Housing Outcomes for Homeless Adults With Mental Illness: Results From the Second-Round McKinney Program

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In the early 1990s the National Institute of Mental Health sponsored projects in four cities that served a total of 896 homeless mentally ill adults. Each project tested the effectiveness of different housing, support, and rehabilitative services in reducing homelessness. Most homeless individuals resided in community housing after the intervention. The proportion in community housing varied between sites. A 47.5 percent increase in community housing was found for those in active treatment conditions. At final follow-up, 78 percent of participants in community housing were stably housed. The findings indicate that effective strategies are available for serving homeless individuals with severe mental illness. (Psychiatric Services 48:239-241, 1997)

H omelessness continues to be a major problem in America. The best epidemiological estimates indicate that about one-third of homeless individuals have a mental illness (1). These individuals have difficulties obtaining the treatment and support services they need to find and keep permanent housing. Research shows that although serving this population is a challenge, homeless individuals with mental illness will participate in services that they view as responsive to their needs (2).

Nontraditional mental health services such as outreach programs, drop-in centers, and various types of case management are successful in engaging homeless persons with severe mental illness (3–8). However, few controlled studies have systematically tested the effectiveness of pro-

grams that include these key elements for improving housing outcomes in this group (2,9).

To address this lack of information, beginning in 1990 the National Institute of Mental Health and, later, the Center for Mental Health Services sponsored a series of five research demonstration projects known as the second-round McKinney research demonstration program for homeless mentally ill adults. The results of the projects are reported in detail elsewhere (10). In this paper we report the overall success of these projects in improving housing outcomes.

Methods

Characteristics of the studies

The studies were conducted in Baltimore, Boston, San Diego, and New York City. The duration of client follow-up ranged from 12 to 24 months (see Table 1). In New York City two studies were conducted, the street study and the critical time intervention study. The street study recruited mainly persons who were living on the streets, and the critical time intervention targeted long-term residents of the Fort Washington Shelter.

Each of the projects focused exclusively on persons with severe mental illness who were homeless. Homelessness was defined somewhat differently in each project; however, all

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Table 1Primary housing settings at final follow-up for participants in the second-round McKinney research demonstration program for homeless mentally ill adults

Study and condition	N sub- jects	Study period (months)	Follow-up interval (days)	% of participants in setting			
				Community	Institution	Street	Shelter
New York street study							
Control	77	24	14	23.4	19.5	51.9	5.2
Experimental	91	24	14	38.9	20	23.3	17.8
Baltimore							
Control	73	12	60	60.3	16.4	1.4	21.9
Assertive community treat-							
ment	77	12	60	80.5	10.4	1.3	7.8
San Diego							
Intensive case management							
(ICM) plus Section 8	91	18	60	82.4	11	6.6	0
Traditional case management							
(TCM) plus Section 8	90	18	60	87.8	6.7	4.4	1.1
ICM, no Section 8	90	18	60	80	8.9	7.8	3.3
TCM, no Section 8	91	18	60	84.6	6.6	6.6	2.2
Boston							
Evolving consumer house-							
holds	63	18	180	82.5	0	0	17.5
Independent living	55	18	180	76.4	1.8	0	21.8
New York critical time inter-							
vention study							
Control	49	18	na	65.3	10.2	2	22.4
Experimental	49	18	na	73.5	12.2	2 2	12.2

na, not applicable

participants were required to have spent a significant number of nights on the streets, in shelters, or in temporary residences before enrollment; to have been homeless at admission to an institution; or to have no permanent community residence at discharge from an institution.

Different case management models were used in the different cities; they included rehabilitation, assertive community treatment, and intensive case management. However, all models involved the use of assertive outreach and case management teams as a primary service vehicle.

Housing resources and settings varied. The Boston project compared congregate consumer-run housing with independent living. In New York specialized housing for homeless persons with severe mental illness was the primary housing resource. The San Diego project tested the importance of Section 8 housing certificates in obtaining and maintaining housing.

Each project used a randomized experimental design with assessment of a common core of housing, clinical, and quality-of-life outcomes across follow-up periods varying from 12 to 24 months. In the New York street

study and the Baltimore project, control groups that received the usual treatment were used, while at the other three sites, comparisons were made between interventions that systematically differed in the type and intensity of services. At all sites, structured interviews were conducted by independent interviewers to assess participants' outcomes. Participant retention averaged 79 percent at 18-month follow-up. The results presented here are from a common database.

Characteristics of the participants

Overall, 894 individuals were enrolled in the five projects. They had a mean±SD age of 37.5±9.01 years and were primarily single (62 percent), male (72 percent), and members of minority groups (59 percent). More than 60 percent had completed high school, and approximately 25 percent were veterans. Only 7 percent were employed when they enrolled in the study.

Nearly 90 percent had a diagnosis of either a psychotic disorder (57 percent) or an affective disorder (33 percent), and 27 percent reported more than five psychiatric hospitalizations. Approximately 44 percent reported having been homeless for more than four years, and 36 percent reported experiencing more than five episodes of homelessness.

Procedures and analyses

Three housing outcomes were assessed: participants' primary housing setting at the end of the study, the change in the proportion of individuals living in community settings, and the stability of participants in community housing.

Residential status was measured at baseline and each follow-up point by recording the number of nights the participant resided in each of four settings—institutions, streets, shelters, and the community. The primary residential setting was defined as that in which the participant slept most nights during time frames that ranged from 14 to 180 days (see Table 1). Community settings included a range of housing alternatives, such as living in one's own apartment, with friends or relatives, or in a residential crisis program in the community.

The change in the proportion of individuals in community settings in each of the 12 experimental or control conditions in the four cities was measured. Housing status was dichotomized into community setting versus other settings, and participants' baseline setting was compared with their housing setting at final follow-up. The McNemar test for differences in proportions was used.

For the third housing outcome measure, participants were classified as stably housed if they did not move during the final follow-up interval.

Results

Primary bousing setting

Table 1 shows the proportion of participants in each of the housing settings during the final follow-up interval of the five studies. Most participants were in community housing at final follow-up. Variations among settings reflect both the homeless subpopulation in each city and the nature of the interventions.

For example, individuals in the New York street study were the least likely to be housed at follow-up. This study targeted individuals who were residing on the street at baseline (90 percent). At final follow-up, 38.9 percent of participants in the street study's experimental group lived in community housing. Control group members in the street study received no special services. Results for this group thus represent what may be expected from an untreated street population. Most control group members were homeless (52 percent) or residing in institutions (20 percent) at final follow-up.

In contrast, at the Baltimore site only 14 percent of participants were living on the street at baseline, with 31 percent living in shelters and 28 percent inpatient settings. At final follow-up, more than 80 percent of experimental group members in Baltimore were in community housing compared with 60 percent of control group members. Because Baltimore used a control group that received standard treatment, the results for this group indicate what might be expected with ordinary community services and a heterogeneous homeless population.

In the New York critical time intervention study, all participants resided in the Fort Washington shelter at baseline. Participants had well-established relationships with the shelter-based treatment team before entering

the study. These results may therefore reflect what could be expected from a stable shelter population. Boston participants were also largely recruited from shelters (80 percent), while individuals in the San Diego study came from a variety of service settings. Overall, homeless persons who received active interventions attained community housing.

Change in proportion boused

The increase between baseline and final follow-up in the proportion of individuals living in community settings was statistically significant (p< .001) in each of the 12 conditions in the five studies (Table 1), including the untreated control group in the New York street study and the usualtreatment control group in the Baltimore study. When data for the New York and Baltimore control groups were omitted and data from the active treatment conditions were pooled, a 47.5 percent increase was found in the proportion of individuals living in community housing (p < .001).

Housing stability

Participants were regarded as stably housed if they did not move during the final follow-up interval. Those who were residing in community housing at the final follow-up were stably housed. Movement data from the New York critical time intervention study were not available to compute stability. Pooled data for the other experimental conditions showed that 78 percent of participants in community housing were stably housed. Interestingly, no differences in stability rates were found across the various experimental groups.

Discussion and conclusions

The pooled results from the five housing demonstration projects suggest that offering a range of acceptable housing alternatives, when coupled with case management, treatment, and rehabilitative services, is effective in engaging and stably housing homeless individuals with severe mental illness. The similarity in the rates at which homeless individuals in the active-intervention conditions gained community housing is striking. With the exception of partici-

pants in the New York street study, those in the experimental interventions achieved about an 80 percent community housing rate.

These projects have demonstrated that effective methods are available for combining housing and support services to successfully serve homeless persons with severe mental illness. Our challenge is to develop the political will and financing strategies to support these proven methods. •

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References

- Outcasts on Main Street: Report of the Federal Task Force on Homelessness and Severe Mental Illnesses. Washington, DC, Interagency Council on the Homeless, 1992
- Dennis DL, Buckner JC, Lipton FR, et al: A decade of research and services for homeless mentally ill persons: where do we stand? American Psychologist 46:1129– 1138, 1991
- Barrow SM, Hellman F, Lovell AM, et al: Evaluating outreach services: lessons from a study of five programs. New Directions for Mental Health Services, no 52:29

 45, 1991
- Susser E, Goldfinger S, White A: Some clinical approaches to the homeless mentally ill. Community Mental Health Journal 26:463

 –480, 1990
- Mowbray CT, Cohen E, Bybee D: The challenge of outcome evaluation in homeless services: engagement as an intermediate outcome measure. Evaluation and Program Planning 16:337–346, 1993
- Dixon LB, Krauss N, Kernan E, et al: Modifying the PACT model for homeless persons with severe mental illness. Psychiatric Services 46:696–701, 1995
- Bybee D, Mowbray CT, Cohen E: Shortversus longer-term effectiveness of an outreach program for the homeless mentally ill. American Journal of Community Psychology 22:181–209, 1994
- Dixon L, Friedman N, Lehman A: Housing patterns of homeless mentally ill persons receiving assertive treatment services. Hospital and Community Psychiatry 44: 286–289, 1993
- Carling PJ: Housing, community support, and homelessness: emerging policy in mental health systems. New England Journal of Public Policy 8:281–295, 1992
- Making a Difference: Interim Status Report of the McKinney Research Demonstration Program for Homeless Mentally Ill Adults. Rockville, Md, Center for Mental Health Services, 1994