

# Housing First Services for People Who Are Homeless With Co-Occurring Serious Mental Illness and Substance Abuse

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*The literature on homeless adults with severe mental illness is generally silent on a critical issue surrounding service delivery—the contrast between housing first and treatment first program philosophies. This study draws on data from a longitudinal experiment contrasting a housing first program (which offers immediate permanent housing without requiring treatment compliance or abstinence) and treatment first (standard care) programs for 225 adults who were homeless with mental illness in New York City. After 48 months, results showed no significant group differences in alcohol and drug use. Treatment first participants were significantly more likely to use treatment services. These findings, in combination with previous reports of much higher rates of housing stability in the housing first group, show that “dual diagnosed” adults can remain stably housed without increasing their substance use. Thus, housing first programs favoring immediate housing and consumer choice deserve consideration as a viable alternative to standard care.*

**Keywords:** homelessness; serious mental illness; dual diagnosis; psychiatric rehabilitation

Homelessness in the United States, traceable to a famine in housing markets beginning in the early 1980s, afflicts thousands of persons who are psychiatrically disabled who lack adequate community-based care (Baumohl, 1996; Lovell & Cohn, 1998). Many are visible as they lead troubled lives on the streets; however, a growing number are likely to be incarcerated—the largest de facto psychiatric facility in the country is the Los Angeles County Jail (Butterfield, 2003). Regardless of whether the problem is viewed as one of individual pathology or systemic failure, the plight of people with mental illness and homeless remains one of the least understood and most contested service delivery problems in mental health today (Gonzalez & Rosenheck, 2002; McGray, 2004; Substance Abuse and Mental Health Services Administration [SAMHSA], 2003).

Social workers join other providers and advocates in lamenting the lack of service integration and the scarcity of resources available to meet the needs of adults who are homeless with mental illness who also abuse substances. However, the literature of social work and other professions is generally silent on a policy-relevant and practice-relevant debate surrounding service delivery for this population. The point of contention stems from fundamental

differences in how people with mental illness who are homeless are viewed and in how consumer choice is defined and incorporated into a program's service delivery philosophy. Put another way, there are two contrasting paradigms in services for persons who are homeless with serious mental illness, one the traditional continuum of care approach favoring treatment first and the other a consumer-driven movement (housing first) that has gained momentum in recent years (Carling, 1990; Culhane, Metraux, & Hadley, 2001; Tsemberis, 1999).

Among a number of differences between them, a contrast of interest in this report lies in how they deal with substance abuse and whether abstinence is a precondition to independent housing and other services. Approximately 50% to 70% of persons who are homeless with mental illness abuse substances (Drake, Osher, & Wallach, 1991; SAMHSA, 2003), and these estimates are widely considered underreports because of denial, distrust, and fear of the consequences of divulging illegal behaviors (Drake, Yovetich, Bebout, Harris, & McHugo, 1997).

Housing first programs rank stable housing as the first and highest priority vis-à-vis abstinence from substance use and/or abuse, thus practicing a harm reduction approach (Inciardi & Harrison, 2000). Treatment first programs reverse this sequence and require detoxification and sobriety before giving access to services such as independent housing. For these programs, consumers'

choice in adherence to mental health treatment and abstinence requirements must be relinquished for their own sake until they are deemed ready for independent living.

Our primary goals in this article are twofold: (a) to describe the historic development and core components of these two distinct service alternatives (treatment first and housing first) and (b) to provide findings related to substance and services use from the only randomized experiment designed to compare their effectiveness—the New York Housing Study.

## BACKGROUND

### **The Treatment First Approach for People Who Are Homeless With Mental Illness**

The era of deinstitutionalization opened the door to independent living for persons with diagnoses such as schizophrenia and bipolar disorder; however, these individuals still needed an array of support services as they made the transition from psychiatric hospital to community (Dixon, Krauss, Kernan, Lehman, & DeForge, 1995). Among these were medication management, psychological counseling, education, and job training. For a large subgroup, abuse of drugs and/or alcohol complicated matters considerably (Drake et al., 1997). Persons with mental illness who became homeless were disproportionately individuals who were “dual diagnosed” whose lives became a continual struggle to find shelter and avoid being victimized (Drake et al., 1991; Padgett & Struening, 1992).

The well-intentioned but underfunded system of public sector mental health services that evolved after the 1960s rarely interacted with drug and alcohol (D/A) treatment programs designed with clients without mental illness in mind. However, both service systems had one thing in common: They were predicated on assumptions of the need for structure and control. Different funding streams, staff expertise, and service philosophies, notwithstanding, the mental health, D/A, and homeless services systems share a “hurdle” approach in which gaining access to services requires relinquishing control and choice. In exchange for a bed and supportive services, consumers and/or clients submitted to rules requiring treatment compliance, abstinence, curfews, limited visitation, and a loss of privacy (Miller & Flaherty, 2000). From the perspective of a person who was dually diagnosed living on the street, this threshold for entry can seem daunting at best. It is also a high-stakes gamble because rule breaking usually leads to expulsion and a return to the streets.

Evaluations of treatment first programs have produced modest results in achieving housing stability (Lipton, Siegel, Hannigan, & Samuels, 2000); however, program attrition and a return to the “institutional circuit” (Hopper, Jost, Hay, Welber, & Haugland, 1997) remain a problem when trying to ascertain change over time. Recent innovations in programs designed specifically for persons with dual diagnoses have shown promising results for integrated treatment models (Drake et al., 1997; Bebout, Drake, Xie, McHugo, & Harris, 1997; Minkoff, 2001) and Double Trouble in Recovery 12-step groups (Magura, Laudet, Mahmood, Rosenblum, & Knight, 2002). Indeed, the cumulative findings have made integrated treatment for persons who are dual diagnosed the “state of the art” in terms of effectiveness (Tsuang, Fong, & Ho, 2003).

When integrated treatment was linked to housing options in a randomized trial, positive outcomes were associated with supervised living and on-site clinical services (McHugo et al., 2004). However, no study of integrated treatment to date has tested its comparative effectiveness as part of the consumer choice model as is the focus of the current study.

### **Reversing the Continuum: The Pathways Model of Housing First for Adults Who Are Psychiatrically Disabled and Homeless**

By the early 1990s, a consumer-centered approach surfaced that reversed the treatment first continuum. Its proponents argued for “supported housing,” with tenets of consumer choice, ongoing support services, and community integration (normal housing, not “treatment” residences; Carling, 1990; Ridgeway & Zipple, 1990; Srebnik, Livingston, Gordon, & King, 1995). They described treatment first approaches as “supportive housing” with on-site (or proximal) staff and rules governing behavior ranging from curfews to visitation to abstinence. Most involve congregate living with other consumers who are homeless and function as transitional housing, that is, therapeutic environments designed to foster independent living skills enabling clients to graduate to living on their own. In contrast, housing first is a type of “supported housing” that separates treatment from housing, considering the former voluntary and the latter a fundamental need and human right. As such, it provides scatter-site housing without on-site staff supervision and generally promotes harm reduction rather than requiring abstinence.

Although confusion can arise regarding what are considered essential and defining program components in supported versus supportive housing (Fakhoury, Murray,

Shepherd, & Priebe, 2002), housing first shares a bottom-line commitment to consumer choice and to immediate and continuing access to scatter-site independent housing. To our knowledge, the agency model that is the subject of the current study—Pathways to Housing, Inc.—stands alone in embodying the following elements: (a) immediate independent permanent housing that is not contingent on treatment compliance and is retained regardless of the client's temporary departure because of inpatient treatment or incarceration; (b) choice and harm reduction with respect to mental health treatment and substance use; (c) integrated Assertive Community Treatment (ACT) services (Drake et al., 1998) that work in conjunction with housing staff and a nurse practitioner to address ongoing housing and health needs.

### The New York Housing Study

With its funding of a national multisite study of housing alternatives for persons who are homeless with mental illness, the federal agency SAMHSA chose the Pathways to Housing (PTH) program as the experimental condition for the New York City site (Shern et al., 2000). The New York Housing Study (NYHS), which began in 1996, was a 4-year randomized trial comparing the PTH version of housing first with treatment first continuum of care programs in the New York City area.

Published findings from the NYHS have shown higher rates of housing stability (Tsemberis & Eisenberg, 2000; Tsemberis, Gulcur, & Nakae, 2004) and cost savings (Gulcur, Stefancic, Shinn, Tsemberis, & Fischer, 2003) for the PTH model. In addition to housing stability, the NYHS also assessed outcomes related to mental health symptoms, quality of life, drug and alcohol use, and utilization of substance abuse treatment. Analyses of the 24-month data showed no significant group differences in these outcomes with the exception of higher use of substance abuse treatment services by the control group (Tsemberis et al., 2004). The NYHS maintained a remarkable 87% retention rate of participation for 4 years (Stefancic, Shaefer-McDaniel, Davis, & Tsemberis, 2004).

In summary, the NYHS found that “a person's mental health diagnosis is not related to his or her ability to obtain or to maintain independent housing” (Tsemberis et al., 2004, p. 654). Moreover, housing such persons without requiring abstinence and sobriety did not increase their use of substances during a 2-year period despite comparatively lower levels of use of substance abuse treatment services. The control group's higher use of substance abuse services did not produce comparatively

lower rates of drug or alcohol use, thus indicating that residence in “sober housing” did not produce the desired results in terms of abstinence.

In this report, we assessed substance-related and treatment-related outcomes from the full 48 months of data to determine if the previous findings are sustained or change during a much longer period of observation (4 years vs. 2 years). Thus, we address the following research questions:

*Research Question 1:* Are there group differences in alcohol and drug use at 48 months?

*Research Question 2:* Are there group differences in participation in substance abuse and mental health treatment at 48 months?

## METHOD

### Sampling and Recruitment

Individuals were eligible to participate in the NYHS if they signed an informed consent form (approved by federal and university Human Subjects Committees) and met three inclusion criteria. These were that the person (a) spent 15 of the last 30 days on the street or in other public places, (b) exhibited a history of homelessness during the past 6 months, and (c) had an Axis I diagnosis of severe mental illness. Although substance abuse was not a criterion for eligibility, 90% of the study participants had a diagnosis or history of alcohol or drug disorders according to clinical records. Psychiatric diagnoses were obtained from clinical records and interviews with referring providers.

Respondents were recruited from outreach teams, drop-in centers, state psychiatric facilities, psychiatric wards, and the streets. When it was determined that individuals met the inclusion criteria, they were asked if they would be interested in participating in a research study with compensation of U.S. \$25 for each interview. It was further explained that based on a randomized lottery system, individuals would be referred to different housing programs in the city. Recruitment lasted from November 1997 to January 1999. The recruited sample was 225 people (99 in the experimental group and 126 in the control group) between ages 18 and 70 years.

### Study Design and Description of Experimental and Control Conditions

The housing first model was developed by Pathways to Housing, Inc. (PTH) in 1992 as a consumer-driven approach to providing housing and support services to

adults who were homeless with mental illness. PTH gives immediate access to housing in independent scatter-site apartments and offers tenants an array of services through interdisciplinary Assertive Community Treatment (ACT) teams that include social workers, psychiatrists, vocational trainers, and substance abuse counselors. Two modifications of the ACT model initiated by PTH were the addition of a nurse practitioner to address health problems and a housing specialist to coordinate housing needs. As part of its vision of consumer choice, PTH does not make housing contingent on sobriety or treatment compliance. The single contingency in this model is a money management program for PTH clients who are unable to meet landlord requirements for leases (e.g., credit histories) or who are not ready to conserve resources necessary to make monthly rent payments. Because it does not refuse clients with histories of violence or incarceration, PTH has accepted and housed the most problematic among persons who are homeless with mental illness, that is, those other programs would not take or had ejected (Tsemberis, 1999).

PTH tenants who abuse drugs or alcohol are counseled by clinical services staff based on their readiness for change. Those with serious substance abuse problems are urged to accept referrals to residential treatment (and their apartments held for them or another one found when they are discharged). PTH also offers harm reduction support groups at its various branch offices. PTH clients whose substance use causes disruption face the usual consequences of a tenant in a similar situation with the exception that PTH staff will assist them in moving to another apartment if evicted.

Individuals randomly assigned to the control group were referred to usual care programs that offer abstinence-contingent housing and services based on a treatment first model. A typical program would be exemplified by a group home or a single-room occupancy residence in which clients are expected to attend day treatment, 12-step, and other therapeutic groups and follow medication regimens enforced by on-site staff. Sleeping, cooking, and bathing facilities are shared, and house rules strictly prohibit consumption of any substances and overnight guests.

During the research design phase, volunteer tenants at PTH reviewed the proposal and provided feedback. Tenants also served on the PTH Institutional Review Board (IRB) and had a voting role as to whether the project and the randomization process was fair and not harmful. Fidelity to the ACT model in the experimental condition was assessed using the Dartmouth fidelity model (Teague, Bond, & Drake, 1998) and was found to be satisfactory (Shinn, Tsemberis, & Moran, 2005).

## Data Collection and Measures

A structured interview was administered at 6-month intervals for 48 months. To reduce attrition and maintain contacts, monthly 5-minute call-in interviews were conducted. Participants were paid \$25 for in-person interviews (9 in all) and \$5 for the monthly calls. These repeated contacts are one of the reasons for the study's high retention rate (Stefancic et al., 2004).

Because the NYHS was one of eight sites participating in a federally funded demonstration project, standardized cross-site measures were used to assess key variables.

*Use of alcohol and illegal drugs.* Use of alcohol and illegal drugs was assessed with the Six-Month Follow-Back Calendar (Sobell, Sobell, Leo, & Cancellata, 1988). Participants reported the number of days drinks were consumed, and the number of days that certain illicit drugs were used during the 6-month period. Four summary variables were defined by the cross-site team: any use of alcohol, any use of illegal substances, heavy use of alcohol (more than 28 days in 6 months), and heavy use of drugs (more than 4 days in 6 months). Of these four variables, two (heavy use of alcohol and heavy use of drugs) were utilized in analyses for the current study.

It is possible that individuals in the treatment first programs underreport substance use differentially because these programs typically require abstinence or at least the promise of sobriety. Although such a bias would work against finding effects favoring the experimental condition, we considered this possibility of differential self-report in interpreting the findings.

*Participation in substance abuse treatment.* Participation in substance abuse treatment was collected through the use of a modified Treatment Services Review (McLellan, Alterman, Woody, & Metzger, 1992). Service use was computed as the average of a seven-item measure consisting of questions such as whether the participant had received treatment in a detox program or consulted with a counselor to talk about substance problems, and attended AA, NA, or any other substance abuse self-help group.

*Participation in mental health treatment.* Mental health service use was also collected through the modified Treatment Services Review (McLellan et al., 1992). Service use was computed as the average of a five-item measure consisting of questions such as whether the participant had received overnight treatment in a psychiatric hospital, attended a day hospital program or day



treatment center, and visited with a doctor or nurse to discuss medication or emotional problems.

For both utilization variables, the average proportion of services used is reported as the outcome of interest. A proportion of .20, for example, means that group members averaged one of a possible five “yes” answers to the mental health services measure.

### Data Analyses

*Checks on random assignment.* A preliminary data analysis question checked on random assignment of the sample retained at each data collection point. One of the best guarantees of random assignment is a strong retention rate, which we successfully attained. We compared respondents who were and were not retained in the sample at several data collection points to see if they differed from baseline and found no differences in key demographic or other baseline variables. Because random assignment produced satisfactory equivalence of the groups, no demographic variables were used as covariates because they were not correlated with the outcomes. For this reason, we reported the demographic characteristics for the total sample rather than by group (see Table 1).

*Analyses of research questions.* Research Question 1 was analyzed graphically and with a growth curve model with group-by-time interactions to formally assess whether differences are changing over time, also known as hierarchical linear modeling (Bryk & Raudenbush, 1992). We created a Level-1 (repeated measures) model for the trajectory of each participant, and a Level-2 (person level) model to examine differences in experimental versus control trajectories for participants. At Level 1 (repeated measures), we estimated a regression equation for alcohol and drug use outcomes as a function of time. At Level 2 (person level), we estimated whether the intercept and growth parameters of the Level-1 models differed by group. Note that with nine points of data collection, we were able to include participants in this analysis even if they missed as many as one half of the assessments; this was an advantage of utilizing SAS Proc Mixed over repeated measures MANOVA.

Research Question 2 was tested using a sub-sample of participants who were in some type of service-related program, namely, experimental participants who were currently housed by the PTH/housing first program and control participants who reported living in one of the following places at time of the interview: supportive single-room-occupancy (SRO) hotels, drop-in centers, safe

**TABLE 1: Participant Characteristics**

Variable	Number	Percentage
Study group: Experimental	99	44
Control	126	56
Gender: Female	52	23.1
Male	173	76.9
Age: 18 to 30 years	43	19.1
31 to 40 years	62	27.6
41 to 50 years	68	30.2
51 to 60 years	41	18.2
61 to 70 years	11	4.9
Race: White	63	28
African American	90	40
Hispanic American <sup>a</sup>	33	14.7
Mixed and/or other <sup>a</sup>	39	17.3
Education: Some high school or less	94	42
High school diploma or GED Equivalent	55	24.6
Postsecondary education	75	33.5
Marital status: Married	8	3.6
Separated <sup>b</sup>	20	8.9
Divorced <sup>b</sup>	32	14.3
Widowed <sup>b</sup>	9	4
Never married <sup>b</sup>	155	69.2
Residence at baseline: Streets/subway/drop-in <sup>v</sup>	114	50.7
Shelter and/or safe haven <sup>v</sup>	14	6.2
Crisis housing with family and/or friends <sup>d</sup>	11	4.9
Psychiatric hospital	80	35.6
Hotel and/or motel <sup>d</sup>	5	2.2
Short-term transitional housing <sup>d</sup>	1	.4
Psychiatric Diagnosis: Psychosis	121	53.8
Bipolar Disorder	30	13.3
Major Depression	32	14.2
Other <sup>e</sup>	10	4.4
Missing <sup>e</sup>	32	14.2

NOTE: Some percentages do not add up to 100% due to rounding error. Categories with the same superscripts were combined for analysis of group differences.

havens, detox facilities, crisis housing, intermediate care, boarding houses, transitional housing, group homes, alcohol and/or drug-free facilities, or treatment and/or recovery programs. The rationale for using this subsample for Research Question 2 was to “level the playing field” in terms of including only housed study participants—those in shelters, incarcerated, or on the streets were considered less able to avail themselves of such services. Because participants’ residential status changed from one time point to the next, the subsamples also changed; we, therefore, had to conduct separate *t* tests for each time point instead of SAS Proc Mixed.

Perhaps it is not surprising to note, sample sizes varied considerably in this analysis across the nine points of data collection (every 6 months for 48 months). Thus, control group sample sizes ranged from a high of 126 at baseline to a low of 53 at 24 months. Similarly, experimental group sizes ranged from a high of 99 at baseline to a low of 35 at 12 months. In addition to the analysis decision to include only individuals who were housed at each specific time of

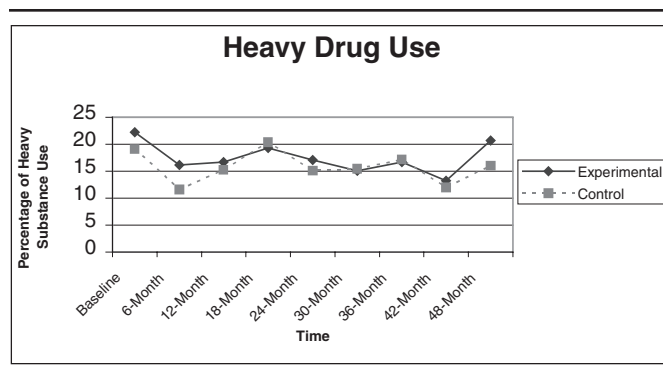


Figure 1: Heavy Drug Use, Baseline to 48 Months

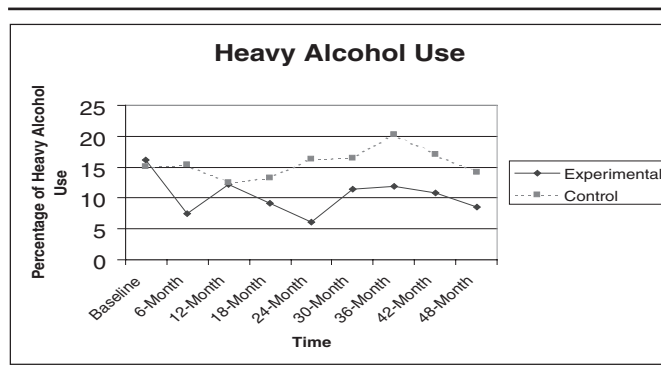


Figure 2: Heavy Alcohol Use, Baseline to 48 Months

data collection, samples were reduced because of study dropout, no-shows, incarceration, or other forms of institutionalization. PTH (experimental) participants were not considered “housed” if they were institutionalized even though they had access to housing on discharge. Because of these multiple group comparisons, a more conservative significance level was applied using a Bonferroni-corrected alpha of .006.

## RESULTS

### Description of the Study Sample

As can be seen in Table 1, the sample consisted of 173 men (76.9%) and 52 women (23.1%) with an average age of 41.5 years. Most of the participants (69.2%) had never been married. Sixty-three (28%) participants identified their race as White, and 90 (40%) identified their race as African American. Twenty-three (10.3%) participants did not go beyond eighth grade in their education. Among Axis I diagnoses, psychotic disorders were dominant (53.8%).

Thirty nine (17.6%) of the participants reported becoming homeless before age 18 yrs. The average age at which participants reported experiencing homelessness for the first time was 29.5 yrs (age range was 5 to 64 yrs). The longest period of time homeless was an average of 4.4 years with a median of 3 years. The majority (50.1%) of the participants lived on the streets or public place or in a drop-in shelter at time of the baseline interview, and 36% ( $n = 81$ ) were living in a psychiatric hospital. According to their psychosocial histories, 90% had substance use disorders either in the past or currently. At the study’s end at 48 months, housing first clients were stably housed 75% of the time during the previous 6 months compared to 50% of the time for treatment first clients (L. Gulcur, personal communication, July 25, 2005).

### Group Differences in Alcohol and Drug Use

To answer Research Question 1, SAS Proc Mixed was utilized to test whether there were changes in reported drug and alcohol use over time. Because of low reported levels of drug and alcohol use, the “heavy use” variables were analyzed and predicted by time, group assignment, and the Time  $\times$  Group Assignment interaction. As can be seen in Figures 1 and 2, none of the parameters were significant: Reports of drug use remained constant during the 48 months of the evaluation project, the groups did not differ from each other, nor were there differences in their rates of change over time. The same predictors were used to examine change in alcohol use over time, and again, none of the parameters were significant. However, there was a visual trend indicating that the PTH group used less alcohol than the control group.

### Group Differences in Substance Treatment and Psychiatric Services Utilization

Substance treatment utilization showed notable differences at 6 months ( $p = .012$ ), 18 months ( $p = .021$ ), 24 months ( $p = .025$ ), 36 months ( $p = .006$ ) and 48 months ( $p = .014$ ) with the control group members showing higher utilization (see Figure 3). With the Bonferroni correction, these differences were significant only at 36 months. Control groups members were somewhat higher utilizers of mental health treatment though the differences were statistically significant only at 48 months ( $p = .003$ ; see Figure 4).

## Discussion

The above results extend those cited earlier (Tsemberis et al., 2004) to an additional 2 years of data collection. We

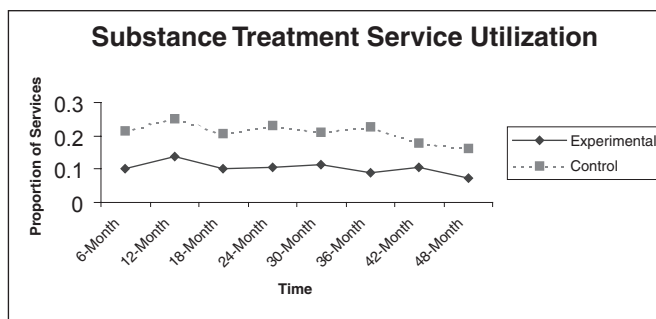


Figure 3: Substance Treatment Service Utilization, Baseline to 48 Months

note the continued absence of group differences in alcohol and drug use, though with a nonsignificant trend toward lower alcohol use by the housing first group. The lack of compliance with sobriety requirements by a significant proportion of the treatment first group—now extending to 4 years' duration—is an indication that such strictures fall short in bringing about abstinence among consumers whose primary need is for housing (Watkins, Shaner, & Sullivan, 1999). Although substance use was almost certainly underreported by members of both groups, it is likely to be greater among those in treatment first because the adverse consequences of any admission of substance use are greater for them.

The treatment first group's higher use of substance abuse treatment services during the 48 months of the study must be considered in this context in which service use is linked to housing. It is not unusual to see clients continue to use drugs or drink surreptitiously even while attending treatment groups (Wolford et al., 1999). Our findings that treatment first clients did not reduce substance use and had comparably greater use of substance abuse and mental health services underscore this possibility.

Access to and availability of such services might influence these findings aside from program philosophies and requirements. However, it is useful to distinguish between services that are available versus those that are required. Housing first participants had an array of services available to them but were not required to use them. Control participants were required to use certain services (e.g., detox, 12-step groups, day treatment) to maintain their housing and presumably had access to them. Given the systemic factors influencing an individual's ability and willingness to seek help for mental health and substance abuse problems, our findings of "no significant difference" in substance use despite lower treatment service utilization and no program-specific restraints on

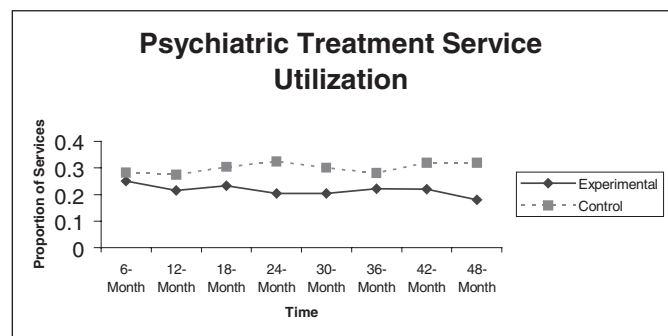


Figure 4: Psychiatric Treatment Service Utilization, Baseline to 48 Months

substance use connotes clinical and programmatic significance favoring the housing first approach.

#### Limitations of the Study and Implications for Future Research

Despite a rigorous experimental design, low attrition rate and the use of standardized measures known for their reliability among persons who are homeless with mental illness, the current study is subject to concerns about accuracy in recall and social desirability bias. Such concerns are common to studies using self-report measures (Calsyn, Morse, & Klinkenberg, 1997) but are especially pertinent given the complex interplay of mental symptoms, drug effects (illicit and prescribed), and the severe deprivations of homelessness. If a man who is homeless is taken to a hospital emergency room disheveled, incoherent, and violent, he could be psychotic, high, or both. When it comes to substance abuse and psychiatric medication adherence, study participants may have a number of reasons for memory loss, misunderstanding Likert-type questions, or deliberately misleading researchers (Wolford et al., 1999).

In the current study, the thresholds selected as indices of a substance abuse problem do not necessarily square with providers' perceptions (Drake et al., 1991) nor should they be construed as clinically significant. In addition, the lower overall rates of substance use reported in this sample do not conform to estimates from previous sources. It is possible that this discrepancy is because of measurement bias or deliberate underreporting. As well, previous estimates may have been higher because of their reliance on persons who were dually diagnosed and homeless rather than those enrolled in services as in the current study. The absence of verification measures (e.g., urine toxicology tests) makes it impossible to draw definite conclusions about these reported rates.

Concerns about inaccuracies in detecting substance use are widespread in research dealing with problems of persons with severe mental illness. Yet Wolford et al. (1999) were surprised to find that self-report was superior to laboratory tests and clinical exams in a controlled evaluation of detection methods with this population. Although beyond the scope of this article, methodological problems related to accuracy in detecting and diagnosing substance abuse continue to challenge clinicians and researchers alike (Calsyn et al., 1997; Wolford et al., 1999). The current study's reliance on psychosocial histories and clinic records, rather than formal *DSM* diagnoses (Axis I or II) limits our capacity to analyze or compare findings based on *DSM* criteria. However, we are reasonably certain that the Axis I eligibility criteria were met.

Given the unquestionable negative effects of drug and alcohol abuse on rehabilitation of persons with mental illness, it is imperative that researchers pursue a number of avenues for understanding the beginning and ending of substance abuse among individuals in this population (Hohmann & Shear, 2002; Ridgway, 2001). To this end, the NYHS investigators and the first author have embarked on a longitudinal qualitative study designed to address this gap in knowledge by asking consumers about their histories of substance use and experiences in the service delivery system.

Beyond methodological improvements, future research is needed on supported housing in general (and housing first programs in particular) to compare outcomes across different settings and geographic areas (Mares, Kaspro, & Rosenheck, 2004). Currently, the PTH program is being replicated in a number of cities (Anderson, 2005), and plans for formal evaluations of the replicated model are under way.

### Implications for Practice and Policy

The results of the current study show that individuals with severe mental illness and substance use problems do not have to undergo mandatory treatment to be able to live independently in the community. Moreover, consumer-driven programs that practice housing first and harm reduction are not linked to increased substance use despite the absence of restrictions. The current study has also revealed consistent (and probably underreported) use of illicit substances by individuals enrolled in treatment first programs despite abstinence requirements.

Our findings have distinct relevance for practitioners charged with engaging and retaining clients who are homeless with mental illness in care. Thus, the one-size-

fits-all assumption that mental disorders and homelessness cannot be addressed until a client is clean and sober is no longer valid. Indeed, engagement and retention may be far more effective when clients who are dually diagnosed are able to actively participate in their own treatment decisions.

Yet long-held beliefs are difficult to change. Research has shown that consumers who are dually diagnosed and homeless prefer independent living while clinicians recommend supervised congregate housing (Schutt, Weinstein, & Penk, 2005; Watkins et al., 1999). Although the landscape of mental health and homeless policies is continually changing (McGray, 2004), there is a marked lag in implementation of empirical findings in policy and practice (Tsuang et al., 2003). Even individual components taken separately from housing first "packaging" (e.g., harm reduction and integrated treatment) remain far less common than treatment first and abstinence-oriented approaches. Organizational cultures, funding streams, and a conservative sociopolitical climate present obstacles to change and have the ultimate impact of restricting consumer choice (Tsuang et al., 2003).

As part of a federally funded national demonstration project, the NYHS was intended to inform housing and treatment policies for this deeply vulnerable population. Millions of public and private dollars are spent each year on treatment for persons with mental illness, and services for persons who are homeless have expanded exponentially (McGray, 2004). For example, the New York State Office of Mental Health has an annual budget of \$5.6 billion, yet a small fraction (about \$6.5 million) is dedicated to supported housing initiatives.

Further support for housing first approaches comes from comparative cost analyses. A groundbreaking study released in 2001 documented substantial cost savings from community-based care compared to shelters, jails, and hospital beds (Culhane et al., 2001). Because "community-based care" encompasses many noninstitutional approaches, future policy decisions to redirect public funds toward more effective alternatives will invariably also consider costs. Annual per capita costs of the PTH program are \$22,500 compared with \$40,000 to \$50,000 for treatment first congregate housing programs, \$85,000 for a jail bed, and \$175,000 for a state psychiatric hospital bed (Anderson, 2005).

Social work practitioners, policy makers, and educators can benefit from these findings as some of the strongest support for "evidence-based practice" in housing and services for persons who are homeless with mental illness. As the largest single group of mental health practitioners



and a significant part of the substance abuse treatment workforce, social workers play a critical role in implementing best practices for this vulnerable population.

Heartened by results showing that housing first leads to residential stability even for those considered least capable of benefiting, we end on a note of optimism that future research will shed additional light on the complex dynamic surrounding decisions of individuals who are homeless about substance use and the many other dimensions of successful recovery from mental illness. In this context, program philosophies favoring choice over restrictions and empowerment over compliance deserve consideration as not only effective but humane.

## REFERENCES

- Anderson, L. (2005, June 20). A reverse approach to homelessness [Electronic version]. *Baltimore Sun*, p. 1A.
- Baumohl, J. (Ed.). (1996). *Homelessness in America*. Phoenix, AZ: Oryx.
- Bebout, R. R., Drake, R. E., Xie, H., McHugo, G. J., & Harris, M. (1997). Housing status among formerly homeless dually diagnosed adults. *Psychiatric Services, 48*(7), 936-942.
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Butterfield, F. (2003, October 22). Study finds hundreds of thousands of inmates mentally ill. *The New York Times*, p. A1, A7.
- Calsyn, R. J., Morse, G. A., & Klinkenberg, W. D. (1997). Reliability and validity of self-report data of homeless mentally ill individuals. *Evaluation and Program Planning, 20*, 47-54.
- Carling, P. J. (1990). Major mental illness, housing, and supports: The promise of community integration. *American Psychologist, 45*, 969-975.
- Culhane, D. P., Metraux, S., & Hadley, T. (2001). The impact of supportive housing for homeless people with severe mental illness on the utilization of the public health, corrections, and emergency shelter systems: The New York-New York Initiative. *Housing Policy Debate, 5*, 107-140.
- Dixon, L. B., Krauss, N., Kernan, E., Lehman, A. F. & DeForge, B. R. (1995). Modifying the PACT model to serve homeless persons with severe mental illness. *Psychiatric Services, 46*, 684-688.
- Drake, R. E., McHugo, G. J., Clark, R. E., Teague, G. B., Xie, H., Miles, K., et al. (1998). Assertive community treatment (ACT) for persons with co-occurring severe mental illness and substance use disorder. *American Journal of Orthopsychiatry, 68*, 201-215.
- Drake, R. E., Osher, F. C., & Wallach, M. A. (1991). Homelessness and dual diagnosis. *American Psychologist, 36*, 1149-1158.
- Drake, R. E., Yovetich, N. A., Bebout, R. R., Harris, M., & McHugo, G. (1997). Integrated treatment for dually diagnosed adults. *Journal of Nervous and Mental Disease, 185*(5), 298-305.
- Fakhoury, K. H., Murray, A., Shepherd, G., & Priebe, S. (2002). Research in supported housing. *Social Psychiatry and Psychiatric Epidemiology, 37*, 301-315.
- Gonzalez, G., & Rosenheck, R. A. (2002). Outcomes and service use among homeless persons with serious mental illness and substance abuse. *Psychiatric Services, 43*(4), 437-446.
- Gulcur, L., Stefancic, A., Shinn, M., Tsemberis, S., & Fischer, S. (2003). Housing, hospitalization, and cost outcomes for homeless individuals with psychiatric disabilities participating in continuum of care and housing first programmes. *Journal of Community and Applied Social Psychology, 13*, 171-186.
- Hohmann, A. H., & Shear, M. K. (2002). Community-based intervention research: Coping with the "noise" of real life in study design. *American Journal of Psychiatry, 159*, 201-207.
- Hopper, K., Jost, J., Hay, T., Welber, S., & Haugland, G. (1997). Homelessness, severe mental illness and the institutional circuit. *Psychiatric Services, 48*, 659-665.
- Inciardi, J. A., & Harrison, L. D. (2000). *Harm reduction: National and international perspectives*. Thousand Oaks, CA: Sage.
- Lipton, F. R., Siegel, C., Hannigan, A., & Samuels, J. B. (2000). Tenure in supportive housing for homeless persons with severe mental illness. *Psychiatric Services, 51*, 479-486.
- Lovell, A. M., & Cohn, S. (1998). The elaboration of "choice" in a program for homeless persons labeled psychiatrically disabled. *Human Organization, 57*, 8-20.
- Mares, A. S., Kaspro, W. J., & Rosenheck, R. A. (2004). Outcomes of supported housing for homeless veterans with psychiatric and substance abuse problems. *Mental Health Services Research, 6*(4), 199-211.
- McGray, D. (2004, June). The abolitionist: Bush's homelessness czar has some new ideas. *Atlantic Monthly, 101*, 36-39.
- McHugo, G. J., Bebout, R. R., Harris, M., Cleghorn, S., Herring, G., Xie, H., et al. (2004). A randomized controlled trial of integrated versus parallel housing services for homeless adults with severe mental illness. *Schizophrenia Bulletin, 30*(4), 969-982.
- McLellan, A. T., Alterman, A. L., Woody, G. E., & Metzger, D. (1992). *Treatment services review*. Philadelphia: University of Pennsylvania.
- Miller, N. S., & Flaherty, J. A. (2000). Effectiveness of coerced addiction treatment (alternative consequences): A review of clinical research. *Journal of Substance Abuse Treatment, 18*, 9-16.
- Minkoff, K. (2001). Developing standards of care for individuals with co-occurring psychiatric and substance use disorders. *Psychiatric Services, 52*, 597-599.
- Padgett, D. K., & Struening, E. L. (1992). Victimization and traumatic injuries among the homeless: associations with alcohol, drug, and mental problems. *American Journal of Orthopsychiatry, 62*, 525-534.
- Ridgeway, P. (2001). Restorying disability: Learning from first-person narratives of recovery. *Psychiatric Rehabilitation, 24*, 335-343.
- Ridgeway, P., & Zippel, A. M. (1990). The paradigm shift in residential services: From the linear continuum to supported housing approaches. *Psychosocial Rehabilitation Journal, 13*, 11-31.
- Schutt, R. K., Weinstein, B., & Penk, W. E. (2005). Housing preferences of homeless veterans with dual diagnoses. *Psychiatric Services, 56*(3), 350-352.
- Shern, D. L., Tsemberis, S., Anthony, W., Lovell, A. M., Richmond, L., Felton, C. J., et al. (2000). Serving street-dwelling individuals with psychiatric disabilities: Outcomes of a psychiatric rehabilitation clinical trial. *American Journal of Public Health, 90*, 1873-1878.
- Shinn, M., Tsemberis, S., & Moran, L. (2005). *Fidelity outcomes for a consumer preference living model of housing*. Manuscript in preparation.
- Sobell, L. C., Sobell, M. B., Leo, G. L., & Cancelli, A. (1988). Reliability of a timeline method: Assessing normal drinkers' reports of

- recent drinking and a comparative evaluation across several populations. *British Journal of Addiction*, 83, 393-402.
- Srebnik, D., Livingston, J., Gordon, L., & King, D. (1995). Housing choice and community success for individuals with serious and persistent mental illness. *Community Mental Health Journal*, 31, 139-152.
- Stefancic, A., Shaefer-McDaniel, N., Davis, A., & Tsemberis, S. (2004). Maximizing follow up of adults with histories of homelessness and disabilities. *Evaluation and Program Planning*, 27, 433-442.
- Substance Abuse and Mental Health Services Administration. (2003). *Report to Congress on the prevention and treatment of co-occurring substance use disorders and mental disorders*. Washington, DC: U.S. Department of Health and Human Services.
- Teague, G. B., Bond, G. R., & Drake, R. E. (1998). Program fidelity in assertive community treatment: Development and use of a measure. *American Journal of Orthopsychiatry*, 68, 216-232.
- Tsemberis, S. (1999). From streets to homes: An innovative approach to supported housing for homeless adults with psychiatric disabilities. *Journal of Community Psychology*, 27, 225-241.
- Tsemberis, S., & Eisenberg, R. F. (2000). Pathways to housing: Supported housing for street dwelling homeless individuals with psychiatric disabilities. *Psychiatric Services*, 51, 487-493.
- Tsemberis, S., Gulcur, L., & Nakae, M. (2004). Housing first, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. *American Journal of Public Health*, 94, 651-656.
- Tsuang, J. W., Fong, T. W., & Ho, A. P. (2003). Dual diagnosis and treatment compliance. *Psychiatric Services*, 54(4), 576.
- Watkins, K. E., Shaner, A., & Sullivan, G. (1999). The role of gender in engaging the dually diagnosed in treatment. *Community Mental Health Journal*, 35(2), 115-125.
- Wolford, G. L., Rosenberg, S. D., Drake, R. E., Mueser, K. T., Oxman, T. E., Hoffman, D., et al. (1999). Evaluation of methods for detecting substance use disorder in persons with severe mental illness. *Psychology of Addictive Behaviors*, 13(4), 313-326.