



King County

Department of Community and Human Services
Mental Health and Chemical Abuse and Dependency Services Division

King County 10-Year Plan to End Homelessness

“Begin at Home” A Housing First Pilot Project for Chronically Homeless Single Adults

One Year Outcomes

Prepared by
Debra Srebnik, Ph.D.
10/15/07

TABLE OF CONTENTS

	Page
Background	3
Evaluation design	4
Purpose of this report	4
Pilot program descriptions	5
Process evaluation	7
Outcome evaluation	12
Summary	17
Recommendations	18

EXECUTIVE SUMMARY

Individuals who are chronically homeless and disabled by mental illnesses, substance abuse or medical illnesses often cycle between homelessness, hospitals, jails, and other institutional settings. To address these needs the City of Seattle, King County, United Way of King County and the Seattle and King County Housing Authorities have provided resources for a number of "Housing First" projects characterized by low-barrier access to housing and integrated psychiatric, substance abuse, and health care services that are voluntary, intensive and easily accessible. There are no "readiness" or abstinence criteria for individuals to obtain or keep housing, and housing is permanent rather than transitional.

The purpose of this report is to present one-year outcomes for an initial pilot Housing First project - Begin At Home (BAH). Data include client characteristics and vignettes, participant and stakeholder feedback, process evaluation findings, and outcomes including jail and acute care service utilization.

BAH was developed and managed by Plymouth Housing Group at the remodeled St. Regis building, now called Plymouth at Stewart. Services for BAH integrated mental health, chemical dependency and primary health care into a single, comprehensive team that addressed an array of health conditions. Help with applying for and obtaining income and food assistance benefits and development of self-sufficiency capabilities was also provided.

PARTICIPANTS

BAH focused on providing housing and support for the highly complex problems of adults being released from the Medical Respite program with at least \$10,000 of expenses at Harborview Medical Center within the prior year (n=14), and individuals who had had at least 60 visits to the Dutch Schisler Sobering Support Center within the prior year and who were referred from REACH homeless outreach case managers (n=6). All participants met the federal definition of chronic homelessness, including having a disabling medical or psychiatric condition. The first tenant moved into housing in June, 2006 and the program was at capacity by the end of August, 2006.

Participants were predominantly male (n=15; 75%), white (77%), and had an average age of 49.9 yrs. (SD=7.8). Sixteen had some income from public benefits upon admission. Participants' average prior duration of homelessness was 40.9 months (SD=31.6). BAH participants had an average of 2.2 federally-defined disabling conditions (SD=.8) and a very high average rate of medical conditions of 4.2 (SD=3.3).

PROCESS EVALUATION HIGHLIGHTS

One of the process goals of BAH was to connect the medically-vulnerable participants with primary care providers. Within the year following admission, indeed all BAH participants had contact with a primary care provider. Within the comparison group, only 9 of 19 (47%) had such contact; however the comparison group had fewer medical conditions that warranted intervention.

Similarly, all BAH participants had contact with the on-site chemical dependency specialist within the year following admission. Within the comparison group, only 5 of 19 (26%) had such contact, although 8 showed substance abuse at admission to the program.

Seventeen of the 20 BAH participants were available to be surveyed for the evaluation. Participants reported a wide range of positive aspects of the program. Most frequently they noted the basic provision of housing and food as well as the presence of a staff person to talk to. Participants reported the strongest program impacts on improving their coping with daily problems, reducing use of drugs, and improving

physical health. The only discernable theme among the areas reported for improvement was lighting and access to the building front door.

Stakeholder satisfaction with the program was high. Stakeholders commented on the importance of rapid placement into housing, a smooth referral process, and the on-site nurse and substance abuse specialist.

OUTCOME EVALUATION HIGHLIGHTS

Housing retention

After one year, out of 20 Begin at Home (BAH) participants, 3 people were no longer in the program. Two people had died, one from a heart attack and one from a stroke. One additional person had been evicted after six months of non-payment of rent despite receiving GAU benefits.

Acute care services

BAH participants reduced use of Medical Respite by 1107 days (\$254,610) comparing the year prior to BAH with the year following admission. The comparison group had no Medical Respite stays during the year prior to or after admission.

BAH participants experience a total 57 admissions to Harborview Medical Center and 191 Emergency Department (ED) contacts in the year prior to BAH admission, dropping to 13 admissions and 50 ED contacts in the subsequent year. Total charges for the BAH participants were reduced by \$1,192,893, representing a reduction of 75%. The comparison group showed a much more modest decrease in utilization of Harborview inpatient and ED services.

Only one BAH participant had a psychiatric hospitalization during the year prior to program entry, and none had an admission in the following year. No comparison group members had a psychiatric hospitalization during the year prior to program admission, and one person had a hospitalization during the following year.

BAH participants accrued 349 Sobering Center visits during the year prior to program entry, dropping to 11 visits during the subsequent year. The comparison group showed a similarly large drop in Sobering Center visits -- from 252 visits during the year prior to program entry to 34 during the following year.

Jail incarceration

Five BAH participants had at least one jail booking prior to entry into the program and 7 people had bookings during the following year. Little change was shown in total jail bookings or days. Similarly, comparison group members showed little change in jail bookings or days.

While the number of overall bookings was not appreciably reduced, bookings for Failure-to-Appear charges *decreased* after individuals became housed. It appears that stable housing per se might increase the likelihood that individuals will show up for court dates.

SUMMARY AND RECOMMENDATIONS

The BAH program successfully implemented a Housing First model with low barriers to housing access, rapidly housing 20 high-utilizers of acute care services. Housing retention was a strength of BAH, with only 1 participant being evicted within a year. Two additional people died as a result of existing medical conditions. BAH participant and stakeholder satisfaction was high.

BAH participants showed striking reductions in utilization of high-cost acute care services in the year following program admission. Overall acute care service cost avoidance was approximately \$1.5 million during the first year, far outweighing the annual \$372,000 cost of the BAH program. Jail incarcerations changed little for BAH participants or the comparison group.

While the BAH program results were quite strong, the findings should be viewed with caution due to the small sample size and lack of a truly comparable comparison group. Future projects should employ a more rigorous evaluation design to strengthen the ability to draw conclusions.

The positive findings from the BAH project suggest that a Housing First approach may be particularly worthwhile to stabilize individuals selected on the basis of intensive service needs and/or high service utilization. Our evaluation findings suggest that similar future programs should: (1) ensure strong connections between the referral source and the receiving program, including obtaining client consent for transfer of any assessments and medical records, (2) ensure the ability to rapidly place individuals into housing, including working with the Housing Authority to prioritize referrals, (3) provide sufficient staff on-site, including chemical dependency specialists and nurses to provide a low enough staff-to-client ratio for intensive support, and (4) include goals of employment and other daily activities as early in a persons participation as possible.

BACKGROUND

Barb (name changed for confidentiality) took care of other homeless women but rarely herself. She never lasted in previous housing opportunities because of a long history of crack use. She used Harborview Emergency Department nearly every month as a reflection of her declining health. Tim was first encountered at the Sobering Center. He had a negative view of Plymouth Housing Group, as he had been on their waitlist three different times but his alcohol use never allowed him to be organized enough to check in and remain on the list. Joe experienced repeated hospitalizations over the past year for a antibiotic-resistant infection.

These are some of the many faces of homeless individuals in our community. According to the 2006 One Night Count, over 7,910 individuals are homeless each night in King County. National statistics indicate that approximately three times as many people experience homelessness in the course of a year as are counted in a point-in-time count. Applied to King County, this ratio would mean that at least 24,000 people experience homelessness annually. The One Night Count indicates that roughly 20% of these individuals are chronically homeless - that is, they are disabled, often by mental illnesses and substance abuse, and they have experienced long or repeated episodes of homelessness.

Individuals who are chronically homeless often cycle between homelessness, hospitals, jails, and other institutional settings. In Seattle and throughout King County, public and private funders have made a significant commitment to fund housing with supportive services designed to meet the needs of people who are chronically homeless. The City of Seattle, King County, United Way of King County and both the Seattle and King County Housing Authorities have provided resources for a number of "Housing First" projects characterized by low-barrier access to housing and integrated psychiatric, substance abuse, and health care services that are voluntary, intensive and easily accessible. These entities have recently embarked on a joint goal of producing 1,000 such units by 2015.

This report is the first to document outcomes for a local Housing First project. A subsequent report will detail outcomes from a second project, located in south King County. A separate evaluation, of a similar project at 1811 Eastlake, is being conducted by the University of Washington. Taken together, these analyses should help identify successes and potential areas for change to aid implementation of future projects serving individuals who are chronically homeless.

PURPOSE OF THIS REPORT

The purpose of this report is to present one-year outcomes for the first of two pilot Housing First projects - the Begin At Home (BAH) project. Data include client characteristics and vignettes, participant and stakeholder feedback, process evaluation findings, and outcomes including jail and acute care service utilization.

EVALUATION DESIGN

King County provided in-kind .10 FTE to evaluate two housing programs begun under these initiatives.

The program evaluation involved both process and outcome evaluation components. The process evaluation included description of:

- characteristics of program participants including demographics, history of homelessness, disabling conditions
- case vignettes
- connection to primary care provider following admission
- contact with in-house chemical dependency specialist following admission
- completion of Department of Social and Health Services benefit application
- attainment of health insurance including Medicaid or Medicare
- participant-reported program satisfaction (one year following admission)
- stakeholder process feedback (focus group) 6 months after initiation of program

The outcome evaluation used a pre-post comparison-group design. That is, one-year pre-program measures were compared with measures taken during the year following program admission. The outcome evaluation included analysis of change in:

- admission and days in Harborview Medical Center Medical Respite
- admissions and days in Harborview Medical Center inpatient units
- contacts with Harborview Medical Center Emergency Department
- admissions and days in inpatient psychiatric hospitals
- King County jail bookings and jail days
- admissions to the Dutch Schisler Sobering Support Center (DSSSC)
- REACH homeless outreach case management
- admissions to the King County Detox Center (not included in this report – pending availability)

Analysis of change from admission to one year after admission was also conducted for:

- income support - movement to stable income sources and increased amount
- employment status
- substance use

The outcome evaluation also included description of:

- participant disposition at exit from program
- participant self-reported program impact

Process and outcomes measures, with the exception of substance use and participant-reported satisfaction and impact, were also collected for a comparison group of previously-homeless individuals residing in the same building as BAH and who have access to the same housing case managers. The comparison group however, was not systematically referred from Medical Respite or REACH and the individuals in the comparison group were not selected to possess the intensity or chronicity of health and addiction issues that were required as eligibility criteria for the Housing First participants. There were 42 people eligible to be in the comparison group and only 19 consented to have their data reviewed for this evaluation. We do not know the representativeness of the group that consented, however we might assume that they are somewhat more engaged in services than those who did not consent and thus might have better outcomes.

Analyses of whether changes were statistically significant were **not** conducted due to the very small sample sizes of the BAH and comparison groups. Only descriptive analyses are provided.

Electronic records from the King County MHCADSD information system, the statewide TARGET data system for chemical dependency treatment, Harborview Medical Center, and the King County jail system were used for the evaluation. To supplement electronic records, faxed intake and discharge documents were developed as well as a participant survey and a stakeholder focus group protocol.

PILOT PROGRAM DESCRIPTION

Both pilot projects employed a Housing First approach.

The "Housing First" model

The housing first model represents a paradigm shift that offers low-barrier access to housing and clinical services that are voluntary, intensive and easily accessible. There are no "readiness" criteria for individuals to obtain housing; individuals are housed directly from living on the streets. Housing is permanent and considered to be the person's home, not residential treatment. Housing units are held for the person up to a 90-day absence. Residents are not required to be abstinent or participate in services to retain their housing. However, easy on-site access to services creates an environment that is conducive to resident participation. The programs emphasize participants being good tenants, and they utilize interventions that target behaviors negatively impacting ability to remain in the community (e.g., managing day-to-day responsibilities of being in an apartment and conflicts with other tenants). Services focus on harm reduction, relapse prevention and recovery associated with mental illness, substance use, and medical conditions. Eviction is seen as a last resort. Tenants hold leases and have full rights and obligations of tenancy.

Begin at Home (BAH)

Overview

Plymouth Housing Group (PHG) developed and manages the BAH project. PHG provides permanent supportive housing and services provider for single adults who are homeless across King County. For BAH, PHG had undertaken a substantial rehabilitation of the St. Regis building at 2nd and Stewart in Seattle, now called Plymouth on Stewart. At the initiative of Mayor Nickels, the City approached Plymouth as the building neared completion with an offer of service funding to create a set-aside of units to serve chronically homeless "high utilizers" of public services. Plymouth agreed to designate 20 units set aside for people with long-term homelessness, chronic medical conditions and/or chemical dependency, and they designed a support service approach to accommodate the needs of this population..

Services for BAH integrate mental health, chemical dependency and primary health care into a single, comprehensive team that can address an array of health conditions. Help with applying for and obtaining income and food assistance benefits and development of self-sufficiency capabilities is also provided. BAH used a multidisciplinary team, frequent case staffing, 24/7 staff coverage, and a small caseload size with almost all services provided in the community or at the person's residence.

The first tenant moved into housing in June, 2006 and the program was at capacity by the end of August, 2006.

Funding and Staffing

BAH used braided service dollars to allow for integrated psychiatric, substance abuse and health care services. Specifically, service and operating funding from the following entities were provided:

\$160,000 - Seattle Housing Authority (section 8 vouchers)
180,000 - City of Seattle Human Services – 3 housing case managers plus one front desk staff
32,000 - City of Seattle General fund – nursing
\$372,000 annually

PHG housing case managers provided intensive housing stabilization-case management services on-site as well as counseling and referral. While the BAH project had 20 participants, the three housing case managers served 64 unit, the additional 44 were in the same building. As such the staff-to-client ratio was 1:21. Clients were assigned to the housing case managers according to the staff's specialty areas (e.g., CD, personality disorders, etc.). One of the housing case managers was a chemical dependency specialist. A Registered Nurse was on-site to provide services 14 hours/week.

Eligibility

BAH focused on providing housing and support for the highly complex problems of individuals coming out of the Medical Respite program, as well as individuals who were frequent users of the Dutch Schisler Sobering Support Center referred from REACH homeless outreach case managers. Medical Respite is funded by the Seattle-King County Public Health Department's Health Care for the Homeless Network, and it provides 24-hour shelter and 7 day/week nursing care, social work and medical linkages for homeless individuals who have had acute medical events and need continuing daily nursing care. The REACH program, also funded by the Homeless Network, provides intensive case management services to homeless chronic public inebriates in downtown Seattle, for clients who are frequent users of the Sobering Center (a sleep off center).

Specific participant eligibility criteria for BAH were:

1. Adults age 18 year or older
2. Long-term homelessness (12 month consecutive or 4 episodes in prior 3 years) with Significant Disabling Condition(s), as per the federal Housing and Urban Development (HUD) standards for 'chronic' homelessness, where Significant Disabling Condition refers to physical and/or psychiatric conditions that significantly impair the functional abilities of the individual and have been likely contributors to periods of homelessness.
3. Referred from Medical Respite with incurred costs within Harborview Medical Center of \$10,000 within the past year, OR referred from REACH with 60 or more visits to the Sobering Center within the past year.

PROCESS EVALUATION

Characteristics of BAH participants and Comparison group members

Referral sources

Begin at Home (BAH) began taking admissions to housing in mid-June 2006. The 20 units were full as of mid-August, 2006. Fourteen of the 20 participants (70%) were referred from Medical Respite. Of those 14, all were currently homeless, and one was losing his place in transitional housing due to non-compliance with that program. Six of the 20 participants were referred from the Dutch Schisler Sobering Support Center via a referral from the REACH program. All of these individuals were living on the streets.

Of the 19 comparison group members, 13 were referred from emergency shelters or the streets, two were from transitional housing, and four were referred from relatives.

Demographics

Participants were predominantly male (n=15; 75%) and had an average age of 49.9 yrs (SD=7.8) with range 29 to 62 years old. Race was only reported for 13 participants. Of those, 10 (77%) are White/Caucasian, 2 (15%) are Black/African-American and 1 (8%) is American Indian. None reported being refugees or needing a language interpreter, however this data was only reported for 13 participants. Five (25%) report having been in the armed services at some point in the past, but none were receiving Veteran's Administration (VA) benefits.

The 19 comparison group members were similar demographically to BAH participants. They were mostly male (n=17; 89%), mostly White/Caucasian (56%) and had an average age of 48.0 (SD=9.6). Four (21%) reported having been in the armed services in the past, but none were receiving VA benefits.

Income sources at the time participants entered into housing are shown in the table below.

Table 1. BAH participant income sources

Income Sources	Number of participants	Monthly payment
GAU/GAX	9	8 @ \$339; 1 @ \$206
SSI	4	3 @ \$603; 1 @ \$543
SSDI	2	1 @ \$636; 1 @ \$560
SSA	1	\$583
None	4	0
Total	20	Average =\$352.5 SD=\$220.2

Eighteen of the 20 participants received food stamps. Seventeen participants were considered Medicaid eligible, and 3 of those also received Medicare.

Comparison group income sources were similar to BAH participants, with 4 of the 19 having SSI or SSDI, 11 having GAU/GAX and 2 having no income. Average income was \$363.8 (SD=180.4). Seventeen received food stamps. Seventeen were Medicaid eligible and one also received Medicare.

Homelessness history

Participants reported that the average duration of their homelessness during the current episode was 40.9 months (SD=31.6; range 2-120 months). Only one person was homeless less than one year, and that person had 8 homeless episodes in the last 3 years. All met the federal definition of chronic homelessness of either one year of continuous homelessness or at least 4 episodes in the previous three-year period.

Similarly, comparison group members all met the federal definition of chronic homelessness. The average duration of their current homeless episode was 27.0 months (SD=15.8; range 2-60 months). Among the comparison group, only 1 person was homeless less than one year and that person had 4 homeless episodes in the prior three-year period.

Conditions at entry into housing

BAH participants showed a wide range of disabling conditions. The HUD definition of disabling condition, within the definition of chronic homelessness, includes the Census definitions (i.e., uses assistive device for mobility, difficulty with functional activities and/or activities of daily living; or learning, developmental, or mental disability) or self-reported mental disability or alcohol or drug dependence. Data were available for 19 BAH participants and their conditions at entry are shown below.

Table 2. BAH participant disabling and medical conditions at program entry

Conditions at Entry	Number of participants (N= 19)	% (of 19)
Federal (HUD) disabling conditions		
-mental illness	14	74%
-alcohol/drug	13	68%
-both mental illness and alcohol/drug	12	60%
-mobility/ADL/functional/physical, sensory	10	53%
-developmental	1	5%
Medical conditions		
-chronic infection - including abscesses	12	63%
-dental problems/infections	10	53%
-hepatitis	9	47%
-shortness of breath	9	47%
-heart disease/heart murmur	8	42%
-stomach/intestine infection/bleeding	7	37%
-other liver disease	5	26%
-broken bones	5	26%
-high blood pressure	5	26%
-seizures	4	21%
-tuberculosis	3	16%
-cuts or injuries requiring stitches or care	3	16%
-frostbite	2	11%
-cancer	1	5%
-diabetes	1	5%
-HIVAIDS	0	0%
Other conditions		
-domestic violence	1	5%

BAH participants had an average of 2.2 HUD defined disabling conditions (SD=.8) and a very high average rate of medical conditions of 4.2 (SD=3.3).

For the comparison group, only HUD disabling conditions were collected. The comparison group predictably showed fewer disabling conditions than the BAH participants as comparison group members were not selected on the basis of high health care utilization. Only 8 (42%) of the comparison group members had an indicator of mental illness and the same percentage showed alcohol/drug use. Only 7 (39%) had mobility/ADL/functional/physical/sensory impairments.

Case vignettes

Below are three examples of participants who entered the BAH program. While vignettes do not represent a systematic sample of participants, they give an indication of the kind of outcomes and transformative life changes that can occur for participants in the housing first pilots. The vignettes are continued from those presented at the beginning of this report.

BAH1. took care of other homeless women but rarely herself. She never lasted in previous housing opportunities because of a long history of crack use. Since being housed in Begin At Home, her use has significantly reduced and she is not presenting any behaviors that would jeopardize her housing. A good part of this is because she is less exposed to friends on the street who still use consistently. She meets often with our visiting nurse around monitoring her blood pressure, because she needs to have her blood pressure stable in order to get hernia surgery. If she were still on the street, that level of engagement would be virtually impossible. She reported to our nurse that she used to go to Harborview Emergency Department (ED) every month as reflection of the cycles of her declining health. She has only accessed the ER once during her first six months with Begin At Home.

BAH2. had repeated hospitalizations over the past year for a MRSA infection, which led him to the Medical Respite program. Since being housed in Begin At Home, he has been able to have the infection treated solely through primary care and has not been hospitalized over his first six months with us.

BAH3. When he was first encountered at the Sobering Center for an intake, he was very resistant to the notion of Plymouth Housing Group, as he had been on the waitlist three different times in the past but his alcohol use never allowed him to be organized enough to check in and remain on the list. His first words to our intake staff were "F*** Plymouth Housing Group!" Through Begin At Home, he was housed in less than two weeks from his intake and is now thriving in housing. He still battles his alcohol addiction, but is working with the chemical dependency specialist on reducing his drinking and with the nurse on understanding the consequences of his drinking upon his health. As a result, he reports using detox services much less than when he was homeless. He also has been attending anger management classes in the building to better understand the rage he harbors as a result of his years on the streets. A very symbolic moment occurred when he apologized to the nurse after becoming angry with her - something he never would have had the insight to do previously. The dignity he feels from having a home and from the 'humanness' with which he is treated at BAH has engendered a sense of self wherein he feels like he deserves to treat himself better, as well as others. He is perhaps the programs' most grateful tenant and lets the staff know how thankful he is very often - a far cry from the first interaction with him.

Connection to primary care provider following admission

One of the process goals was to connect the medically-vulnerable BAH participants with primary care providers. We found that indeed all BAH participants had contact with a primary care provider within the year following their admission. Within the comparison group, only 9 of 19 (47%) had such contact; however the comparison group had fewer medical conditions that warranted intervention.

Contact with in-house chemical dependency specialist following admission

All BAH participants had contact with the on-site chemical dependency specialist within the year following admission. Within the comparison group, 5 of 19 (26%) had such contact, although 8 showed substance abuse at admission to the program.

Completion of Department of Social and Health Services benefit application

After one year, 19 of 20 BAH participants had completed a DSHS application for benefits, however 16 had DSHS benefits coming into the program. Within the comparison group, 16 of 19 (84%) completed a DSHS application

Attainment of health insurance including Medicaid or Medicare

Of the 20 BAH participants, 16 came into housing with Medicaid insurance. Two of those individuals lost Medicaid, and 2 of those who did not have Medicaid obtained it. Within the comparison group, 17 of 19 came into housing with Medicaid insurance. Two of those individuals lost Medicaid, and one of the 2 who did not have Medicaid obtained it.

Participant -reported program satisfaction

Participants were surveyed 6 months after admission into the program. Questions included how often the person was seen by staff, whether the perceived program benefits and in which areas (results are shown in outcome evaluation section) and their views on the strengths and weaknesses of the program. Of the 20 participants, 17 completed surveys. One person died and one was evicted prior to the survey period, and one person refused the survey.

All participants reported "yes" or "yes, somewhat" to the question of whether the program benefited them. Participants typically reported seeing a staff person once per week or once every two weeks as shown below.

Table 3. BAH participants staff contact

How often do you have contact with Housing First staff person?	N	%
Once/month	2	12%
Once/2 weeks	5	29%
Once/week	6	35%
3-5 times/week	2	12%
6-10 times/week	2	12%

Participants reported a wide range of positive aspects of the program, as shown below. Most frequently they noted the basic provision of housing and food as well as the presence of a staff person to talk to. The only discernable theme among the areas reported for improvement was lighting and access to the building front door.

Participant-reported program strengths

- staff to talk to; open to listen; talk w/o an appointment (3 people)
- having a home; place to live (3 people)
- food; food vouchers (2 people)
- can set-up room the way I want; funds for it (2 people)

- own place to shower and nobody bothers me
- not riding bus around all night
- place to stay to recover from crushing effects of addiction
- allow family to visit
- feel secure because of a place to go
- attention to all concerns resulting in better structure of daily life

Participant-reported areas for program improvement

- more lighting outside; backup staff to let you in
- own key to front door
- more move-in \$ for K-mart
- more access to TV room (not always watching sports)
- 1-3 days of food and vitamins at move-in
- mandatory hygiene and housekeeping videos before move-in
- WI-FI
- more meetings in-house and softball team

Stakeholder feedback

Stakeholder feedback was gathered in focus groups conducted six months after initiation of the program. For BAH, two focus groups were held during Sept and October, 2006. Attendees included the program nurse, housing case managers, medical respite representative, REACH outreach staff, Plymouth Housing Group Program Manager and Director of Social Services, Pioneer Square Clinic representative, and a Healthcare for the Homeless representative. The program's chemical dependency specialist was not available.

Two broad questions were asked of the group. The first was "What is working?" including strengths of the program. The second question was, "What is not working?" including barriers and obstacles that have had to be surmounted. Responses are summarized below.

Stakeholder-reported program strengths

- Clients are, overall, very happy in their new home
- All program participants remain housed to date (4 months+)
- Plymouth Housing Group (PHG) staff were helpful in getting the intake paperwork completed; PHG staff going to the client in respite, on the streets or in treatment center was particularly effective
- Good preparation of clients for transition to BAH by REACH and Medical Respite i.e., connecting to benefits, medical care, mental health treatment, employment services specific to homeless individuals, and instilling in clients the value of having professionals involved, and medical respite's 'conditioning' to having increased structure
- Room and guest policies are working - they allow for timely feedback and reward for progress (e.g., start with weekly room checks and earn less frequent checks; similarly no guests for 30 days then earn daytime guests and then evening)
- King County supporting data collection
- Vouchers provided by the housing authority and funding provided by funding partners
- Nursing on-site to work with non-urgent issues and be preventative (e.g., wound care) -- it helps get people prepared and motivated to go to appointments who likely wouldn't go otherwise
- Chemical dependency specialist on-site - expertise to educate staff and clients in harm reduction

- Small caseload 1:20 for housing case managers - allows them to do community-building and not just respond to emergencies
- Rapid housing allows clients to believe in the program - and that they will be housed
- Success in blending and integrating staff from various programs (chemical dependency, mental health, PHG, nurse)

Stakeholder-reported barriers to program success

- Barriers to rapid placement
 - cumbersome PHG review of criminal history - trying to get this quicker
 - eligibility requirement of at least \$10,000 hospital charges - hard to get timely data and there is no access to non-Harborview hospital data - need to re-think criteria
 - eligibility paperwork backed up at housing authority - up to 6 weeks at beginning, now ~3 days
- Continuity of care barriers - didn't get permission forms to release information completed for nursing while participant was in Medical Respite, so nurse didn't get the medical information (Ideally, nurse would go out on-site to referral entity - with housing case manager - but she wasn't hired early enough)
- Need all partners identified (and staff hired) at the beginning
- Ideal would be to have health assessment at both the point of identification for the program AND at the point of BAH move-in
- Inadequate space for nursing - need at least a privacy screen (has now been provided) - and sink
- Challenge to find a chemical dependency specialist with a harm reduction approach
- Initially, BAH was not able to process multiple rapid intakes from Medical Respite . A few Clients whose acute medical problems were resolved and who would normally have been discharged from the Respite program remained in Respite beds until PHG was ready to have them move in.
- It was a challenge to receive and have to use the program funds very quickly
- Needed earlier dialogues with housing authority regarding volume and timing of anticipated applicant pool and how they could prioritize them
- Pressures of federal tax credit timeline to rapidly fill units (credits accrue when unit is filled for new building units) - causing investors to pay a premium (\$600/month per unit) if units are filled early (and PHG to lose this incentive if not), and "place-in-service" deadline, and other restrictions call for an extremely rapid rent-up, or a loss of operational funding for the agency.
- Units did not need to be on the same floor (though units in the same building is important for efficiency)
- Data collection done in 'reactive' way - not integrated into intake and discharge process
- Partners need to be informed about what data is needed and why (e.g., criminal history, medical)

OUTCOME EVALUATION

Participant disposition at exit from program

After one year, out of 20 Begin at Home (BAH) participants, 3 people were no longer in the program. Two people had died, one from a heart attack and one from a stroke. One additional person had been evicted after six months of non-payment of rent despite receiving GAU benefits. Many outreach efforts were made to assist this person with rental assistance and payment plans (including having Plymouth serve as her representative payee), but she was not compliant with service plans created in conjunction with staff.

As 17 of 20 people remained in BAH at one year, the program demonstrated 85% retention. This rate is considerably higher than the 43% one-year retention rate reported overall for Housing First programs

nationwide (HUD, 2007). Of the 19 comparison group members who consented to the evaluation, all were still in housing after one year.

Admissions and days in Medical Respite

As described earlier, Medical Respite is a shelter based service for people who are homeless. Persons who were housed -- in BAH or the comparison group -- were not eligible for the program. As such, we would expect not utilization of this service following program admission unless a person left the program. This is indeed what was found.

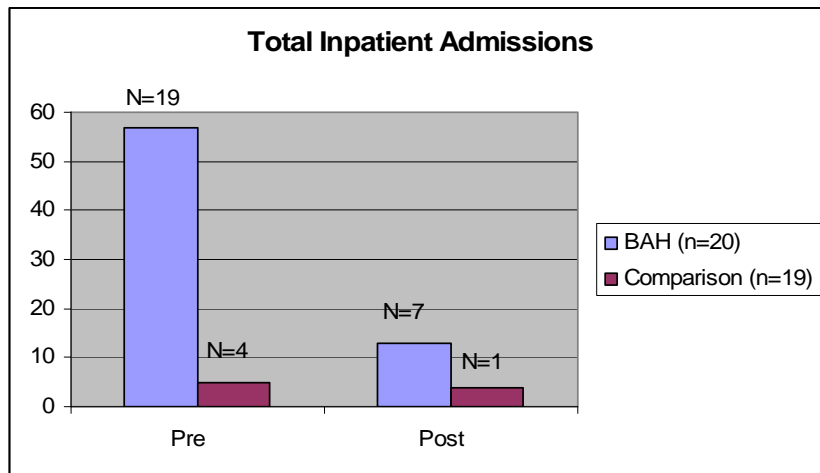
During the year prior to BAH admission, the BAH group had 27 stays (1107 days total) in Medical Respite. The estimated cost of those stays was \$254,610. The group had no stays during the year following admission. The comparison group had no stays during the year prior to or after admission.

Harborview Medical Center

Inpatient

The figure below shows Harborview inpatient admissions for the BAH and comparison groups. The 20 BAH participants had 57 admissions (329 total days - data not graphed) to Harborview inpatient units during the year prior to program admission. The admissions were accounted for by nineteen of the participants. During the year following BAH entry, only 7 people had a Harborview admission. There were 13 total admissions (56 total days). The comparison group was not selected for high medical utilization in the same way as the BAH group so we would expect them to have less utilization at both time points and indeed this is what the data show. The comparison group did however show some decreased utilization from 5 visits (4 people) to 4 visits (1 person).

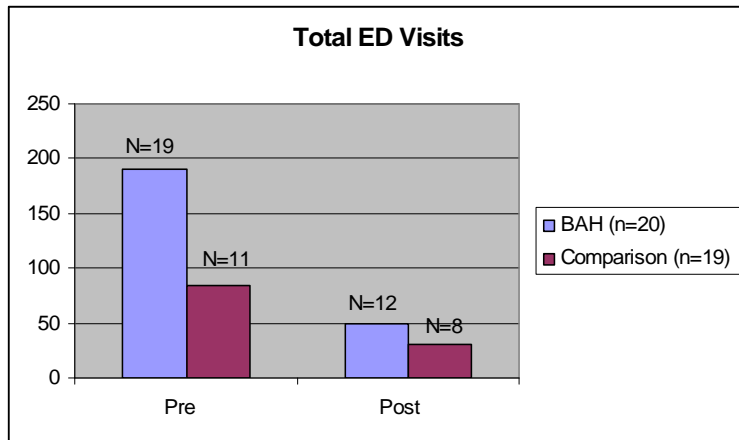
Figure 1. Harborview inpatient admissions



Emergency Department

The figure below shows Harborview Emergency Department contacts for the BAH and comparison groups. The 20 BAH participants had 191 contacts (accounted for by 19 people) during the year prior to program admission dropping to 50 contacts during the year following BAH entry (12 people). The comparison group, had fewer contacts at both time points, but also showed decreased utilization from 85 visits (11 people) to 30 visits (8 people).

Figure 2. Harborview Emergency Department contacts



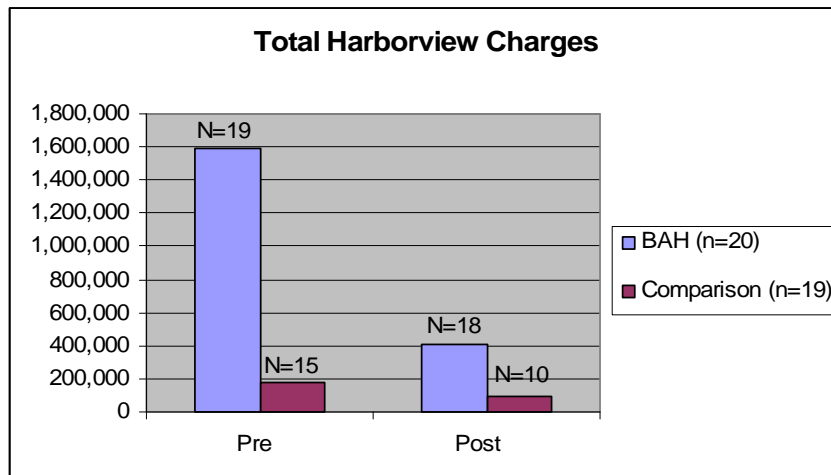
It should be noted that Emergency Department (ED) and inpatient contacts are not independent. Nearly all inpatient admissions begin as an ED contact. However, there are many ED contacts that do not result in an admission. About 1/4 of BAH ED contacts resulted in admission, while about 10% of comparison group ED contacts did so.

Charges

Given the substantial decrease in Harborview inpatient and ED events, we would expect decreased charges. Indeed, the figure below shows that total charges for the BAH participants were reduced by \$1,192,893, from an alarmingly high \$1,594,571 (average of \$80,000 per person) during the year prior to program entry to \$406,827. This represents a reduction in charges of 75%. Even after removing the two most expensive patients (possible outliers), charges were reduced \$595,832 for the BAH group. The comparison group reduced total charges from \$176,645 during the year prior to entry into housing to \$96,082 during the following year (i.e., \$80,563, representing a 46% reduction).

The pattern of charges differed between the BAH and comparison group. About 3/4 of total charges for BAH participants came from inpatient/ED visits, while for the comparison group only about 1/3 came from these visits, while the majority came from outpatient contacts. These data are consistent with the selection of BAH participants on the basis of high medical costs.

Figure 3. Harborview charges



Admissions and days in inpatient psychiatric hospitals

There were very few inpatient psychiatric hospitalizations among the BAH participants and comparison group. The program did not purposefully select individuals with mental illness, however, as shown earlier, 3/4 of the BAH participants and 42% of the comparison group had some indication of a mental illness. Only one BAH participant had a psychiatric hospitalization during the year prior to program entry (13 days - accounted for within the Harborview data), and none had an admission in the following year. No comparison group members had a psychiatric hospitalization during the year prior to program admission, and one person had a hospitalization of 2 days during the following year.

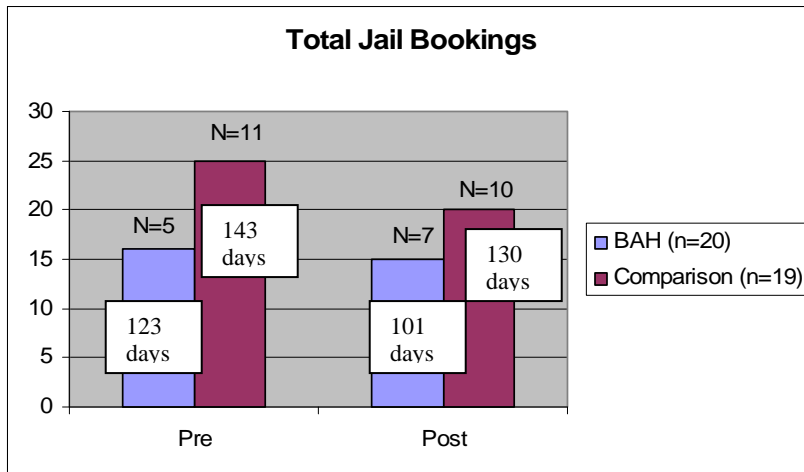
King County jail bookings and jail days

Five BAH participants had at least one jail booking prior to entry into the program and 7 people had bookings during the following year as shown in Figure 4 below. Similarly, little change was shown in total jail bookings or days. Eleven comparison group participants had jail bookings during the year prior to program entry (a higher proportion than for BAH participants) and 10 had at least one booking during the following year. As with BAH participants, total bookings and days for the comparison group were not notably reduced.

In terms of types of crimes, the overwhelming majority of charges were Failure to Appear in court (FTA), at 46% of the total charge for both groups. The next most common charges was Violation of the Controlled Substance Act, with 19% of the total charges.

The number of FTA charges *decreased* after individuals became housed. BAH participants had 7 FTAs in the year preceding housing, and none in the subsequent year. Comparison group members had 8 FTAs in the year preceding housing and 2 in the subsequent year. It appears that stable housing per se might increase the likelihood that individuals will show up for court dates.

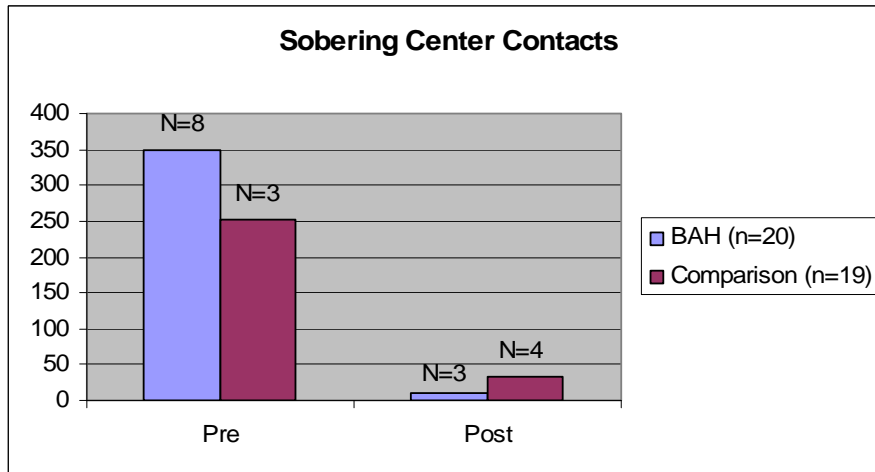
Figure 4. Jail bookings



Admissions to the Dutch Schisler Sobering Center

Shown in the figure below, eight BAH participants accrued 349 Sobering Center visits during the year prior to program entry. Following BAH program entry, the number of visits dropped to 11 (3 people). The comparison group showed a similarly large drop in visits -- from 252 visits during the year prior to program entry to 34 during the following year -- but not a reduction in the number of people having Sobering contacts.

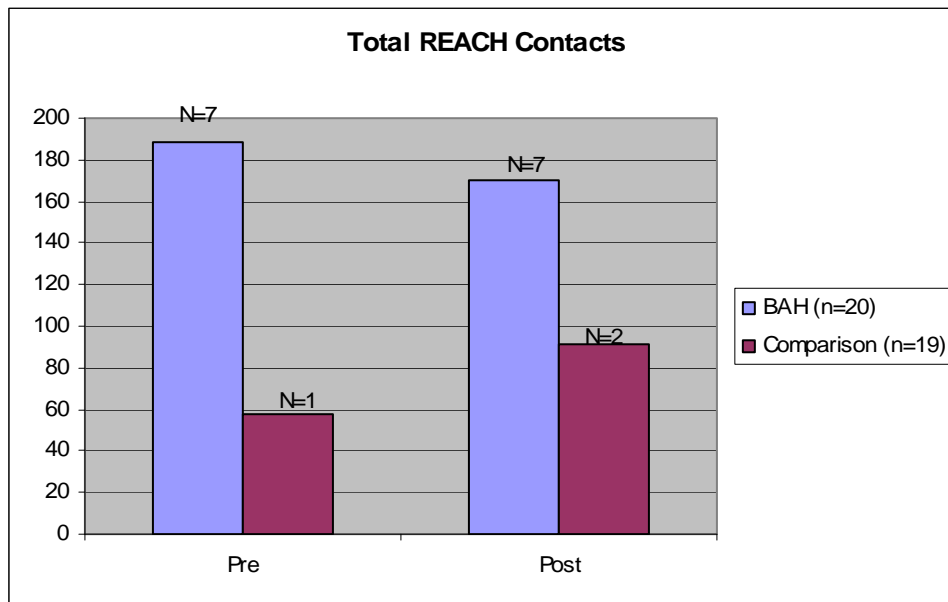
Figure 5. Sobering Center contacts



REACH homeless outreach case management

The REACH case management program initially works with individuals who are homeless to engage them in housing and needed services such as health care and chemical dependency treatment. Once an individual is housed, a REACH case manager will continue their work if they feel that housing stabilization support is still needed. This applies to the BAH housing as well even though the REACH case management is not part of the BAH Housing First model. One might expect that, once housed, BAH participants would reduce their use of REACH, however the figure below does not bear this out. Client encounters are defined as documented, face-to-face interaction between the client and a provider where independent professional judgment is exercised. During the pre-program period, 7 BAH participants had REACH contact (6 were referred from REACH and one from Medical Respite), and the same 7 people continued to have some contact with REACH during the subsequent year. Within the comparison group, contact with REACH was less than the BAH participants during the pre-program year, and it increased during the subsequent year, though the numbers are too small to draw conclusions.

Figure 6. REACH Encounters



Income support

Of the BAH participants, 3 people shifted from GAU to SSI and 4 had no income at admission and also at one year. The two participants who died had unknown income at that point. BAH participants with known income after one year gained an average of \$93/month (SD=205).

Within the comparison group, 3 people gained income from employment, 3 shifted from GAU to SSI, 1 gained GAU, and 2 lost GAU. Overall, comparison group members gained an average of \$130/month (SD=295).

Employment

None of the BAH participants were receiving income from employment after one year in the program. Within the comparison group, 3 of 19 were working part time after one year in the program, while all others were unemployed.

Substance use

Frequency of substance use was recorded by the housing case manager for BAH participants. Comparison group data was not collected. Of the 20 BAH participants, 18 were using drugs or alcohol during the month of their program admission. Thirteen used alcohol, 9 used heroin, and 8 used cocaine/crack. Eight participants reduced substance use from admission to one year and eight increased use. Two showed no change in use and two remained abstinent.

While the numbers are too small to fully examine the relationship between substance use and outcomes, however, as half of the participants reduced substance use and half increased use, it would appear that the positive outcomes found for BAH are not strongly related to reductions in substance use. Moreover, these findings give tentative support for the effectiveness of a harm reduction approach - rather than abstinence approach.

Participant self-reported program impact

As described earlier, BAH participants were surveyed after they had been in the program at least 6 months. As part of the survey, they were asked, retrospectively, about the impacts of the program. Items were derived from the Mental Health Statistics Improvement Project (MHSIP) nationally-used survey instrument. Specifically, participants were asked to use the scale below to rate the items in Table 4.

Figure 6. MHSIP Rating scale

Strongly agree 1	Agree 2	I am neutral 3	Disagree 4	Strongly disagree 5
-----------------------------------	--------------------------	---------------------------------	-----------------------------	--------------------------------------

The number of participants responding to each survey question and their average rating for each question are shown in Table 4 below.

Table 4. BAH participant self-reported impacts

As a direct result of services....	N	Average rating
My housing situation has improved	15	1.3
I deal more effectively with daily problems	15	2.0
I am not using drugs as much	12	2.0
I do better in school and/or work	6	2.0
I am better able to control my life	15	2.2
My physical health is improved	16	2.2
I am getting along better with my family	11	2.2
My symptoms are not bothering me as much	14	2.3
I do more productive things during the day	15	2.5
I do better in social situations	13	2.5
I am not craving drugs as much	12	2.5
I am better able to deal with crisis	14	2.7

Participants affirmed that the BAH program, including housing and services, did indeed improve their housing situation. Most participants also reported that all other areas targeted were improved. The strongest impacts were for coping with daily problems, reducing use of drugs, and improving physical health. Participants also strongly endorsed improvements to school and/or work and getting along with family, however a substantial number of participants did not respond to these questions as they felt they were not applicable.

In addition to MHSIP items, participants were asked "yes/no" questions about whether they felt the program benefited them the ways denoted in the table below. All 17 participants who responded to the survey completed these questions. Nearly all reported that BAH helped them feel "at home", while about half reported that it helped them get connected with services and getting around town.

Table 5. Additional BAH program benefits

Participants also reported the program helped with:	N	%
Feeling "at home"	14	82%
Getting connected to services	9	53%
Ability to get around	8	47%
Money	4	24%

SUMMARY

The BAH program successfully implemented a Housing First model with low barriers to housing access, rapidly housing 20 individuals directly from being homeless. The model had no "readiness" criteria for individuals to access housing and no abstinence requirement once housed. Residents were not required to participate in services to retain housing, however, service providers were said to "knock often" at residents units to encourage engagement and participation.

Services for BAH integrated on-site mental health, chemical dependency and primary health care into a single, multidisciplinary team with a 1:21 staff-to-client ratio. Funding from the Seattle Housing

Authority, and City of Seattle human services and general funds were braided to provide these services plus housing.

The first tenant moved into housing in June, 2006 and the program was at capacity by the end of August, 2006. BAH participants were referred from two sources by design. Fourteen participants were referred following high hospital utilization and a stay at Medical Respite, and the remaining 6 were referred after high Sobering Center utilization and identification from REACH homeless outreach case managers. Participants showed a high rate of medical co-morbidities, indicating the program correctly identified medically vulnerable individuals and not simply individuals who had accumulated high medical costs.

Both participants and comparison group members had long histories of homelessness. The average length of homelessness prior to program admission was over 3 years for BAH participants and over 2 years for comparison group members.

Housing retention was a strength of BAH, with only 1 participant being evicted within a year. Two additional people died as a result of their existing medical conditions. The less medically vulnerable comparison group members all remained in housing after one year.

All BAH participants had contact with a primary care provider within a year after admission, while fewer comparison group members needed or had such contact. All BAH participants also had contact with the in-house chemical dependency specialist, while fewer comparison group members had such contact despite considerable need.

BAH participant and stakeholder satisfaction was high. Participants were grateful for simply having a place to call their own and having food to eat. They reported that in addition to improving their housing situation, the program helped them deal more effectively with daily problems, improved their physical health, and helped them to not use drugs. Stakeholders commented on the importance of rapid placement into housing, a smooth referral process, and the on-site nurse and substance abuse specialist.

BAH participants showed striking reductions in utilization of high-cost acute care services in the year following program admission. Specifically, substantial reductions were shown in Harborview Medical Center (HMC) inpatient admissions, contacts with the HMC Emergency Department, and contacts with the Dutch Schisler Sobering Center. However, contacts with REACH homeless outreach case management were largely unchanged. Overall acute care service cost avoidance was approximately \$1.5 million during the first year, far outweighing the annual \$372,000 cost of the BAH program. Reductions in acute care service utilization were somewhat greater for BAH participants than the comparison group.

Substance use outcomes were mixed, with equal numbers of BAH participants reducing and increasing substance use. Both the BAH participant and comparison groups increased average income, but few gained employment. Jail incarcerations changed little for BAH participants or the comparison group.

RECOMMENDATIONS

The positive findings from the BAH project -- particularly the remarkable reductions in use of high-cost acute care services -- suggest that a Housing First approach may be particularly worthwhile to stabilize individuals selected on the basis of intensive service needs and/or high service utilization.

While the BAH program results were quite strong, the findings should be viewed with caution for a number of reasons. First, the very small number of participants (and comparison group members) did not permit analysis of statistical significance. Data from larger samples are needed to determine whether the findings are reliable and consistent. Second, the comparison group was not wholly comparable. As noted

earlier, the group was not selected for high service utilization in the same way that BAH participants were selected. Indeed, because BAH participants were selected precisely on the basis of very high service utilization, the evaluation capitalized on their odds of reducing utilization due to natural stabilization, that is, “regression to the mean”. Without a comparison group, we cannot conclude that the BAH program per se caused changes reported. It could be that other people selected on the basis of high service utilization who do not get BAH-type programs would also show positive outcomes. Finally, if we assume that it is the BAH program that produced the results reported, we still do not know which components of the program are associated with the results. For example, some suggest that simply providing housing reduces use of acute care services.

With these caveats in mind, the results of the BAH program are nevertheless strong enough to consider expansion of the program to serve more individuals with similar service profiles. Such an expansion should be coupled with continued examination of program outcomes, ideally using a more rigorous evaluation design, such as random assignment or a more comparable comparison group. Further analysis of evaluation data would also be useful, including examination of the relationship of obtaining benefits and having contacts with the on-site nurse and chemical dependency specialist to outcomes. Additional information about the services provided and potential predictors of program success (e.g., methods of eviction prevention, interventions to avert medical and psychiatric crises) should also be collected and analyzed.

Finally, for BAH participants who have been successful during their first year in the program, it is a good point to re-examine their program goals. True recovery from substance use and mental illness involves becoming involved in meaningful daily activities, including employment. Indeed, once a person is stabilized in housing, they are at a somewhat greater risk of substance use due to their increased "free" time -- time not spent in simply trying to survive on the streets. This risk can be mitigated if a person is actively engaged in meaningful daily activities.

Thus, the evaluation suggests that future projects should: (1) ensure strong connections between the referral source and the receiving program, including obtaining client consent for transfer of any assessments and medical records, (2) ensure the ability to rapidly place individuals into housing, including working with the Housing Authority to prioritize referrals, (3) provide sufficient staff on-site, including chemical dependency specialists and nurses to provide a low enough staff-to-client ratio for intensive support, and (4) include goals of employment and other daily activities as early in a persons participation as possible. Our findings suggest that these processes, coupled with selection of individuals most in need of housing plus intensive services, can lead to positive individual and system outcomes for Housing First models like BAH.

Bibliography

Housing and Urban Development (2007, July). The applicability of Housing First models to homeless persons with serious mental illness.