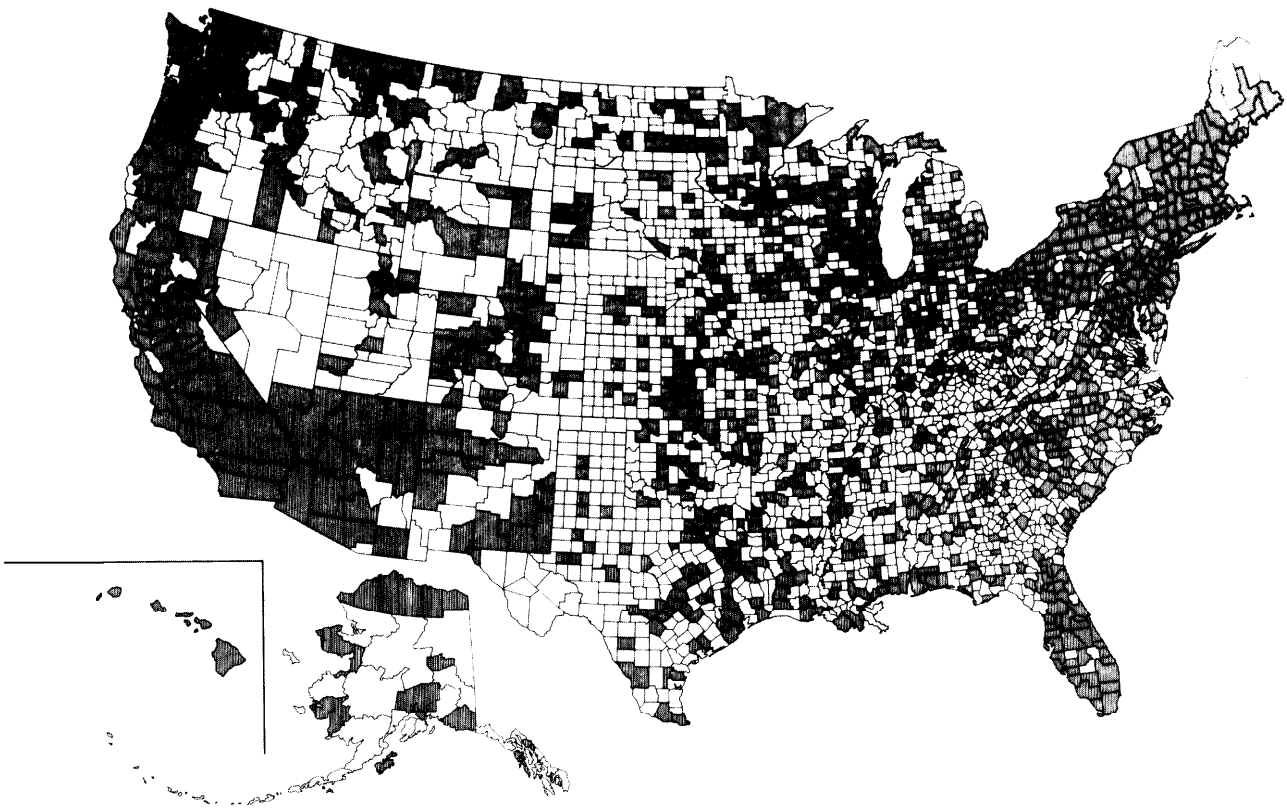
A study of professionally trained mental health personnel (i.e., psychiatrists, Ph.D. psychologists, social workers, master's level psychologists) done in the early 1980s found that there were more counties without such professionals than there were counties with at least one type of mental health professional (1,682 v. 1,393) (figure 16-1) (324). Counties without mental health personnel had lower educational levels and were ''more rural" than those with providers.

The uneven dispersion of mental health professionals is most notable for psychiatrists.

- Although both urban and rural areas have experienced recent increases in numbers of psychiatrists, the number of non-Federal psychiatrists per 100,000 residents in rural areas is still less than one-fourth the urban number (3.6 v. 15.9) (table 16-9) (686).
- In 1988,61 percent of all rural residents-over 34 million people-lived in designated psychiatric personnel shortage areas (665).
- Staff psychiatrists are less likely to be found in rural than in urban general hospitals of all sizes (table 16-10); over 90 percent of the Nation's 1,890 rural hospitals with fewer than 100 beds have no psychiatrist on staff (625).
- Rural residents travel for substantially longer times to visit psychiatrists than do urban residents (averaging 33 v. 24 minutes, respectively) (644).
- Living in a rural area reduces an individual's probability of seeing a psychiatrist by more than 30 percent (548).

Psychologists are also apparently disproportionately distributed between urban and rural areas, although national data are lacking. One study of psychologists who received their doctorates from programs supported by the NIMH between 1968 and 1980 found that 11 percent were practicing in communities of fewer than 50,000 residents (546). In contrast, of psychologists who were trained in the 20 existing rural mental health programs, or who expressed an intention to obtain rural training, 24 percent worked in small communities (546).

Figure 16-1-Geographic Distribution of Counties With at Least One Provider and With No Listed Provider



NOTE: Counties with at least one provider are shaded; those with no listed providers are unshaded.

SOURCE: D.J. Knesper, J.R.C. Wheeler, and D.J. Pagnucco, "Mental Health Serviees Providers' Distribution Across Counties in the United States," American Psychologist 39(12): 1424-1434, Deeember 1984. Copyright 1984 by the Ameriean Psychological Association. Reprinted by permission.

Master' s-level clinical psychologists are less numerous than Ph.D. psychologists, but they are more evenly distributed. An extrapolation of data for the 10 States with the largest rural populations found that the average number of doctoral-level psychologists per 100,000 residents was 14, compared with 19.0 for the total population (571). The average number of master' s-level psychologists in these 10 States was 9.2 per 100,000, compared with 10.1 per 100,000 for the entire United States. (Many master's level psychologists have a limited scope of practice or must work under supervision. Only three States—Minnesota, Vermont, and West Virginia-permit master' s-level personnel to hold licenses as independent psychologists practicing outside the educational system *(155a).)*

A preliminary study of six States[10] found that social workers are the most widely dispersed mental health practitioner group in low-income rural areas and are more likely than either psychiatrists or psychologists to choose to practice in these areas (table 16-11) (416). In about 25 percent of all the counties studied, social workers were the only mental health providers. Furthermore, a substantial proportion of counties with no mental health providers were contiguous with counties served only by social workers (416).

[10]Illinois, Michigan, Oklahoma, Texas, Florida, and West Virginia.

Table 16-9-Non-Federal Psychiatrists by Metropolitan/ Nonmetropolitan Location, 1975 and 1988

	Rate per 100,000 population		Percent change
	1975	1988	1975-88
United States (total)	10.0	12.9	28.9
Metro	12.4	15.9	28.2
Nonmetro	**2.6**	**3.6**	35.4
50,000 and opera	**3.8**	**5.6**	47.0
25,000 - 49,999a	**2.6**	**3.1**	17.8
10,000 - 24,999a	1.4	1.6	12.5
Less than 10,000[a]	0.6	0.8	29.7
6+ persons/sq mi[b]	0.5	0.8	83.5
<6 persons/sqmi [b]	0.7	0.9	17.4

[a]Includes only nonmetro counties.

[b]Includes only nonmetro counties of fewer than 10,000 residents.

SOURCE: U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, unpublished data from the Area Resources File (provided by H. Stambler, 1990).

A study of the Nebraska community mental health workforce between 1981 and 1.988 found that rural centers relied heavily on master's-level professionals, while employees in urban centers were predominately bachelor's level and below (583). Although there was a substantial decrease in rural staff during the period, the decrease was mostly in nonmedical staff; the number of full-time-equivalent medical staff did not decrease significantly (583).

Eisenhart and Ruff visited 10 mental health centers and concluded that urban and rural mental health professionals provide different services to clients (182). They found that rural mental health professionals had to perform a greater variety of tasks, accept a less structured environment, deal with more crisis situations, respond to other staff members' needs and concerns, and develop a sensitivity and commitment to the local community. In contrast, the urban mental health professional was able to concentrate on developing specialized skills (e.g. treating behavioral disorders) and focus more on professional issues such as publishing articles and continuing education (182). The different style of care required in rural communities may discourage psychiatrists and psychologists from choosing a rural practice unless they are trained to contend with the uniquely rural needs.

Isolation adversely affects recruitment and retention of mental health professionals in many rural communities (163,233). The isolation of some rural mental health professionals can spawn strong interdependent relationships and innovative arrangements among colleagues. In communities without psychiatrists, for example, the primary care physicians who must authorize the medications for their mentally ill patients may consult with their local psychologist colleagues--who are prohibited from prescribing--regarding information about the medications (111). In other areas, centrally based psychiatrists may provide substantial amounts of services through telephone consultation to rural therapists and nurses on site (247). A part-time satellite clinic staffed by a group of nonpsychiatrist health professionals with some specialty expertise (e.g., family services, the chronically mentally ill) proved successful in enhancing service availability and minimizing professional isolation in Maine (120).

Like other health professionals, rural mental health professionals often must become generalists (182,234,458). They may need to develop techniques for community outreach, monitor persons with chronic illness, consult with teachers to help children in distress, or develop training modules for stress management. Moreover, in rural areas mental health professionals must become part of the community to be effective (234). The overlap between personal and professional roles can lead to burnout and conflicts between professional impartiality and personal values. For the patient, this overlap is also an issue because the effectiveness of mental health treatment is often dependent on anonymity and confidentiality.

Pulakos and Dengerink examined the services provided in State-funded rural and urban CMHCs in Washington State (497).[11] They found that rural therapists were more likely to be generalists (spending time in two or more activities), while urban therapists were more specialized. Compared with urban therapists, rural therapists spent more time in support services (e.g., advocacy, recordkeeping) but comparable time in indirect services (e.g., prevention, consultation, education). In both rural and

[11] 'R@' and "urban" were defined by county population. Rural centers were located in 15 communities ranging in population from 2,600 to 46,000 and urban centers were located in 15 communities with more than 46,000 residents.

Table 16-10-Average Number of Mental Health Professionals" in Community Hospitals, by County Type and Hospital Size, 1987

Hospital size (number of beds)	Metro				Nonmetro			
	Psychiatrists	Psychologists	Social workers[b]	Total[c]	Psychiatrists	Psychologists	Social workers[b]	Total[c]
6-24	0.3	0.0	0.1	0.4	0.0	0.0	0.1	0.1
25-49	0.6	0.0	0.3	0.9	0.1	0.0	0.3	0.3
50-99	1.0	0.1	0.7	1.8	0.2	0.0	0.7	0.9
100-199	3.0	0.3	2.0	5.3	0.8	0.1	1.4	2.3
200-299	6.3	0.4	4.2	11.0	2.3	0.2	2.8	5.3
Total (<300 beds)	3.4	0.3	2.2	5.9	0.4	0.0	0.8	1.2

[a]Includes both full-time and part-time personnel (not full-time equivalents; part-time staff are weighted the same as full-time staff). Figures for psychiatrists are for full-time staff only.
[b]Social workers may hold positions not associated with the provision of mental health services (e.g., discharge planning).
[c]Total includes all full-time psychiatrists and all full- and part-time psychologists and social workers.

SOURCE: Office of Technology Assessment, 1989. Data from American Hospital Association's 1987 Survey of Hospitals.

Table 16-11—Percent of Counties Served by Mental Health Providers in Six States

State	Psychiatrist, psychologist and social worker	Psychologist and social worker only	Social worker only	Other combination	None
Illinois	29	19	33	13	6
Michigan	43	27	28	1	1
Oklahoma	18	14	34	30	4
Texas	19	10	26	40	3
Florida	52	9	5	16	18
West Virginia	37	35	26	4	6

[a] primarily psychiatrist and social worker.

SOURCE: National Center for Social Policy and Practice, "Report of the Geographic Distribution of Mental Health Providers: A Pilot Study," unpublished manuscript, Silver Spring, MD, July 1982.

urban communities, individual psychotherapy was the direct service most frequently provided, and family and group therapy were provided at roughly the same level across communities (497),

No single office at NIMH has responsibility for mental health personnel issues. The Health Resources and Services Administration (HRSA) has the administrative capability to identify mental health shortage area designations, but national data sources describing nonpsychiatric mental health Professionals and the locations of their practices are not available (except for professionals who work in specialized mental health facilities).

Other Rural Mental Health Providers

Primary Care Physicians

Mental and physical health care systems are interdependent in both rural and urban areas. Primary medical care is an important part of mental health service delivery because primary care physicians and clinics are the frost contact in the care system for many patients, they often assume long-term responsibility for the care of their patients, and they can help to integrate services for the patient (2). Only 19 percent of respondents to a survey of rural North Dakota residents listed mental health services as their first choice for treatment for "mental, nervous, or emotional problems,'' while physicians were ranked as the first choice by 50 percent of the respondents (189). For seriously mentally ill patients on long-term drug therapy in rural areas, primary care physicians may be the only persons available who can authorize the needed prescriptions and monitor patients' progress.

In fact, four times as many people are treated for mental health disorders by primary caregivers as are treated by mental health specialists (10,503). More specifically, in 1984:

- Nonpsychiatrist physicians provided almost one-half (48 percent) of the patient visits resulting in the diagnosis of a mental disorder.
- General practitioners, family practitioners, and internists accounted for over three-fourths (77 percent) of these diagnoses.
- Primary care physicians referred these patients to a mental health professional in only 5 percent of the episodes.
- About 85 percent of all psychoactive drug prescriptions were made by nonpsychiatrists.
- Over one-fourth (28 percent) of nonpsychiatrist visits were for psychological problems.
- Anxiety and nervousness accounted for 11 percent of the reasons people visited a physician (655).

These numbers are not specific to rural areas, where the relative lack of mental health professionals in rural areas may lead to particularly heavy dependence on primary care physicians as sources of mental health care. Only 5 percent of visits to psychiatrists occur in rural areas. In contrast, 30 percent of all visits to physicians by patients with psychiatric diagnoses are made in rural areas, as are 16 percent of the physician visits that include some psychotherapy (655). Clearly, rural nonpsychiatric physicians are providing substantial amounts of mental health care.

Allied Mental Health Professionals, Paraprofessionals, and Volunteers

Members of the clergy are professionals who are particularly important providers of some rural mental health services. In the North Dakota survey, 45

percent of respondents listed the clergy as their frost choice of help for "family problems" (189).

Local paraprofessionals with no formal academic mental health training can fill some of the gaps in rural mental health provision. These individuals receive training and consultation from mental health professionals on topics such as crisis management, case identification, and community education. D'Augelli suggests that paraprofessionals can increase community awareness and acceptance of mental health services and promote mental health through such mechanisms as conducting training in "life skills" (e.g., parenting), developing self-help groups, and strengthening natural helping systems (informal networks of community residents) ***(160). They*** can also identify new cases and act as liaisons between professionals and the community.

Crisis intervention is one area where trained volunteers can sometimes provide important first-level help. Volunteers may bean especially critical component of crisis services both in remote areas not served by a local mental health professional and in areas where a 24-hour on-call professional would require a long-distance telephone call or extensive travel.

Helping community members to help each other is another approach that has been successfully adapted to rural areas. In one example, mental health professionals in a CMHC in northwestern Iowa developed support groups and a peer listening program for farmers and their families (3). The community response was so overwhelming that the CMHC started support groups in satellite clinics and reported a tenfold increase in the utilization of its services.

Mutual- and self-help groups that focus on a common medical or mental health problem are another approach for including local residents in mental health care. These groups, which have grown dramatically in popularity over the past decade, provide residents with the opportunity to help each other cope with stress, solve problems, develop a sense of belonging, share knowledge and experiences, and educate themselves about medical alternatives (229344,638).

Training for Rural Mental Health Personnel

Fewer than one-third of mental health training programs place any emphasis on rural training and placement (546,560). Exemplary programs do exist. Liechtenstein et al. describe the development of a l-year training program designed to provide outreach services (consultation, education, and community organizational development) in two rural communities (351). Students in the program reported moderate skill acquisition and positive community response. Bergstrom et al. describe another rural mental health training program that included a practicum in rural consultation and education (84). A mental health Area Health Education Center in North Carolina reports success in developing continuing education programs for rural professionals and facilitating linkages between rural mental health generalists and central specialists (227).

Rural-oriented training seems to affect the likelihood that graduates will practice in rural areas, although information is scarce. A study of graduates of psychology training programs supported by NIMH between 1968 and 1980 identified two rural-oriented programs training master' s-level psychologists (546). Of the 66 identified graduates of these programs, 42 were practicing in small towns or rural areas. This study also found that master' s-level students were more likely than doctoral-level students to remain in the State of their training (546).

Recent legislation (Public Law 100-607) expanded Federal support for faculty and curriculum development for health professions training programs, including graduate clinical psychology programs. Since the support applies only to doctoral-level training programs, and there are no provisions for targeting funding to rural-oriented projects, this provision may have little effect on the availability of psychologists in rural areas. However, the legislation also extended the Federal loan repayment program to allied health professionals, including clinical psychologists, who practice in rural areas.

A short-term continuing education program for rural practitioners (not to exceed 5 days) was introduced in 1988 and is administered by NIMH. This Depression Awareness, Recognition, and Treatment program targets rural and agricultural areas affected by the farm crisis and was designed to provide current information on the recognition, diagnosis, and treatment of depressive disorders to the general public, mental health professionals, and primary care physicians (639). Programs in medicine, psychology, nursing, and social work are eligible for funding.

Primary care physicians receive limited training in mental health issues. For example, the 6-week clerkship in psychiatry for all third-year students is the briefest among the five standard third-year clinical rounds (587). Medical students' coursework in behavioral sciences is similarly limited, amounting to approximately 5 percent of the medical college class curriculum (587). Limited training may explain why primary care physicians are less able than mental health professionals to diagnose mental disorders accurately (47). Under the Health Professions Educational Assistance Act of 1976 (public Law 94-484), NIMH operated several initiatives to promote mental health training for primary care physicians (547). However, the Act and the program expired in 1980.

MENTAL AND PHYSICAL HEALTH LINKAGES

The notion of linking physical and mental health care is not new, but it may be especially useful in rural areas because of limited resources (e.g., personnel, buildings, funding) and services. Linkages may also help to reduce the stigma associated with the mental health system. Possible models include:

- a contractual agreement between providers for referral and information exchange,
- a mental health staff person in a health center to provide screening and information to patients,
- a mental health unit in a health center to provide direct services,
- a mental health professional in the health care setting to consult with physicians and other health professionals and to provide direct mental health services,
- a "linkage worker" **to advise primary care** health personnel on patients with mental health problems (but provide no direct services to patients), and
- provision of comprehensive care with the mental health and health professionals working together on each case (476).

An evaluation of several linkage efforts of the 1970s concluded that internal organizational teams and linkage agreements between organizations were the most successful ***(104). In these efforts, the*** mental health professionals consulted with health center staff about their patients, provided inservice training to the health center staff, provided emergency **services to health** center patients, **evaluated** health center patients for psychiatric problems, provided short-term psychotherapy, and referred patients. Linkage workers **were** usually psychologists (41 percent) or social workers (38 percent). Most of the linkage workers' time was spent in the primary care setting, with 27 hours per week devoted to consulting with primary care professionals; patient evaluation and therapy were the services most frequently provided. The linkages resulted in several organizational changes, including increased interaction among clinical, administrative, and board staff, joint recordkeeping, and shared administrative services. Linkages appeared strongest where **there was** shared **administrative** control between the mental and physical health care providers and where the linkage worker spent equal time across primary care and mental health settings ***(104).***

The motivations for implementing linkage programs differed between rural and urban areas. Rural health center directors implemented programs primarily in order to provide direct treatment and consultation; only 17 percent reported that establishing a mechanism to refer patients to the CMHC was the most important factor. In **contrast, 43** percent of urban health center directors listed referral opportunities as the primary motivating factor (114).

Broskowski found that the most common linkage benefits reported by agency directors were:

- increased awareness and detection of mental health problems by primary care providers,
- more appropriate utilization of health and mental health services,
- increased access to mental health services, especially for the hard to reach populations (e.g., elderly, minorities, and the poor),
- reduced waiting for primary care patients and reduced burden of primary care staff,
- improved information and records exchange, and
- better continuity of care (104).

Few problems were reported, and most reported were eventually solved. They included difficulties in recruiting qualified linkage staff, providing adequate space for the linkage worker, and developing adequate transportation between sites for referrals. Problems of space and transportation were more common in rural than in urban programs (114).

The threat of losing autonomy and interdisciplinary and organizational rivalries are major barriers to linkages (104,706). Arguments often revolve around who gets reimbursed, who controls the tasks for the linkage worker, and who controls policy for the linkage agreement (104,121). Steps to overcome these barriers include technical assistance and training for the linkage worker and for directors, and increasing the awareness of health and mental health officials of their role in facilitating (or hindering) linkage initiatives (104).

Several apparently successful examples of linkage agreements are found in the literature (98,407, 484,637), and such agreements are a component of some of the Rural Mental Health Demonstrations (see box 16-A). In one case study, Boydston described the efforts of a social worker working with local physicians to provide mental health services (98). The researcher concluded that collaboration resulted in better case detection, smoothed transitions between the physical and mental health care systems, and improved client attitudes about mental health treatment. In this case, the physicians came to value the mental health services because they allowed the physicians more time to treat physical problems ***(98).***

A recent informal survey of 20 rural States found that none have instituted any program incentives for health and mental health linkages, although all of them expressed interest (171).

CONCLUSIONS

The prevalence of mental disorders in rural Americans is similar to that of their urban counterparts. The services available to rural residents are usually more limited, however, both in number and in scope, and those that do exist are generally provided by nonpsychiatric professionals. Psychiatrists are entirely absent in most rural communities.

Because alternative sources of mental health services are scarce, rural mental health facilities and personnel may be torn between the competing demands for services to chronically mentally ill individuals and services to individuals experiencing temporary distress or less debilitating problems. Innovative approaches (e.g., expanding the Community Support Program to include more rural delivery models) deserve investigation for both populations. Such approaches must build on the professionals and paraprofessionals available. Models that incorporate the use of primary care physicians, volunteers, and paraprofessionals may be particularly appropriate because of the scarcity of mental health professionals.

Federal and State funding of services such as prevention, education, and consultation are especially important to rural areas, because these services are not reimbursable by most payers and there may be no private sources of such services. Inmost States, it appears that service requirements for CMHCs have been reduced to those likely to produce revenue (e.g., psychotherapy, partial hospitalization), while funding for preventive services, consultation with other health and human service professionals, public education, and evaluation have been reduced. Funding of rural mental health in general also may have been reduced, but the lack of data precludes a firm conclusion. In fact, since the implementation of the block grant there has been insufficient data to support any significant evaluation of Federal rural mental health funding efforts.

Rural mental health professionals face problems similar to those encountered by other health professionals. They have fewer practice-specific training programs, fewer colleagues with whom to discuss professional issues, and more diverse demands on their time than do their urban counterparts. Rural mental health professionals are also isolated in many ways. They often lack the opportunity to discuss cases with other professionals, must make decisions alone, and lack opportunities for supervision or mentoring. Primary care physicians, who provide much rural mental health care, receive relatively little training in mental health diagnosis and treatment.

The lack of psychiatrists and doctoral-level psychologists in rural areas, the proportion of mental health care provided by nonpsychiatric physicians, and the need to provide mental health services in ways and settings acceptable to rural residents all suggest that integrating mental health and other health care is especially important in rural areas. Linkages between the physical and mental health systems that are provided by social workers, psychologists, and paraprofessionals play an important role in extending mental health services. Unfortunately, Federal stimulation of linkage efforts has waned since the implementation of the mental health block grant in 1981.

Despite the apparent success of the short-lived Federal linkage program, no evaluation of the ultimate effectiveness of the program was undertaken. Renewed efforts could include more attention to such measures as changes in inappropriate utilization of social and health care services and the most effective interorganizational linkage models for different rural environments (537).