

**THE BEDFORD ADDICTIONS HOUSING TEAM (BAHT):  
PARTICIPANTS, SERVICES, AND OUTCOMES**

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# **EXECUTIVE SUMMARY**

## **The Bedford Addictions Housing Team: Participants, Services, And Outcomes**

### **Background**

This report describes the activities of a new clinical initiative, the Bedford Addictions Housing Team (BAHT) during 2001 and 2002. BAHT was a multidisciplinary, healthcare delivery approach designed to improve housing acquisition, transition to community residences, and maintenance of housing for homeless, substance abusing veterans.

### **Methodology and Instrumentation**

103 BAHT clients participated in data collection during the assessed period. Data were collected on eight instruments, including Residential Preferences, Housing History, Clinician Recommendation, ASI, MMPI, TOPs, and Client Satisfaction Survey (p.4). BAHT case managers also completed weekly service logs describing their contacts with each client enrolled in the program (pp. 5-6).

### **Participants**

BAHT participants were all male veterans; 86% white and 11% African-American; 60% separated or divorced and 37% single; average years of education was 12.3; 25% were employed full time, the remainder were in work therapy. The most commonly reported problems were with employment and alcohol abuse. BAHT participants reported considerable residential instability in their history; one-third reported being homeless for at least 4 years. One in five reported being homeless prior to their military service while 3 in five reported being homeless following their military discharge. At time of enrollment, 81% were in residential treatment or a transitional residence, 12% were living in shelters or on the street, and 7% were sharing residences with others.

### **Variations in Preferred Housing and Support: 3 categories**

BAHT participants varied in the type of housing and support services they preferred:

- ❑ About one-third of the veterans strongly preferred living independently without staff or support services.
- ❑ Another third indicated an interest in what has been termed the “supported housing” model: they strongly preferred to live on their own but were interested in receiving services from support staff.

- ❑ Another third of applicants were interested in the staffed, group housing: these veterans were interested in staff support and also were willing to consider living with others.
- ❑ There were almost no BAHT applicants who definitely rejected staff support but were willing to consider living communally with roommates.

### **Services Provided**

During the collection period, veterans in BAHT spent an average of 19 weeks in the program, with an average weekly contact of 19 minutes. In addition to BAHT treatment, BAHT participants received, on average, 1.5 other substance abuse and/or psychiatric services each week.

### **Housing Outcomes**

Retrospective case manager reports suggested that two-thirds of the BAHT participants were either living independently or had moved toward more independent living arrangements after their enrollment in the BAHT program. Veterans receiving more BAHT services tended to have better residential outcomes, while higher levels of pathology were associated with poorer residential outcomes.

### **Recommendations**

- ❑ Continued collection of residential preference data from homeless veterans in treatment should be used to guide development of housing opportunities and to and improve rates of housing placement and retention.
- ❑ Systematic collection of data on veteran characteristics and service utilization can identify influences on service outcomes. Such data collection must continue to be supported by adequate computer hardware and software and by dedicated staff.
- ❑ Individualized placement efforts after substance abuse treatment can help many veterans move into independent community-based housing.
- ❑ Post-treatment housing placement work should be coordinated by an interdisciplinary team that includes representatives from each of the medical center's transitional residential programs.
- ❑ Follow-up efforts should be intensified so that post-placement residential status and length of housing tenure can be determined for most program participants. This may require signed agreements that allow contacting landlords and family members or friends.
- ❑ The VA should be encouraged to continue to fund programs that deliver services in the community, outside of the medical centers, and that move veterans more quickly into community-based housing. The BAHT project demonstrates that such efforts can succeed.

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For too many veterans, substance abuse and homelessness are co-occurring and mutually reinforcing maladies. Homelessness undermines the effectiveness of substance abuse treatments, exacerbates physical and mental health problems associated with substance abuse, and multiplies ultimate service costs. Substance abuse compounds the difficulties of regaining housing and reduces the likelihood of treatment engagement. Yet in spite of the deleterious impact of substance abuse and the moral failing that homelessness among veterans represents for American society, available housing and service programs continue to be insufficient to eliminate this destructive combination. Even within the VA system, areas such as northern New England lack residential care facilities for substance abuse treatment.

Dr. Walter Penk and other substance abuse treatment experts at the Edith Nourse Rogers Memorial Veterans Administration Medical Center designed the Bedford Addictions Housing Team program (BAHT) as a new approach to reducing homelessness among veterans in treatment (Binus et al., 2000). Funded by the Veterans Administration during 2001-2002, this new clinical program initiative sought to enhance the support provided to veterans in their efforts to secure stable community-based housing and thereby increase the rate of treatment retention and successful treatment outcomes.

This report presents findings from the BAHT program experience during 2001-2002. We describe the population of veterans who used BAHT, the services delivered and the results achieved. We also identify those characteristics and orientations of veterans using BAHT that were related to more successful outcomes.

## **Background**

Increasing retention in substance abuse treatment programs improves treatment outcomes independent of primary treatment modality—pharmacologic, psychosocial or both. Multisite treatment interventions have also demonstrated that persons with addictions entering residential programs for at least 90 days have better treatment outcomes (Broome, Simpson, & Joe, 1999, Simpson, Joe, Fletcher, Hubbard, and Anglin, 1999). We hypothesize that the mechanism for this effect of residential programming on treatment outcomes is improved treatment retention. Simply put, housing in whatever form renders the program participant comparatively more available for treatment services (Gossop, Marsden, Stewart, & Rolfe, 1999).

The Bedford Addictions Housing Team (BAHT) is a healthcare delivery approach designed to improve housing acquisition for homeless, substance abusing veterans. BAHT consists of a specially-trained, interdisciplinary team of substance abuse treatment specialists who help veterans solve a major problem which causes their relapse into inpatient treatment—the problem of no available housing. The BAHT team uses a case management approach developed for substance abuse treatment but with a primary focus on housing and with an emphasis on dually-diagnosed addicted veterans (e.g., Ashery, 1992; Dennis, Karuntzos, & Rachal, 1992; Woodward, 1992; Ridgley & Willenbring, 1992; Goldfinger, Schutt, Tolomiczenko, Seidman, Penk, Turner, and Caplan, 1999; Rapp, Siegal, & Fisher, 1992; Bokos, Mejta, Mickenberg, & Monks, 1992; Lidz, Bux,

Platt, & Iguchi, 1992; Levy, Gallmeier, Weddington, & Wiebel, 1992; Falck, Siegal, Carlson, 1992; McCoy, Dodds, Rivers, & McCoy, 1992).

## **Methodology**

Data were collected from veterans when they were referred to the BAHT program, from case managers while the veterans were in the program, and from VA service records. For the purposes of this report, we consider veterans to have participated in the BAHT program if they completed a residential preferences form at intake or if BAHT case managers completed at least two service logs for them. According to these criteria, a total of 103 veterans participated in BAHT during the year under investigation

### Treatment

The Bedford Addictions Housing Team was a five-person multidisciplinary case management group that offered help with housing acquisition and maintenance as well as substance abuse and mental health problems. Veterans who had had trouble finding or keeping housing and who had a history of substance abuse and/or serious mental health problems were referred to BAHT from other VA treatment units or by word-of-mouth.

The team consisted of a clinical psychologist, a psychiatrist, a psychiatric nurse, a clinical social worker and a housing specialist. In addition, a post-doctoral fellow in psychology assisted with program management and the design and collection of assessment instruments and service logs. Through BAHT, program participants could receive skills training in housing acquisition, counseling about financial problems, motivational therapy, service coordination and networking assistance, and medication management. Program staff also provided psychotherapy and psychiatric evaluation, as well as a multidimensional assessment of health and housing needs.

### Instrumentation

BAHT assessed participants with eight instruments, some completed by the veteran, some by the case manager, and some by other VA staff in other programs. In addition, BAHT team members completed a weekly service log for each client.

Residential preferences were assessed upon first referral to the program with a form adapted from that used in the Boston McKinney Project (Schutt and Goldfinger, 1996). A residential history form was completed at the same time. Specific indexes constructed from these forms included preference for living with a group, preference for staff, desire for resident control, perceived ability to function independently, housing stability, and experience with group housing. All had acceptable reliabilities (Cronbach's alpha) of .7 or higher. In addition, several ratios were computed to measure the importance attached to particular housing features, relative to the average importance attached to all house features.

BAHT case managers subsequently rated the support needs of about half the participants with a Clinician Evaluation form adapted from the Boston McKinney Project (Goldfinger and Schutt, 1996). Responses to 10 questions were averaged to obtain an

index of clinician confidence in the veteran's ability to live independently. Cronbach's alpha was .89.

The baseline characteristics and health needs of BAHT participants were assessed with multiple indicators included within the Addiction Severity Index (ASI), the MMPI, and the TOPS. ASI scales measured alcohol and drug abuse, medical problems, legal problems, social relationships and psychiatric problems. MMPI scales included in the analysis were the three validity scales (L, F, K), the ten traditional clinical scales, the MacAndrew alcoholism scale and two PTSD scales. Recent ASI scores were available for about two-thirds of the participants, MMPI scores for about half, and TOPS scores for about one-third. Due to the extent of missing data, only minimal use is made of the TOPS in this report.

Outcomes were assessed with the weekly log data, as of the last week during the data collection period in August, and as compared to the first week of service. Three months after data collection ended, BAHT case managers also reported the last known residential status of their clients, as well as the clients' residential status when they started BAHT. These retrospective case manager reports provide a more comprehensive view of the project's outcomes than do the weekly service logs, since the logs did not begin until three months after the first BAHT clients were enrolled and, for the purposes of this report, did not continue, for many clients, to the point of program exit.

### **Veteran Characteristics**

Although demographic and health information were available for only a portion of BAHT participants when they began the program, these data suggest that BAHT participants were similar to the larger veteran population served at the Bedford VA and had multiple health care needs.

#### Demographics

Respondents to the TOPS survey provide some social background information on BAHT participants. All were men and 60% were separated or divorced; 37% had only been single and one respondent was widowed. They had an average of 1.8 children. All but two were high school graduates but only 20% had finished a 2- or 4-year college, so that they had, on average, 12.3 years of education. Eighty-six percent were white and 11% were African American; just one was Hispanic. At the time they completed the TOPS survey, one-quarter were employed full time and all but five of those who were working were in blue collar jobs.

#### Baseline Health and Support Status

The most recent ASI assessment of BAHT participants highlighted their employment problems, with an average score of .68 on the 0-1 rating scale of work-related problems. Problems with alcohol abuse were also common (average score of .4). ASI medical and psychiatric problems indicated problems for many (average scores

about .33), while family problems were less common (.20) and there were few reports of drug or legal problems (average scores less than .1).

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
MEDICAL1	71	.00	1.00	.3435	.3541
Emp/Sup1	71	.1	1.0	.681	.257
ALCOHOL1	69	.00	.97	.3988	.3037
DRUG1	69	0	1	9.22E-02	.12
LEGAL1	70	0	1	4.19E-02	.12
FAMILY1	70	.0	.7	.201	.199
PSYCH1	70	0	1	.33	.24
Valid N (listwise)	66				

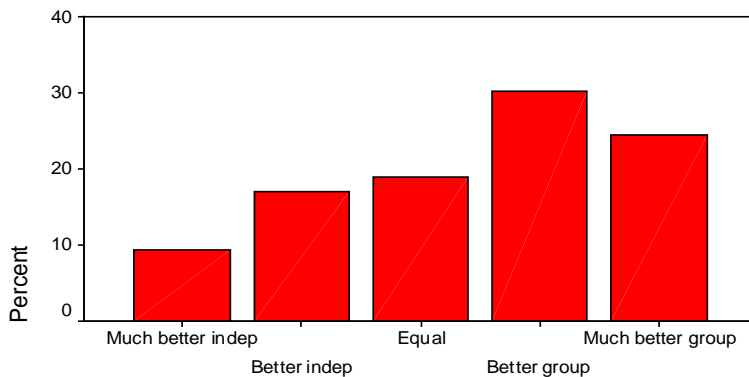
The smaller sample that completed a baseline TOPS evaluation also indicated common medical problems. They had seen a physician about medical problems an average of 4.2 times in the past year and 3.5 times in the past month; they had been hospitalized for medical problems an average of 3 days in the past year, were taking an average of 2.4 medications and reported an average of 1.7 current medical problems.

Clinical Support Needs

BAHT case managers rated group rather than independent housing as the better placement, from a clinical standpoint, for a majority of their clients (55% compared to just 24% who were rated as more appropriate for independent housing).

**Veteran Clinically Better in**

**Community-Based Group or Independent Hous**



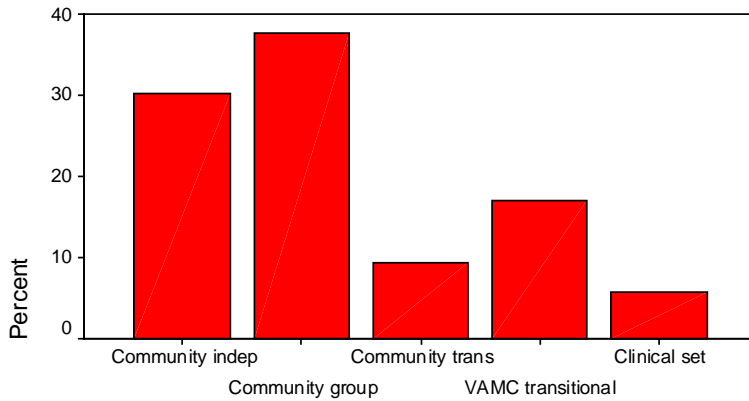
Better living independant or in group

BAHT Clinician Recomendation.

However, the community rather than the VA was viewed as the better place for this housing, for more than three-quarters of the veterans served.



### Best Placement for Veteran's Health and Rehabilitation



At this time which is best placement

BAHT Clinician Recommendation

BAHT case managers’ recommendations for specific residential options indicated that they believed most program participants could manage in community-based housing with intensive support, but would be less likely to succeed if they were placed in independent rather than group housing, if they did not participate in substance abuse treatment, if there was not a mandatory sobriety policy, and if service staff did not visit frequently.

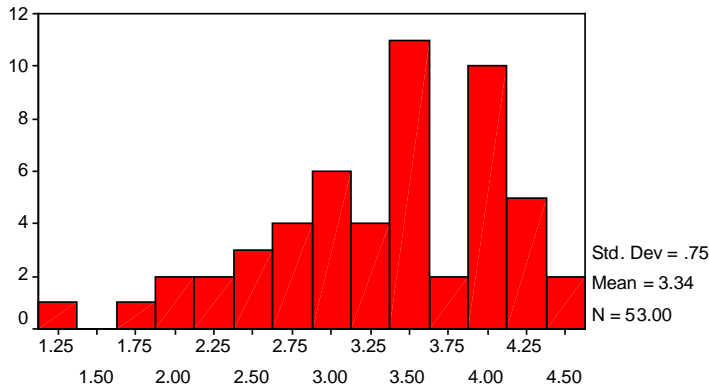
**Housing Features  
Recommended by Clinician**

	Better in independent housing (vs. VA transitional)	Manage independent housing with intensive support	Manage group housing with intensive support	Manage independent housing without SA treatment	Manage group housing without SA treatment	Better on own than with other veterans	Importance of mandatory sobriety policy	Staff need not visit
	%	%	%	%	%	%	%	%
Very Positive	5.7%	15.1%	28.3%	1.9%	1.9%	3.8%	47.2%	11.3%
Some Positive	18.9%	32.1%	56.6%	11.3%	11.3%	15.1%	37.7%	24.5%
Neutral	17.0%	37.7%	7.5%	28.3%	37.7%	24.5%	11.3%	43.4%
Some Negative	37.7%	9.4%	1.9%	39.6%	32.1%	43.4%	3.8%	20.8%
Very Negative	20.8%	5.7%	5.7%	18.9%	17.0%	13.2%	.0%	.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: BAHT Clinician Recommendation.

The distribution of average responses across the 10 specific clinician recommendations makes clear the BAHT team’s preference for maintaining supports to the veterans after housing placement.

Average Clinician Recommendation  
for Residential Supports



Average Clinician Recommendation for Residential Supports

Source: BAHT Clinician Recommendation form.

Personality

MMPI scores were elevated on all clinical dimensions except mania and masculinity/femininity. Average scale scores exceeded the cutoff of 65 on Depression (D), Psychopathic Deviance (PD), Psychasthenia (PT), Schizophrenia (SC) and PTSD (PK, PS).

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
L	48	35	70	50.81	8.763
F	48	42	120	67.38	19.690
K	48	30	75	46.71	11.344
HS	48	39	88	62.71	12.561
D	48	47	95	71.85	12.108
HY	48	43	89	62.10	13.238
PD	48	52	90	72.44	10.579
MF	48	32	76	51.23	9.811
PA	48	39	101	63.50	12.083
PT	48	43	104	70.33	15.735
SC	48	37	111	68.29	17.377
MA	48	38	75	52.83	9.290
SI	48	38	84	60.25	12.795
PK	48	40	100	67.88	16.144
PS	48	43	104	68.17	16.644
MAC-R	48	44	74	61.21	8.346
Valid N (listwise)	48				

## **Residential Experiences and Orientations**

The BAHT service delivery program began with a detailed assessment of applicants' residential experiences and orientations. The results of this assessment then guided counseling about residential and support options.

### Experiences

Most BAHT applicants had been homeless, but they were living in a VA transitional residence at the time of application. A total of eighty-one percent were living in a transitional residence at the time of application to BAHT, with 27% residing in the VA Domiciliary. Twelve percent were homeless when they applied to BAHT and just 7% were living in their own place. In total, 93% reported that they were living with other people, rather than living alone. They had been living in this place for an average of 8 months.

Past living arrangements indicated considerable residential instability. Three-quarters had shared a home, as adults, outside of military service and school, with roommates who were not their family. Eighty-two percent had been homeless for at least one week and one-third had been homeless for at least four years. Eight months was the median number of months since BAHT applicants had last lived in their own place for at least 30 days.

Literal homelessness--living on the streets or in shelters--had been primarily a post-military experience for the veterans. Just 21% had been homeless at any point prior to being in the military, compared to 74% were homeless at some time after leaving military service.

### Current Housing Satisfaction

At the time of their application to BAHT, two-thirds of the veterans rated themselves as "very satisfied" or "satisfied" with "the place you are living now." Only one-quarter reported that they were "very excited" about leaving that place and, in total, just 51% were at least "somewhat excited." 91% of the BAHT applicants rated the quality of support services at their current living place as "good" or "excellent." Satisfaction with nine current housing features was rated on a 4-point scale, with "1" corresponding to "very dissatisfied" and "4" corresponding to "very satisfied." The average level of satisfaction across these nine housing features was 2.9, or "satisfied."

In spite of their generally high level of overall satisfaction with current residential arrangements, the BAHT applicants expressed markedly different levels of satisfaction with the nine specific housing features. About 80% reported that they were satisfied or very satisfied with the staff and with the help they received for getting benefits, but only 59% reported being satisfied with the amount of space and 50% reported satisfaction with the amount of privacy. Satisfaction with the degree of freedom and the level of comfort in the house was moderate, with no more than 20% being "very satisfied," but about another 50% being "satisfied."

Several questions examined feelings about roommates. In the list of nine features of their current residence, 80% rated themselves as satisfied or very satisfied with the kinds of people they lived with and 68% with the number of people in the residence. However, just 16% and 13%, respectively, rated themselves as “very satisfied” with these housing features. In response to a separate question, only 57% of the veterans reported feeling “good” or “very good” about their roommates. Only 16% reported that they had had “a fair amount of choice” or “a great deal of choice” over whom they lived with.

**Satisfaction with Housing Features**

	Satisfied amount of space you have now	Satisfied staff you have now	Satisfied privacy you have now	Satisfied security or safety	Satisfied kinds of people live with now	Satisfied number of people live with now	Satisfied freedom you have now	Satisfied comfort you have now	Satisfied help get benefits you have now
	%	%	%	%	%	%	%	%	%
Very dissatisfied	13.8%	3.4%	18.1%	7.5%	8.5%	10.8%	9.6%	7.4%	8.8%
Dissatisfied	27.7%	7.9%	31.9%	12.9%	11.7%	21.5%	21.3%	18.1%	13.2%
Satisfied	42.6%	43.8%	37.2%	43.0%	63.8%	54.8%	48.9%	54.3%	46.2%
Very satisfied	16.0%	44.9%	12.8%	36.6%	16.0%	12.9%	20.2%	20.2%	31.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Intake Residential Preferences Form

Satisfaction with current residential arrangements tended to be much lower among those who were homeless than among those living in transitional housing or in a place of their own.

Residential Preferences

The series of questions about veterans’ preferences for new housing indicated some consistent priorities as well as substantial variation with respect to some housing features.

BAHT applicants were extremely concerned about having adequate privacy in their new housing, with about 90% rating privacy, freedom and “the kinds of people you live with” as more than “somewhat” important features for their new housing. Housing cost, security, and comfort were also rated as this important. Amount of space in the housing, its location, closeness to work and veteran services, the number of people and the availability of help with getting benefits were rated as somewhat less important (between 54% and 72% rated these features as more than “somewhat” important, with scores of 4 or 5). Only one feature, “the staff,” was rated as more than somewhat important by fewer than half the respondents (33%).

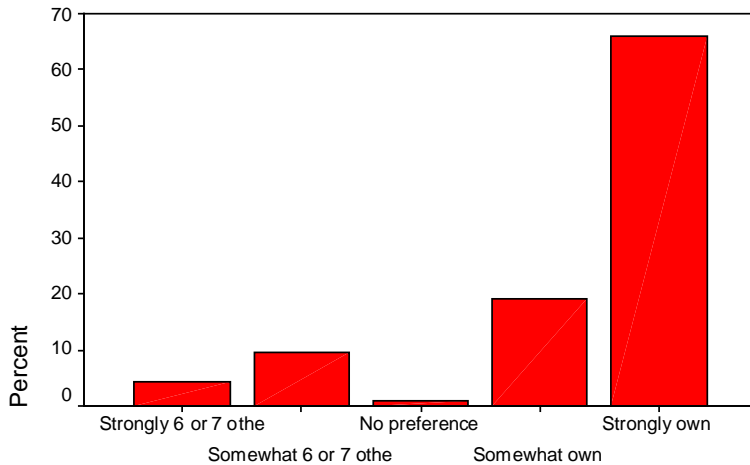
Importance of Housing Features

	Importance amount of space %	Importance staff %	Importance privacy %	Importance security %	Importance kinds of people %	Importance number of people %	Importance freedom %	Importance comfort %	Importance help get benefits or entitlements %	Importance location %	Importance cost %	Importance close to work %	Importance close to veterans service %
Not important at all	2.1%	20.0%	1.1%	1.1%	2.2%	3.3%	1.1%	1.1%	2.1%	1.1%	.0%	5.5%	.0%
2	1.1%	16.7%	1.1%	1.1%	.0%	1.1%	.0%	.0%	3.2%	1.1%	.0%	.0%	6.4%
Somewhat important	43.2%	30.0%	8.4%	9.5%	7.6%	21.7%	4.2%	5.3%	22.3%	21.1%	9.6%	27.5%	33.0%
4	28.4%	18.9%	25.3%	21.1%	23.9%	25.0%	21.1%	23.4%	16.0%	27.4%	19.1%	25.3%	24.5%
Very important	25.3%	14.4%	64.2%	67.4%	66.3%	48.9%	73.7%	70.2%	56.4%	49.5%	71.3%	41.8%	36.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Intake Residential Preferences Form

A number of questions were used to determine BAHT applicants’ orientations toward the involvement of other veterans and professional staff in their housing. In general, these responses indicated a strong preference for living alone rather than with others. Given a simple choice of living “alone” or “with others,” 79% said they would prefer to live alone. When given the choice of living with 6-7 others or living alone, again about 80% preferred to live alone; even if they were told the residents would run the group housing, 70% still preferred to live alone. The veterans also strongly preferred living with only 1 or 2 others (82%) rather than with 6 or 7 others (11%), when these were the only alternatives. Only 15% preferred to live with 6 or 7 people rather than alone, while 29% preferred to live with 1 or 2 others rather than alone.

Prefer to Live Alone or in Group



Living alone or with 6 or 7 people

BAHT Residential Preferences Form

Preferences for residential staffing were more variable. Only 19% preferred living with staff to living with no staff, but another 20% had no preference for staff or no staff. Just 14% were interested in living with day staff rather than without staff, but another 13% had no preference for day staff compared to no staff. Only 31% preferred a place run by staff to one run by residents, but another 26% had no preference. Thus,

between 40% and 60% of the veterans were not opposed to having some type of residential staff. Moreover, 78% of the veterans said that they would “like a lot” or “like somewhat” help with things that they have a hard time managing, while 72% said that they would want “a lot” or “some” help once they had gotten their housing.

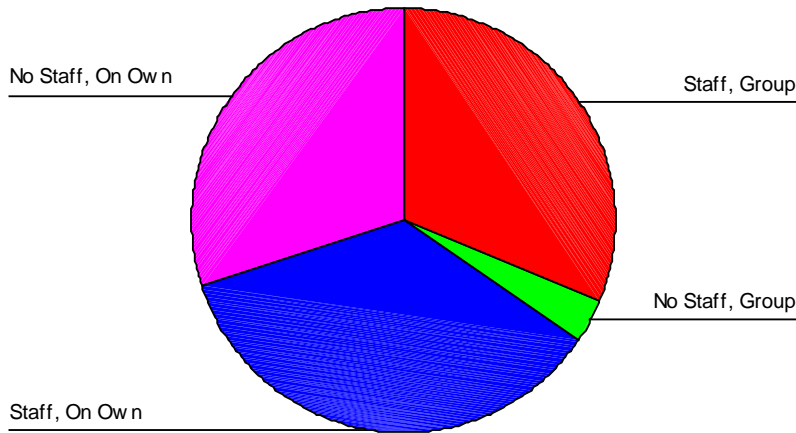


Living with staff or no staff

Source: Intake Residential Preferences Form

The type of housing that BAHT applicants preferred is indicated more clearly after combining their preferences for living alone and for staff support. About one-third of the veterans strongly preferred living independently without staff. Another third indicated an interest in what has been termed the “supported housing” model: they strongly preferred to live on their own but were willing to consider staff support. The preferences of the other third of applicants indicated potential interest in the “Oxford House” model of resident-run housing--these veterans strongly preferred the idea of staff support but were willing to consider living with others. There were almost no BAHT applicants who definitely rejected staff support but were willing to consider living with 6 or 7 roommates.

### Preference for 6-7 Roommates and Staff Support



Source: Intake Residential Preferences Form

Coding: Strongly Prefer No Staff or No Roommates v. Others

Responses to a series of questions about house management style indicated that the veterans attached less importance to *who* managed their residence than to *how* the residence was managed. Support for sobriety was the most important management issue. More than two-thirds rated housing policies that do not allow alcohol or illicit drugs and require residents to maintain their sobriety as “extremely important”; a total of 84% rated these two management features as at least “very” important. The other housing management features rated as very or extremely important by more than half of the respondents were accepting housing vouchers (71%), requiring use of prescribed medications (62%), and posting and enforcing rules for residents (52%). Just 42% attached very or extreme importance to residence management of house finances and only about one-third attached this much importance to who managed the housing—whether professional staff (“very” or “extremely” important to 38%) or the residents themselves (“very” or “extremely” important to 31%).

#### Importance of Housing Management Features

	Importance run by residents	Importance rules posted and enforced	Importance house vouchers	Importance does not allow alcohol or drugs	Importance residents maintain sobriety	Importance run by staff	Importance house finances managed by residents	Importance medications required
	%	%	%	%	%	%	%	%
not important	32.2%	19.8%	12.2%	5.4%	2.2%	31.1%	31.9%	28.3%
fairly important	36.7%	28.6%	16.7%	10.8%	13.2%	31.1%	26.4%	9.8%
Very important	25.6%	34.1%	25.6%	15.1%	18.7%	20.0%	27.5%	23.9%
Extremely important	5.6%	17.6%	45.6%	68.8%	65.9%	17.8%	14.3%	38.0%

Source: Intake Residential Preferences Form

Service Support Orientations

Most BAHT applicants were very confident in their ability to do the things required to live in their own place. On a 5-point scale, where 5 represented “very confident,” the average score across 15 items was a 4.4. Between 90 and 100% of the respondents scored themselves at a 4 or 5 in terms of shopping, cleaning house, dealing with neighbors, cooking, getting medical care, and finding and taking medicines. Confidence was lower—about 70% with a score of 4 or 5--in terms of completing benefit forms, managing legal issues, finding a job, and keeping a job. Respondents expressed the least amount of confidence (two-thirds with a score of 4 or 5) in budgeting money and dealing with roommates.

Confidence in Living Skills

	Confidence go shopping	Confidence clean house	Confidence deal with neighbors	Confidence get around on bus or train	Confidence cook meals	Confidence get medical or dental care	Confidence find and take medication	Confidence fill out forms SSI, welfare, other	Confidence budget money	Confidence access other treatment	Confidence manage legal issues	Confidence maintain alcohol and drug free	Confidence find a job	Confidence keep a job	Confidence deal with roommates
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Not at all confident	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.1%	.0%	.0%	.0%	1.1%	5.5%	4.3%	10.9%
2	.0%	.0%	.0%	4.3%	.0%	1.1%	.0%	5.3%	6.4%	3.2%	5.3%	1.1%	5.5%	3.3%	4.3%
Somewhat confident	.0%	3.2%	10.8%	14.0%	7.4%	10.9%	4.3%	23.4%	27.7%	11.6%	18.1%	11.6%	16.5%	15.2%	20.7%
4	11.5%	11.6%	19.4%	15.1%	11.7%	16.3%	16.0%	19.1%	23.4%	34.7%	24.5%	25.3%	18.7%	20.7%	30.4%
Very confident	88.5%	85.3%	69.9%	66.7%	80.9%	71.7%	79.8%	51.1%	42.6%	50.5%	52.1%	61.1%	53.8%	56.5%	33.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Intake Residential Form.

Looking for housing can be a difficult experience for individuals with few financial resources and a health-related disability. When asked how difficult eight housing search tasks were for them, on a scale from “1,” “not at all difficult,” to “4,” “very difficult,” the average difficulty rating was just 2.1, or “a little difficult.” However, much more difficulty was reported on the emotional issue of “dealing with frustration” (rated as “fairly” or “very difficult” by 44%), as well as on the process of “waiting for responses” and “completing applications” (both of which were rated as “fairly” or “very difficult” by 35%).

Most BAHT applicants were eager for help with the housing search process—about half reported that it would be “not at all difficult” to accept help with looking for housing. In different questions, almost all said that they would want “some” (63%) or “a lot of help” (33%) finding housing if it were available and 70% said that they would be “very comfortable” accepting such help (another 20% would be “somewhat” comfortable with this help).



**Difficulty of Housing Search Steps**

	Difficult get information for house	Difficult get application for house	Difficult completing applications for house	Difficult deal frustration about house	Difficult accept help for house	Difficult meet deadlines for house	Difficult wait responses for house	Difficult limited choices for house
	%	%	%	%	%	%	%	%
Not difficult	26.6%	32.6%	28.4%	12.6%	48.4%	33.7%	15.8%	11.6%
A little difficult	42.6%	38.9%	36.8%	43.2%	31.2%	48.4%	49.5%	60.0%
Fairly difficult	22.3%	26.3%	24.2%	28.4%	18.3%	12.6%	24.2%	24.2%
Very difficult	8.5%	2.1%	10.5%	15.8%	2.2%	5.3%	10.5%	4.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Intake Residential Preferences Form

In general, BAHT applicants preferred to find a place to live on their own and were confident they could handle the tasks involved in independent living. They were most concerned with issues of security, comfort, and affordability that pertain to independent as well as group living. However, if they were to live in a group residence, these veterans were very concerned that house rules be maintained, particularly against alcohol or drug use. They reported that they lacked confidence in dealing with roommates and many were interested in help from staff. Given their experience in and satisfaction with transitional group residences, these results suggest that veterans accepted the value of the rules maintained in their current settings and the staff who assisted them. Although the veterans were seeking to live independently after leaving what for most was their current transitional group residence, many continued to seek some type of support.

Correlates of Residential Preferences

Veterans’ orientation to future housing was shaped in part by current and prior residential experiences and evaluation of their own capacities. Those who had had more experience living in transitional residences and who were more satisfied with their current residence were more interested in staff support in a new residence. Those who were more confident in their ability to complete tasks associated with independent living were less interested in staff support. Responses from the limited number of TOPS forms also indicate that life circumstances play a role in residential preferences: those who were single and who did not have children were more interested in living in a group. However, there was little indication of a relationship between clinician evaluation of need for support and respondents’ residential preferences, nor between indicators of health or personality and residential preferences.

**The BAHT Experience**

The BAHT experience was assessed subjectively, with a self-reported satisfaction questionnaire and objectively, with weekly service logs that indicated veterans’ residential status and their use of other services. Log data were supplemented with the

retrospective case manager review of residential status at baseline and the last known residence, as of December 2002.

Service Satisfaction

In August, 2002, twenty-two BAHT participants responded to the BAHT Customer Satisfaction Survey. Among these participants, experiences were almost universally positive. Just over 70% said they would definitely come back to BAHT for housing help again and that they would recommend BAHT to a friend needing housing. About 60% were very satisfied with BAHT—with the quality of BAHT services, with the contribution of BAHT treatment to remaining clean and sober, with the amount of help they had received from BAHT, and with BAHT services overall. With respect to housing search issues themselves, responses were only slightly less positive: 41% said that BAHT had been “very helpful” in “helping you to organize your housing search” and one-third reported that it had “helped you to be more effective in getting or keeping independent housing”; more than 85% were at least somewhat positive with respect to these housing search questions.

**Veteran Satisfaction**

	Service Quality	Help Organizing Housing Search	Helped Effectiveness in Getting Housing	Remaining Clean & Sober	Amount of Help	Services Overall	Come Back Again	Recommend BAHT to Friend
	%	%	%	%	%	%	%	%
Very Negative	.0%	4.5%	.0%	.0%	4.5%	4.5%	.0%	4.8%
Somewhat Negative	9.1%	4.5%	14.3%	4.5%	9.1%	9.1%	9.1%	4.8%
Somewhat Positive	31.8%	50.0%	52.4%	31.8%	27.3%	27.3%	18.2%	19.0%
Very Positive	59.1%	40.9%	33.3%	63.6%	59.1%	59.1%	72.7%	71.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Followup Satisfaction Form

Virtually all respondents rated specific BAHT program features as “good” or “excellent.” About 90% rated staff courtesy and clinic attractiveness as “excellent.”

**Satisfaction with BAHT Features**

	Availability of Staff	Location Accessibility	Staff are Courteous	Clinic Attractive and Clean
	%	%	%	%
Excellent	72.7%	68.2%	90.9%	86.4%
Good	22.7%	27.3%	9.1%	13.6%
Fair	4.5%	4.5%	.0%	.0%
Total	100.0%	100.0%	100.0%	100.0%

Source: Followup Satisfaction Form

Veterans were also asked to rate the usefulness of six different BAHT program elements. “Help with housing search” was rated as “very useful” by half of the respondents and as somewhat useful by another 40%. Only 10% had not used the program for this purpose. Help with addiction/recovery and counseling were rated as the

second most useful BAHT services, with about 75% finding them “very” or “somewhat” useful. BAHT was rated as useful for financial help and medication by about two-thirds of the respondents, while only one-third rated it as useful for help with legal issues (the rest had not used BAHT for this purpose).

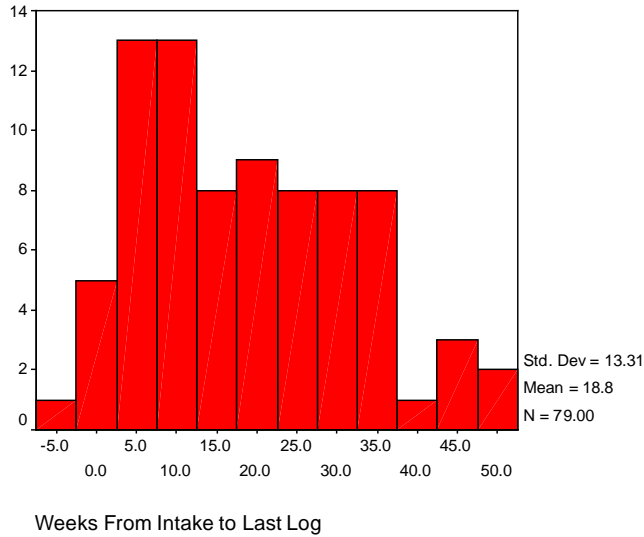
**Usefulness of BAHT Services**

	BAHT Useful for Housing Search	BAHT Useful for Legal Help	BAHT Useful for Addiction Help	BAHT Useful for Financial Help	BAHT Useful for Medication	BAHT Useful for Counseling
	%	%	%	%	%	%
Very Useful	50.0%	15.8%	55.0%	40.0%	42.1%	66.7%
Somewhat Useful	40.0%	15.8%	25.0%	25.0%	15.8%	9.5%
A Little Useful	.0%	.0%	.0%	.0%	.0%	4.8%
Not Used	10.0%	68.4%	20.0%	35.0%	42.1%	19.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

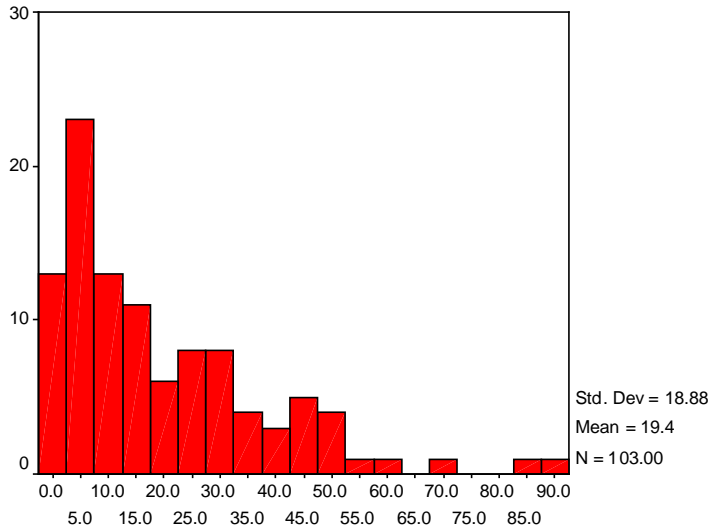
Source: Followup Satisfaction Form

Service Provision

Service logs indicate that BAHT provided many participants with a lengthy and multi-dimensional treatment experience. Among all BAHT applicants, the number of weeks from the time they applied to the end of data collection ranged from 0 to 50, with a mean of 19 weeks.



Team members spent an average of 19 minutes per week with the clients who were seen for at least two weeks, but with a range from 0 to 90 minutes per week.



**AVMINR**

At the end of data collection (August), veterans in BAHT had spent an average of 19 weeks in the program, with 81% of those weeks represented in service logs. About 11% of the logs recorded direct contact with the clients, with an average weekly contact of 19 minutes. About 13% of the weeks included some use of the HousingWorks program.

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Weeks From First to Last Log	103	1.00	24.00	12.2718	8.12910
Weeks From Intake to Last Log	79	-4.00	50.00	18.7595	13.31109
Prop. of Weeks after Entry with Logs	79	-.25	3.50	.8068	.51620
Prop. of Weeks with Logs, of All Weeks from First to Last Log	103	.22	1.13	.8931	.14171
Prop. of Logs with Some Minutes of Direct Contact	103	1	23	10.83	7.463
AVMINR	103	.00	90.50	19.3891	18.87928
Time Used HousingWorks	103	.0	87.5	13.471	20.2894
Valid N (listwise)	79				

BAHT participants were heavily engaged in treatment services. On average, BAHT participants spent about 75% of the weeks they were in BAHT engaged in substance abuse treatment through AA or Aftercare. Psychiatric treatment was much less common, but on average during about 20% of participants' weeks they were known by their BAHT case manager to be on psychotropic medication or seeing a BAHT

psychiatrist. In total, compared to a standard of one service each week, BAHT participants were receiving some substance abuse or psychiatric treatment, including services directly from the BAHT team, about 147% of the time—in other words, an average of 1 ½ services per week.

Help with housing search was less common, although some participants received help with their housing search every week. Compared to the one service per week standard, BAHT participants received some type of housing search assistance 33% of the time they were enrolled in the program, including use of HousingWorks for about 13% of the weeks.

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Time in BAHT Housing Search Help	103	.00	160.00	33.4525	36.7133
Time Used HousingWorks	103	.0	87.5	13.471	20.289
Time Used Other Housing Search	103	.0	100.0	19.982	24.878
Time in Subs Treatment Engagement	103	.00	200.00	75.8548	59.9688
Time in Psych Treatment Engagement	103	.00	86.26	19.6499	20.6331
Time in Subs, Psych Treatment Engagement	103	.00	325.00	115.1546	88.5845
Total Subs, Psych Treatment, including BAHT	103	.00	400.00	146.5408	104.5183
Valid N (listwise)	103				

### Employment and Residential Status

BAHT participants were housed for about half of the weeks that they spent in the program (52%), but most of these weeks were spent in transitional housing like the Domiciliary program. Ten percent of the BAHT participant weeks were spent living in a shelter or on the streets, compared to 9% spent in permanent housing and 2% in community-based group housing.

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Time in Shelter or Streets	103	.00	100.00	9.8469	23.54657
Time in Transitional Housing	103	.00	100.00	43.4704	39.41565
Time in Permanent Group Housing	103	.00	100.00	2.3674	10.81762
Time in Any Housing	103	.00	100.00	52.4992	38.11448
Time in Permanent Housing	103	.00	100.00	9.0288	20.70585
Valid N (listwise)	103				

Thirty percent of the BAHT participants were housed at the time their last service log was completed, although only 9% were living in independent housing in the community.

The retrospective case manager reports suggest greater improvement in participant residential status from first contact with the project to the last status known to their case manager, in December 2002, irrespective of whether they were still BAHT clients. At the outset of the project, while only 10% had been literally homeless, 53.5% had been in an early stage of treatment—enrolled in IDTP or living in the Domiciliary. Only 7% were either sharing an apartment or living on their own. By the time of their last known status, 12% were still homeless but only 7.6% were in an early stage of treatment. Forty-five percent were in a transitional residence and one-third were either sharing an apartment or living on their own, with 24% actually living independently.

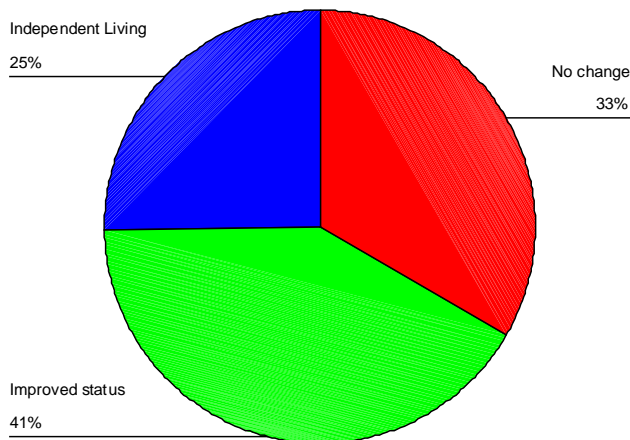
**Retrospective Reports on Residential Status**

	Count	%	Count	%
Homeless	7	9.9%	8	12.1%
Dom, IDTP, early treatment	38	53.5%	5	7.6%
TR House	21	29.6%	30	45.5%
Shared apartment	2	2.8%	7	10.6%
Independent Living	3	4.2%	16	24.2%
Total	71	100.0%	66	100.0%

Source: BAHT Case Manager

The next chart summarizes this picture of improvement. Two-thirds of the BAHT participants were either living independently or had moved toward more independent living arrangements after their enrollment in the BAHT program.

**Improvement in Residential Status**



Source: BAHT Case Manager

Veteran characteristics and orientations were used to explore influences on housing status while in the program and final status in the program. Relationships with in-program status indicators suggest some predictors of BAHT experience. The more that clinicians rated veterans as needing supports in order to live in housing, the more of their in-project time that the veterans spent homeless. Time homeless during the project was also associated with more legal problems. Veterans who preferred to live alone spent less time in transitional (group) housing. More time in permanent housing during the project was related to fewer years of education.

Veterans who spent more of their time receiving housing search help from the BAHT team through Housing Works had indicated at baseline that they were more comfortable with getting help with finding housing and also were less interested in living alone. Those who used BAHT more for housing search also were less satisfied with their current housing.

Work history during the project had some relationship to background characteristics. Those with more years of education tended to spend more of their project period competitively employed; higher rates of competitive employment were also associated with higher ASI legal scores. Higher MMPI mania scores and higher ASI alcohol scores were associated with less participation in CWT.

Final residential status had few baseline correlates, but those who scored higher on the MMPI paranoia scale were less likely to be living independently at year's end, while those with higher MMPI scores on mania, hysteria, and hypochondriasis were more likely to be homeless at the time of their last service log. Independent living at the last point known to a BAHT case manager was also more likely for veterans who rated BAHT as more useful and for those who had participated in the program for the longest time. In addition, those who had received more service time from their BAHT case manager were more likely to have improved their residential status.

## **Conclusions**

Improving the residential status of homeless veterans is first and foremost a matter of fairness and social justice: those who risked their lives or sacrificed other opportunities in service to their country in the past deserve reasonable living arrangements in the present and a basis for hope for the future. But housing homeless veterans is also smart service policy: having a regular place to live increases availability for other treatment and maximizes the probability of treatment retention.

The BAHT program demonstrated that residential search and related services could be delivered successfully to veterans who were participating in other programs at the Edith Nourse Rogers Memorial Veterans Administration Medical Center. The dedication and hard work of BAHT clinicians and other support staff resulted in many service innovations and in improved tools for measuring client assessment and service outcomes.

The BAHT team successfully implemented a refined tool for assessing clients' residential histories and preferences and clinicians' housing recommendations, as well as a weekly service log that tracked service delivery and residential, work, and health outcomes. These tools provide a means for matching homeless veterans with desirable housing opportunities and for monitoring progress. The project was less successful in obtaining data collected elsewhere in the VA system. ASI data were available on only two-thirds of the participants, MMPI data on half, and TOPS forms could be located in the initial data collection period for only one-third. The limited duration of the data collection program also hindered collection of adequate process and outcome data. Many participants began the BAHT program before the weekly service logs were designed, and many were still in BAHT at the end of August, when processing of service logs was terminated. Fortunately, the ongoing contact that BAHT clinicians maintained with veterans in the VA system allowed them to update project records with more adequate residential status information.

BAHT participants were similar to other homeless veterans receiving services at the ENRM VAMC. After what for many had been extensive histories of homelessness, most were living in temporary, transitional residences at the VA. They were generally satisfied with their service and residential experiences in the VA, except for the lack of freedom and space, and the presence of some roommates whom they did not choose. By contrast, the BAHT participants attached a high degree of importance to having privacy, freedom, and the ability to choose their roommates in any new housing. They also tended to rate highly the importance of rules to enforce sobriety in their residence. About one-third of the veterans were open to living in staffed, group housing and one-third sought to live independently without any staff support. The rest were interested in supportive housing, with staff support but no roommates; few participants expressed an interest in Oxford-type housing, in which a house is shared and managed by 6-7 roommates without staff support.

BAHT participants also were confident in their ability to live alone, but were eager for help with finding housing--suggesting that they were ready candidates for BAHT services. Participants receive many services from the BAHT team, particularly substance abuse services, and they subsequently expressed a high level of satisfaction with these services (although their rating of the housing search assistance they had received was lower than for other services).

Most of the BAHT participants had improved their residential status by the end of the year and one-quarter were living independently. by this time. Receipt of more BAHT services was associated with better residential outcomes, while higher levels of pathology on the MMPI were associated with poorer residential outcomes.

These indications of positive program impact must be tempered by the caution that there was no comparison group for which we could obtain comparable data. As a result, we do not know whether outcomes for BAHT participants exceeded what might have been achieved through regular VA services. We also must note that our primary source of outcome data, the weekly service logs, was not available for the duration of all participants' program experiences, nor for a lengthy subsequent followup period. But we



have documented the characteristics and orientations of the many veterans served by BAHT, the extent of services they received, and the ability of the program to assist many veterans to improve their housing.

**References**

- Ashery, RS. Case management community advocacy for substance abuse clients. In R. S. Ashery (Ed), Progress and Issues in Case Management, (pp 383-394) NIDA Research Monograph 127, Rockville, MD (1992)
- Binus, Gregory, Christopher Boyd, Nitigna Desai, Douglas Deyoe, Charles Drebing, Robert Hallett, Lawrence Herz, Margaret Henderson, Walter Penk, Dolly Sadow. Proposal in Response to the Request for Proposals (RFP) to Improve Specialized Treatment Programs For Substance Use Disorders. Edith Nourse Rogers Memorial Veterans Hospital And Community-Based Clinics (2000)
- Bokos, PJ, Mejta, CL, Mickenberg, JH, and Monks, RL. Case management: An alternative approach to working with intravenous drug users. (pp 92-111) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Broome, K . M., Simpson, D. D., & Joe, G. W. (1999) Patient and program attributes related to treatment process indicators in DATOS. Drug and Alcohol Dependence, 57, 127-135.
- Dennis, ML, Karuntzos, GT, and Rachal, JV. Accessing additional community resources through case management to meet the needs of methadone clients. (pp 54-78) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Falck, RS, Siegal, HA, and Carlson, RG. Case management to enhanced AIDS risk reduction for injection drug users and crack cocaine users: Practical and philosophical considerations. (pp 167-180) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Goldfinger, S., Schutt, R., Seidman, L., Turner, W., Penk, W., L.Tolomiczenko. Self report and observer measures of substance abuse among homeless mentally ill persons in the cross section and over time. Journal of Nervous and Mental Disease. 1996: Vol 184, No. 11:667-672.
- Goldfinger, S, Schutt, RK, Tolomiczenko, GS, Seidman, L, Penk, WE, Turner, W, & Caplan, B. Housing placement and subsequent days homeless among formerly homeless adults with mental illness. Psychiatric Services. 1999, Vol. 50, No. 5, 674-679.
- Gossop, M., J. Marsden, D. Stewart, and A. Rolfe. "Treatment Retention and 1 Year Outcomes for Residential Programmes in England." Drug and Alcohol Dependence, 57:89-98. (1999)

- Levy, JA, Gallmeier, CP, Weddington, WW, and Wiebel, WW. Delivering case management using a community-based service model of drug intervention. (pp 145-166) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Lidz, V, Bux, DA, Platt, JJ, and Iguchi, MY. Transitional case management: A service model for AIDS outreach projects. (pp 112-144) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- McCoy, HV, Dodds, S, Rivers, JE, and McCoy, CB. Case management services for HIV-Seropositive IDUs. (p-p 181-207) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Penk, W. Psychosocial Rehabilitation Techniques. In Edna Foa, Terence Keane, and Matthew Friedman (Eds.) PTSD Treatment Guidelines, New York: Guilford Press. (1999).
- Penk, W, Flannery, RB, Irvin, E., Geller, J., Fisher, W., Hanson, MA. Characteristics of substance-abusing persons with schizophrenia: the paradox of the dually diagnosed. Journal of Addictive Diseases. (1999).
- Penk, W, Robinowitz R, Roberts WR, Dolan MP, Atkins HG. Adjustment differences among substance abusers varying in degree of combat experience. J Consulting and Clin Psychol. 1981: 49:426-437.
- Rapp, RC, Siegal, HA, and Fisher, JH. A strengths-based model of case management/advocacy: Adapting a mental health model to practice work with persons who have substance abuse problems. (pp 79-91) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Ridgely, MS and Willenbring, ML. Application of case management to drug abuse treatment: Overview of models and research issues. (pp 12-33) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD (1992)
- Schutt, R., Goldfinger, S., Penk, W. Satisfaction with residence and with life: When homeless mentally ill persons are housed. Evaluation and Program Planning. 1997: 20:185-194
- Simpson, D. D., Joe, G. W., Fletcher, B. W., Hubbard, R. L., & Anglin, M. D. (1999). A national evaluation of treatment outcomes for cocaine Dependence. Archives of General Psychiatry, 1999, 66, 507-514.

Woodward, A. (1992) Managed care and case management of substance abuse treatment. (pp 34-53) In R. S. Ashery (Ed), Progress and Issues in Case Management, NIDA Research Monograph 127, Rockville, MD